MAHARASHTRA UNIVERSITY OF HEALTH SCENCES, NASHIK
Road, Mhasrul, Nashik-422004
MUHS Tel: (0253) 2539206/302/197 Student Helpline: (0253) 25391 11/66591 11
Website: www.muhs.ac.in, E-mail: fccc@muhs.ac.in

Application for Continuation of Affiliation for Fellowship/Certificate Course(s)

(As per provisions of the Maharashtra University of Health Sciences Act, 1998,and University Rule / Guidelines)

To,
The Registrar,
Maharashtra University of Health Sciences, Vani
Dindori Road, Mhasrul,
Nashik 422 004.

Sir,

I am/We are herewith submitting the Application with a request under section 68 of the Maharashtra University of Health Sciences Act, 1998, for Continuation of my/our Institute for renewal of Fellowship / ~~Certificate~~ Course in, **Critical Care Medicine** with an Intake Capacity of **2** Students, from the Academic Year **2027-28**.

Following are the particulars:

- **Purpose of Present inspection:** (Tick whichever applicable and strike-out whichever not applicable) (~~Renewal of Affiliation~~/**Continuation**/~~Compliance Verification~~)
- **Date of last inspection of the department: Not Applicable**
  (Write Not Applicable for first inspection)
- **Purpose of Last Inspection : Not Applicable**
- **Result of last Inspection: Not Applicable**

(Copy of University Letter to be attached)

- Fellowship/Certificate Course Co-ordinator Details:

Name: **Dr. Shailendra D. Chauhan**

Mobile/Telephone no.: 7588693032

e-mail id: **deangmcosmanabad@gmail.com**

(INSTITUTIONAL INFORMATION)

1. Particulars of Director / **Dean** / Principal: (Who so ever is Head of Training Centre)

Name: **Dr. Shailendra D. Chauhan** Age: 53 (Date ofBirth) :30/08/1973

PG Degree	Subject	Year	Institution	University
Recognized	Anaesthesia	2003	S.R.T.R.M.C. Ambajogai	BAMU.

Teaching Experience:

Designation	Institution	From	To	Total Exp.
Assistant Professor	S.R.T.R.M.C. Ambajogai	15/09/2003	15/05/2008	04Y08M
Assistant Professor	S.R.T.R.M.C. Ambajogai	16/05/2008	25/03/2014	05Y10M09D
Associate Professor/Reader	G.M.C. Latur	26/03/2014	25/02/2019	04Y10M30D
Professor	S.R.T.R.G.M.C. Ambajogai	26/02/2019	29/09/2020	01Y07M03D
Professor & Head	V.D.G.M.C. Latur	30/09/2020	10/02/2025	04Y04M11D
Dean	Govt. Medical College & Hospital, Dharashiv	11/02/2025	Till Date	1 yrs 7 months
Any Other		Grand Total		22 yrs 10 months

2. Management/Society/Inst. Information:

01	i) Name of the Society/Institution/ College/University Department:	Government Medical College, Dharashiv.
	ii) Postal Address, with PIN:	Marwad Galli, Dharashiv. 413501
	iii) Contact Details:	Mob:7588693032 Tele:(02472) 297440
	iv) E-mail ID:	**gmcosmanabad@gmail.com**
02	Society/Institution/College Registration Number and date:	i) Public Trust Act 1950'
		ii)Society's Registration Act. 1860•
		iii) Year of establishment:2021
		iv) Copies of Registration, Constitution and Memorandum of Association attached? Yes (Required to upload said documents on Training Centre website)
03	Hospital Information : (It is mandatory for Training Centre/applying Institute to have their own functional Hospital asper norms) i) Name of the Hospital ii) Nursing Home Registration No. iii) Establishment Year	Government Medical College, Dharashiv. Registration: 227 **01-04-2021** (Required to upload said documents on Training Centre website)
04	i) Name of the College/institute where Course is to be conducted:	Government Medical College & Hospital Dharashiv.
	il) Postal Address, with PIN:	Marwad Galli, Dharashiv.
	iil) Contact Details:	Mob: 7588693032 Tele:(02472) 297440
	iv) E-mail ID:	**deangmcosmanabad@gmail.com**

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	v) List of University approved Fellowship/Certificate Course(s) conducted / already running at Training Centre with Intake Capacity	Name of the Course (s) : **Fellowship In Critical Care Medicine** Approved Intake Capacity: **2** Affiliated Since **2025** (if necessary Attach separate List)
	vi) Training Centre / Institute willing/desirous to Start/Open Fellowship/Certificate Course(s) (For New Opening Purpose only)	Name of the Course (s): NA Required Intake Capacity :NA (if necessary, Attach separate List)
05	Fee details : Click on link to Online Payment www.muhs.ac.in- Dashboard- Online Parment Fellowship UDC Department- Process- University De t. Cell Fellowship I Certificate De t. Fees	Valid Online Receipt Attached? *Yes / **No.** **(As Govt Institute – No fees paid)**
06	Financial position of the Society/ Institute in the preceding 03 years:	Audited Statements of Accounts for ***Yes**/No (Required to upload said documents on Training Centre website)
07 08	Budgetary provision for the FC/CC/DC for the next 03 Years: Management Resolution seeking Recognition of Institute for FC/CC of MUHS, Nashik:	i) **2024,2025 , 2026 Rs: 64593440** Resolution No. **MUH/11/FC/21/2025** dated .. **25/03/2026** Copy of Management Resolution attached? **Yes**
09	**Other Information:**	
	a) Land:	***Yes** If yes, then Area: 25.77 acres
	i) Whether the land is owned by the Applicant Institute/College/ Trust:	Copy of land documents i.e. 7/12 extract, Property Card, etc. attached? ***Yes** Required to u load said documents on Training Centre website)
	ii) Whether the land is registered?	***Yes** If yes, Registration Number . . . . . .dated . . . . . at (Place)• . . . . . . Copy of Land Registration Certificate attached? ***Yes** Required to u load said documents on Training Centre website)
	iii) Any loans, mortgage, etc. shown against the title of the land:'	*Yes/**No**. If yes, amount of loan s. . . . . Rs /mortgaged for Rs Copy of Loan/Mortgage Deed attached? *Yes/No. (Required to upload said documents on Training Centre website)
	b) Building: i) Total built-up area:	Area in **97484 sq. ft.** Certified copy of Building Plan attached? ***Yes** (Required to upload said documents on Training Centre website)

3.Central Library

- Total number of Books in library: **3114**

□ Books pertaining to concerned Fellowship subject: **228**

□ Purchase of latest editions of concerned books in last 3 years: - **94**

- Journals:

Journals	Total	concerned Fellowship subject
Indian	19 Hard Copy 78 Online	01 Hard Copy 10 Online
Foreign	11 Hard Copy 868 Online	01 Hard Copy 33 Online

- Year / Month up to which latest Indian Journals available: **May-2026**
- Year / Month up to which latest Foreign Journals available: **June-2026**
- Internet / Med pub / Photocopy facility: **Available**/not available
- Library opening times: **09:45 AM to 05:45 PM**

•Reading facility out of routine library hours:
(Obtain list of books & journals duly signed by Dean)

4. Recreational facilities: **Available** / Not available .

Play grounds Gymnasium	**Available**

5. Hostel Accommodation: **Available**

Particular			PG		Interns	
	Boys	Girls	Boys	Girls	Boys	Girls
No. of Rooms	16	26	08	06	10	22
No. of Students	97	75	26	20	30	42
Status of Cleanliness	clean	clean	clean	clean	clean	clean

6. Residential accommodation for Staff / Paramedical staff: **Available** [~~Not Available~~]

7. Ethical Committee (Constitution): **YES**/~~NO~~

8, Medical Education Unit (Constitution): **YES**/~~NO~~ (Specify number of meetings held annually & minutes thereof)

9. Any other faculty specific information required :(such as Herbal garden / Panchakarma Unit [Pharmacy / Dental Chairs and Units/as per the requirement) **Not Available**

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(HOSPITAL INFORMATION)

1. Name of the Hospital: **Government Medical College & Hospital, Dharashiv.**
2. Total number of OPD, IPD in the Institution and concerned department during the last one year: **2025-2026**

In the entire Hospital		In the Department of concerned Fellowship Subject	
OPD	355797	OPD	56449
IPD (Total No. of Patients admitted)	41385	IPD (Total No. of Patients admitted)	12796

3. Hospital Beds Distribution & No. of O.T.:

In the entire hospital	
No. of Beds	430
No. of Beds in ICU	12
No. of Beds in IRCU	05
No. of Beds in SICU	10
No. of Major O.T.	05
No. of Minor O.T.	05

4. Available Clinical Material: (Give the data only for the department of concerned Fellowship subject)
   - No. of available for clinical service on inspection day:

	On Inspection day	Average of random 3 days
□Daily OPD-2 PM	.....	.....
□ Daily admissions	.....	.....

   - Daily admissions in Dept. Through casualty at 10am
   - Bed occupancy in the Dept. at 10AM ....
   - Number of patients in ward (IPD) .....
   - Percentage bed occupancy at 10 Am ....

- Clinical Procedure(s)& Operative Details related to Fellowship subject/Specialty •.(For further details in this concern, kindly peruse the Guidelines information sheet supplied herewith)

	On Inspection day	Average of random 3 days
Intubation		
Central IV		
Pleural Fluid tapping		
Bone Marrow aspiration		
LP		

- Casualty: / Emergency Department:

Space	1000 sqft
Number of Beds	08
No. of cases (Average daily OPD and Admissions):	25
Emergency Lab in Casualty (round the clock):	**Available**
Emergency OT and Dressing Room	**Available**
Staff (Medical/Paramedical)	30
Equipment available	Ventilator, Defibrillator, Suction Machine, cardiac monitor

5. Blood Bank:

(i)	Valid FDA License(copy of certificate be annexed)	**Yes**	
(ii)	Blood component facility available	**Yes**	
(iii)	All Blood Units tested for Hepatitis C, B, HIV	**Yes**	
(iv)	Nature of Blood Storage facilities (as per specifications)	Yes	
(v)	Number of Blood Units available on inspection day		
(vi)	Average blood units consumed daily and on inspection day in the entire Hospital (give distribution in various specialties)	Average daily	On Inspection day

6. Central Laboratory:Pathology, Biochemistry, Microbiology.
   - Controlling Department: Pathology
     - No of Staff: 21
     - Equipment Available: Attach separate List
     - Working Hours: **24 Hours**
7. Central supply of Oxygen / Suction: **Available** / ~~Not available~~
8. Central Sterilization Department : **Available** / ~~Not available~~
9. Ambulance (Functional): **Available** / ~~Not available~~
10. Laundry: **Manual**/~~Mechanical/Outsourced~~
11. Kitchen : **Available**/~~Outsourced/NotAvailable~~
12. Incinerator: **Functional** / Non functional ~~Capacity~~/**Outsourced**
13. Bio-Medical waste disposal **Outsourced** / any other method
14. Generator facility **Available** / Not available
15. Medical Record Section: **Computerized** / Non computerized
    ICD X classification Used / Not used

Sign & Stamp
Head of the Department
Date: 26/10/26

Professor & Head of Department
Department of General Medicine
GMC Dharashiv

Sign & Stamp
Dean/Principal/Head of Institute
Date: 26/10/2026

Dean,
Government Medical College
Dharashiv

College / Institute Round Seal

Government Medical College Dharashiv

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(To be Filled by the Local Inquiry Committee)

(DEPARTMENTAL INFORMATION)

1. Fellowship Specialty Department to be inspected: **General Medicine**
2. Date on which independent department of functioning concerned specialty was created and started : 2022
3. Faculty details (From start of department till date):

Sr. No.	Name	Full Time/ Part Time	Designation	Qualification	Experience in Yrs. (after acquiring PG Qualification in concerned Subject)
1.	Dr. Mallikarjun Jamadar	Full Time	Professor	MD-Medicine	35 Years
2	Dr. Rushikesh Haridas	Full Time	Associate Professor	MD-Medicine	9 Years
3	Dr. Ramrao Mundhe	Full Time	Associate Professor	MD-Medicine	11 Years
4	Dr.Pravin Dumne	Full Time	Assistant professor	DNB (Respiratory medicine)	4 years 3 months
5	Dr. Rajshekhar Mengule	Full Time	Assistant Professor	MD-Medicine	02 years 00 months
6.	Dr. Saurabh Patil	Full Time	Assistant Professor	MD-Medicine	03 years 00 months

4. Whether Independent Department of concerned Fellowship/Certificate subject exists in the Institution: **Yes**/~~No~~ • Since when: 2025

5. Specialty Department Infrastructure Details:

Facility	Area (sft.)	Available	Not Available
Faculty rooms	500	4	-
Clinics	800	6	-
Laboratory Space	100	1	-
Seminar room	300	1	-
Department Library	200	1	-
PG common room	200	1	-
Preclinical lab (where ever applicable)	Available	1	-
Patient waiting room	1000	2	-

Total area	3100	9600	

6. Year-wise number of students admitted to Fellowship/ Certificate course during last 5 years:

Sr. No.	Name of Fellowship/ Certificate Course	Academic Year	Intake Capacity	No. of Students Admitted (In figure only)
1	Fellowship in Critical care Medicine	A.Y. 2020 - 2021	NA	NA
		A.Y. 2021 - 2022	NA	NA
		A.Y. 2022 - 2023	NA	NA
		A.Y. 2023 - 2024	NA	NA
		A.Y. 2024 - 2025	02	00

(Local Inquiry Committee shall specifically ensure about availability of eligible/validated Mentor(s) and shall check whether the Training Center met with the student: Mentor Ratio for the permitted Intake Capacity for each course or else it shall be reported in the Overall Remark Option.)

7. List of Non-Teaching Staff in the department:

Sr. No.	Name	Designation
1.	Mr. Sachin Giri	ECG Technician
2.	Bhagyashri Adulkar	ECG Technician
3.	Manasi Saste	ECG Technician
4.	Neha Bhoir	ECG Technician
5.	Anuja Gaikwad	ECG Technician
6.	Supriya Kamble	LAB Technician
7.	Mr. Navnath sarwade	Medical Social Worker (MSW)
8.	Mr..Khahim sayyed	Medical Social Worker (MSW)
9.	Mr. Mangeshkumar Annamwar	Medical Social Worker (MSW)
10.	Mr.Akash Sontakke	Clerk
11.	Mr. Rushikesh kulkarni	peon

8. List of Equipment(s) in the department of concerned Fellowship subject: Equipment's: List of Important equipment's available and their functional status (List here only- No mnexure to be attached). **Provide With attached List**

Sr. No.	Name of the Equipment	Specification	Function al / Not	Qty.

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			Function al	
01	B.P Apparatus	Pressure Range: 0 to 300 mmHg. Pressure Accuracy: Within ±3 mmHg (or ±2% of the reading).	Functional	**30**
02	Ophthalmoscope	Magnification: Approximately 15x (in an emmetropic eye). Field of View (FOV): Narrow, typically 5° to 10° (approx. 2 disc diameters). Diopter Range: Usually -25D to +40D (often in 1D or 2D steps) Illumination: * Source: 3.5V LED	Functional	**8**
03	Lumber Puncture Needles (Disposable)	Material: High-grade surgical stainless steel (AISI 304 or 316L) for the cannula; medical-grade transparent plastic for the hub. Safety Standards: Must comply with ISO 7864 (sterile hypodermic needles) and ISO 9626 (stainless steel needle tubing).	Functional	**TOTAL- 100 Nos**
04	Pleural Biopsy needles (Disposable)	Material: High-grade surgical stainless steel cannula with medical-grade plastic hubs. Safety Features: Often include a "locking" mechanism	Functional	ABRAMS PLEULAR BIPSY PUNCH NEEDLE 11G- **5 Nos**

		or "Fire Ready" indicator to prevent accidental discharge. Compatibility: Standard Luer-lock hubs for syringe attachment (to aspirate fluid and confirm needle placement).		
05	Liver Biopsy needles (Disposable)	Material: 304 or 316L Surgical Stainless Steel (Thin-walled for maximum core yield). ISO 13485: Manufactured under medical device quality management systems. Lightweight Design: Modern automatic guns are made of high-strength medical plastics to allow one-handed operation.	Functional	SILVERMAN LIVER BIOPSY NEEDLE 14G- **5 Nos**
06	Kidney Biopsy Needles (Disposable)	ISO 13485: Manufactured under international medical quality standards. ISO 9626: Standards for the stainless steel tubing used in the needle. Pyrogen-Free: Essential for invasive renal procedures. Single-Use Only: Strict "Do Not Resterilize" labeling to maintain edge	Functional	BARD GUN 18G,20CM- **10 Nos**

		sharpness and prevent infection.		
07	Bone Marrow Biopsy Needles (Disposable)	Gauge (Thickness): * 8G (Green) or 11G (White): The standard for adults. 11G is the most common for routine biopsies. Length: * Standard: 10 cm (4 inches) or 15 cm (6 inches). Tapered Distal Tip: Often features a "Twin Peaks" or "Crowned" cutting edge to facilitate coring and prevent sample loss during withdrawal.	Functional	JAMSHEDI NEEDLE = 5
08	Bone Marrow Aspiration needles (Disposable)	Adjustable Depth Guard: A critical safety feature, especially for sternal aspirations, to prevent over-penetration into underlying structures. Hub: Luer-lock compatible for secure attachment to aspiration syringes.	Functional	SAHLIS NEEDLE= 5
09	X-Ray Viewing Box	Light Source: High-efficiency LED Matrix Luminance (Brightness): Standard: >3,000 cd/m² Uniformity of Light: ≥90% across the viewing surface	Functional	**16**

		Thickness: Ultra-Slim: 20 mm to 25 mm Standard: 45 mm.		
10	Flexible Video End Viewing Oesophago-Gastroduodenoscope (Optional)		Functional	**1**
11	Flexible Video Colonoscope (Optional)		Functional	**1**
12	Flexible Video Side Viewing Gastroduodenoscope for ERCP (Optional)		Functional	**0**
13	Proctoscope	Disposable: Transparent, medical-grade polystyrene (allows for 360° visibility of the rectal walls). Reusable: High-grade 304 or 316L stainless steel (autoclavable).	Functional	**6**
14	Fiber Optic Bronchoscope (May be Shared with TB & CD)	Image Guide: Uses "Superfine" fiber technology. Diopter Adjustment: A ring on the eyepiece to allow the clinician to focus the image to their own eyesight. Light Transmission: Dual fiber optic bundles to provide balanced illumination and minimize shadows. Bending Section: Controlled by a lever on the handle; high-durability wires allow for a tight	Functional	**1**

		bending radius to reach sub-segmental bronchi .		
15	Spirometer	Volume Range: 0 to 8 Liters (minimum). Volume Accuracy: Within ±2.5% or ±0.050 L Flow Range: 0 to 14 L/s. Flow Accuracy: Within ±5% or ±0.200 L/s. Test Duration: Must be capable of recording for at least 15 seconds	Functional	**4**
16	Bed Side Cardiac Monitor	Leads: Typically 3-lead or 5-lead standard; 12-lead capability for high-acuity/ICU settings. Analysis: Continuous ST-segment analysis, arrhythmia detection (Afib, Tachycardia, Bradycardia), and QT/QTc interval monitoring. NIBP : Modes: Manual, Automatic Pulse Oximetry: Accuracy: ±2% between 70% and 100% saturation. Technology: Motion-tolerant algorithms Respiration Rate : via Transthoracic	Functional	**30-**

		Impedance through the ECG leads.		
17	Central Cardiac Monitor Console	Display Configuration: * Single/Dual/Quad Screen: Typically supports 22" to 27" LED wide-screen monitors (16:9 aspect ratio) CPU: Minimum Intel Core i5/i7 (or equivalent) for real-time rendering of 32+ waveforms. Storage (Full Disclosure): 256GB–1TB Solid State Drive .	Functional	**1**
18	Defibrillator	Waveform Type: Biphasic (Truncated Exponential or Rectilinear) is the mandatory standard Energy Range: Adult: Usually escalating from 120J → 150J → 200J (or up to 360J in some protocols) ECG: 3, 5, or 12-lead monitoring with high-resolution color displays.	Functional	**10**
19	Non-Invasive B.P. Apparatus	Measurement Range: Systolic: 40 mmHg to 260 mmHg. Diastolic: 20 mmHg to 210 mmHg. Pulse Rate: 40 to 200 beats per minute (bpm). Accuracy Pressure: Within ±3 mmHg	Functional	**26**

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		Pulse Rate: Within ±5% of the reading .		
20	Pulse Oximeter	SpO2 Measurement Range: 0% to 100%.SpO2 Accuracy:70% to 100%: Within ±2% (the standard for FDA/CE clearance).Below 70% , Pulse Rate (PR) Range: 20 to 250 bpm.Pulse Rate Accuracy: Within ±2 bpm or ±2% .Perfusion Index (PI): Displays a range from 0.02% to 20%	Functional	**16**
21	Equipment For Cardiac Pacing	Leadless pacemakers (like the Micra AV2/VR2 or AVEIR DR) are self-contained capsules implanted directly into the heart. Dimensions: Approximately 26 mm in length and 1.75 g in mass. Longevity: median battery life of 13–15 years . Dual-Chamber Leadless: Systems like the AVEIR DR utilize "i2i" (implant-to-implant) communication, using the body's own blood as a conductor to synchronize two separate capsules in the atrium and ventricle.	Functional	**0**

		Retrieval: Features A safe removal at the end of battery life		
22	Ambu Bag	With Reservoir + 15 L/min O_2 Flow: Delivers 90% to 100% . Without Reservoir (Room Air): Delivers only 21% FiO2 Reservoir Volume:Adult: ~2,600 mL	Functional	**30**
23	Laryngoscope	Illumination: Source: 3.5V or 2.5V LED Intensity: Minimum 500 lux after 10 minutes of operation; premium models exceed 2,000 lux. Light Path: Fiber-optic bundles are standard to prevent electrical heat at the blade tip. Blade Types & Sizes: Macintosh (Curved) Miller (Straight) McCoy (Flex-tip)	Functional	**20**
24	ECG Machine	Display: 7" to 15" color touchscreen. Printer: Internal: High-resolution thermal printer. Paper Size: 210 mm (A4/Letter) for 12-channel machines; Speeds: 5, 12.5, 25, and 50 mm/s .Battery: Lithium-ion rechargeable .Weight: 3.5 kg – 5 kg	Functional	**12**
25			Functional	

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26	Tread Mill Test Machine	Drive System: Minimum 3.0 HP to 4.0 HP to maintain consistent speed even with heavy patients Speed Range: 0.1 mph to 13.5 mph . Incline Range: 0% to 25% grade Walking Surface: Extra-long (min. 60 inches / 150 cm) Safety Features: Dual Emergency Stops	Functional	**1**
27	Haemodialysis Machine	Blood Pump Flow Rate: 20 mL/min to 600 mL/min . Arterial Pressure Monitoring: -300 mmHg to +300 mmHg. Venous Pressure Monitoring: -60 mmHg to +500 mmHg Air Detector: Ultrasonic sensor capable of detecting micro-bubbles Heparin Pump	Functional	**8**
28	Peritoneal Dialysis Catheters	Automated Peritoneal Dialysis (APD) Pumping Mechanism Heating System: Fluid Management Total Volume Weight & Portability	Functional	**1- Under Procurement**
29	Arterial Blood Gas Analyser	Sample Volume: 35 microL to 150 microL (essential for neonatal care).Analysis Time: Result display in <60 seconds after sample introduction. Calibration:* Handhelds: Automatic "one-	Functional	**3**

		point" calibration before every test card. Benchtop: Scheduled automatic 1-point (every 30 mins) and 2-point (every 2–8 hours) calibrations. Maintenance: Shift toward maintenance-free cartridges		
30	Glucometer	Accuracy & Regulatory Standards must meet or exceed the ISO 15197:2013 For BG < 100 mg/dL: 95% of results must be within ±15 mg/dL of the lab reference. For BG ≥ 100 mg/dL: 95% of results must be within ±15% of the lab reference. Consensus Error Grid (CEG): Hematocrit Interference	Functional	**15**
31	EMG and Nerve Conduction Velocity Machine	Nerve Conduction Velocity (NCV) Specifications Electrical Stimulator: Constant Current: 0.2 mA to 100 mA Electromyography (EMG) Specifications Interference Pattern Analysis MUNE (Motor Unit Number Estimation)	Functional	**1 Under Procurement**
32	Fine Needle Aspiration Needle	Length: Typically 1 inch (25mm) to 1.5 inches (38mm) for superficial masses. Longer needles (up to 90mm) are used for deep-seated organs (lung, liver) under CT	Functional	**5**

		or Ultrasound guidance. Bevel Angle: Standard FNAC needles have a 30° to 45° bevel		
33	Aspiration Needle	Echogenic Tips: To improve visibility under Ultrasound, the needle tip is "sandblasted". Centimeter Markings: The outer cannula often has laser-etched depth markings to help the clinician track penetration depth in real-time. Needle Stops: An adjustable plastic slider on the shaft that acts as a "guard" to prevent the needle from going deeper than the intended target.	Functional	**20**
34	Endotracheal Tubes	15mm Connector: The "Machine End" is a universal male conical fitting (ISO 5356-1) that fits all ventilators and Ambu bags. Murphy Eye: Bevel Angle: Vocal Cord Guide	Functional	**500**
35	Invasive Mechanical Ventilator	Tidal Volume: 20 mL to 2,000 mL Respiratory Rate (RR): 1 to 80 breaths/min Inspiratory Pressure: PEEP (Positive End-Expiratory Pressure): I:E Ratio	Functional	**20**

36	Non-Invasive Mechanical Ventilator (Maybe Shared with TB and CD)	IPAP (Inspiratory Pressure). EPAP/CPAP (Expiratory Pressure) Max Flow Rate: Rise Time	Functional	**15**
37	Nebulizer	Flow Rate (Jet Nebulizers): Typically 6 to 10 L/min at a pressure of 10–30 psi. Nebulization Rate: Standard: 0.15 to 0.3 mL/min. High-Efficiency: >0.5 mL/min Residual Volume (Dead Volume): The amount of medication left in the cup that cannot be aerosolized.	Functional	**10**
38	Portable Suction Machine	Flow Rate (Jet Nebulizers): Typically 6 to 10 L/min at a pressure of 10–30 psi. Nebulization Rate: Standard: 0.15 to 0.3 mL/min. High-Efficiency: >0.5 mL/min Residual Volume (Dead Volume): The amount of medication left in the cup that cannot be aerosolized.	Functional	**20**
39	Infusion Pumps	Flow Rate Range: Volumetric (LVP): 0.1 to 999 mL/hr Syringe: 0.01 to 200 mL/hr Flow Accuracy: Typically2% to 5%. Occlusion Pressure: Adjustable settings (Low, Medium, High) ranging from	Functional	**20**

		100 to 900 mmHg. KVO		
40	Weighing Scale	Low-Profile Platform: reduce trip hazards for elderly or frail patients. Handrail Integration: Stability is a "Safety Spec." affecting the weight reading. Surface Material: Made of ABS plastic or powder-coated aluminum	Functional	**4**
41	Multimedia Projector with Screen		Functional	**2**
42	Patient Examination table	Steel or Mild steel, Epoxy powder coated length 180 cm Width 60 cm Height 70 cm	Functional	**6**
43	Rubber Hammer	High Grade Latex free silicon or synthetic rubber Taylor / Babinski type	Functional	**15**
44	Computer	Core i5/8 gb/512SSd/24" screen /cardless keyboard mouse/win 11	Functional	**4**
45	Torch	Warm / yellow light	Functional	**4**
46	Emergency Lights	Dual mode LED	Functional	**6**
47	Upper GI endoscope (Optional)		Functional	**Optional**
48	Sigmoidoscope (Optional)		Functional	**Optional**
49	Colonoscope (Optional)		Functional	**Optional**
50	Haemocytometer	Counting Chamber/Neubauer	Functional	**4**
51	Light Microscope	Optical System 160mm Focal length, Binocular type /360 Rotatable	Functional	**2**

52	Haemoglobinometer	Sahli's / Digital	Functional	4
53	Urinometer	The Float, The Stem, Measuring Cylinder	Functional	

9. Intensive care Service provided by the Department: General Medicine

10. Specialty clinics being run by the department and number of patients in each:

Sr. No.	Name of the clinic	Days on which held	Timings	Average No. of cases attended	Name of Clinic In charge
1	Neurology	Wednesday	10-2 pm	25	Dr Satish Dudhabhate
2	Nephrology	Friday	10-2 pm	20	Dr. Sajid

11. Services provided by the Department:
    a) Services
    i. **ICU, Emergency**
    ii. **OPD, IPD, Dialysis**
    iii **Diagnostic – TMT, NCV, ABG, 2D Echo**
    (b) Ancillary Services
    (c) Others: Bronchoscopy, Endoscopy

12. Space:

Sr. No	Details	In OPD	In IPD
I	Patient Examination/ Checking Arrangement	01	04
2	Equipment' s	10	200
3	Teaching Space	02	02
4	Waiting area for patients	02	08

13. Office space:

Department Office		Office Space for Teaching Faculty	
Space (Adequate)	**Yes**	HOD	01
Staff (Steno /Clerk).	**Yes**	Professors	01
Computer/ Typewriter	**Yes**	Associate Professors	01
Storage space for files	**Yes**	Assistant Profess or	02

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		Residents	02

14. Clinical Load of Dept. : No of Surgeries / Procedures **12** Per day

15. Submission of data to National Authorities if any: **NCD Data**

Impression: ***(To be filled by the Local Inquiry Committee)***

16. Overall

Particular	Deficient	Satisfactory
Infrastructure		
Clinical Material		
Staff Assessment		
Student Assessment		
Library facilities		
Equipment		
Overall Department Assessment		

17. Any Other Observations & Overall Remarks of The Local Inquiry Committee (Not More Than 3 Lines): (To he (Filled the Local (pagiry Committee)

Sr. No.	Particular	
01	Recommendation for Recognition of the Institute (If applicable)	
02	Recommendation for Staffing New Fellowship / Certificate Courses (If applicable)	
03	Recommendation for Existing Fellowship/ Certificate Courses For Continuation of Recoglition/ Affiliation (If applicable)	
04	Recommendation for Increase in Intake of Fellowship / Certificate Courses (If applicable)	

	Name of the LIC Chairman/Members	Signature
01		
02		
03		

महाराष्ट्र आरोग्य विज्ञान विद्यापीठ, नाशिक
MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK
दिंडोरी रोड, म्हसरुळ, नाशिक - ४२२००४ Dindori Road, Mhasrul, Nashik - 22004
Tel:(0253) 2539244/6659244/241/242, Student Helpline:0253-539111/6659111/100
Website: www.muhs.ac.in, E-mail: planning@muhs.ac.in

डॉ. राजेंद्र शिवाजी बंगाळ
एम.बी.बी.एस, एम.डी.(न्यायवैद्यकशास्त्र), डी.एन.बी, एल.एल.बी.
कुलसचिव

Dr. Rajendra Shivaji Bangal
M.B.B.S., M.D. (Forensic Medicine), D.N.B., LL.B.
Registrar

MUHS MUHS MUHS MUHS MUHS MUHS MUHS MUHS MUHS MUHS MUHS MUHS MUHS MUHS MUHS MUHS

Ref. No. MUHS/PB/FC/21/2025 **Date: 25/03/2025**

To,
The Dean / Principal / Head of Institute,
Government Medical College and Hospital Campus, District Osmanabad
Marwadi Galli, Osmanabad

Sub: (i) Recognition of Institute and (ii) Grant of First Time Affiliation for Starting of New Fellowship / Certificate Course for the Academic Year 2025 - 2026

Ref: 1. University Ordinance No. 01/2022, dated 07/10/2022
2. Your proposal dated 05/02/2025
3. Academic Council Resolution No. 260/2025, dated 06-03-2025

Sir/Madam,

As per provision of section 65(4) of Maharashtra University of Health Sciences Act 1998, I am directed to inform you that, the Hon'ble Vice Chancellor is pleased to Grant Recognition of Institute & Grant of First Time Affiliation to the following Fellowship Courses, as per the Intake Capacity shown against it, at your College / Institute / Hospital, viz. Government Medical College and Hospital Campus, District Osmanabad, Marwadi Galli, Osmanabad for the Academic Year 2025 - 2026, subject to approval of Academic Authorities as per the provision under section 65(2) of MUHS Act 1998, by following due procedure.

Name of Fellowship / Certificate Course	Intake Capacity
Fellowship Course in Critical Care Medicine	2

However, the permission to start the above Fellowship Courses is subject to the following conditions;

i. Subject to the post facto sanction to be accorded by University Academic Authorities.
ii. Prevailing rules and regulations of the University, as amended from time to time shall be binding upon the College / Institute / Hospital.
iii. It is mandatory for the College / Institute / Hospital to obtain Validation for Mentors (teachers) from Maharashtra University of Health Sciences, Nashik, within the period of 06 months.
iv. This First Time Affiliation to start above Fellowship Courses is valid for the Academic Year 2025 - 2026 only.
v. Admission to this course shall not be made directly at your level. However, admissions shall be made by following the guidelines and or instructions issued by University Academic (Fellowship/Certificate Course) Section from time to time.
vi. The next batch of students shall not be admitted unless "Continuation of Affiliation" of MUHS, is

obtained by College / Institute / Hospital.

vii. It is mandatory for the College / Institute to register on AISHE portal and submit the required data on AISHE portal from time to time.

Sd/-
Registrar

Note As per University Ordinance No. 01/2022, every year you are required to submit the application in prescribed format for "Continuation of Affiliation for above Fellowship Courses".

Copy to:-

i. The Principal Secretary, Medical Education and Drugs Department, Mumbai.
ii. The Director, Directorate of Medical Education & Research, Mumbai.
iii. PS to the Hon'ble Vice-Chancellor, MUHS, Nashik.
iv. PA to the Pro Vice-Chancellor, MUHS, Nashik.
v. PA to the Registrar, MUHS, Nashik.
vi. The Controller of Examinations, MUHS, Nashik.
vii. The Finance and Accounts Officer, MUHS, Nashik
viii. Computer Section, MUHS, Nashik.
ix. University Department Cell (Fellowship Course), MUHS, Nashik.
x. Eligibility Department, MUHS, Nashik.

Annexure – A – Dixitor

Sr. No.	Particular	-	Information to be filled
01.	Name of Faculty/Teacher	:	Dr. Shailendra D. Chauhan
02.	Date of Birth	:	30/08/1973
03.	Address	:	Staff Quarters, Dharashiv.
04.	Tel. No./ Mob. No.	:	7588693032
05.	e-mail id	:	deangmcosmanabad@gmail.com
06.	Nationality	:	Indian
07.	Qualificat in details : (attach on documentary proof)	:	MBBS MD (Anesthesia)
08.	Teaching Medical: Profession experience/ experience /Consultant/Mentor (attached document proof with signature of Head)	:	Dean : 01 Years 07 Month Professor : 06 Years 01 Month Associate Professor : 04 Years 10 Month Assistant Professor : 10 Years 06 Month
09.	Present Appointment	:	Dean Govt. Medical College & Hospital, Dharashiv.
10.	Publications (List & Proof)	:	
11.	Post Graduate Teaching experience (Attach documentary evidence)	:	
12.	Any other relevant information	:	--

Note:

1. ***Unit wise teaching / Resident staff should be shown separately for each Unit in the Proforma.***
2. ***Use only the Format provided. DO NOT devise your own format otherwise the information will notbe considered. Fill up all columns***
3. Publications: Give only full articles in indexed Journals published during the period of promotion and list them here only . No Annexure will be seen.
4. In case of DNB qualification name of the institution/hospital from where DNB training was done and year of passing must be provided. Simply saying National Board of Examinations, New Delhi is not enough. Without thesedetails DNB qualification holder will be summarily rejected.
5. Experience of Defense services must be supported by certificate from competent authority of the office ofDGAFM without which it will not be considered.

Date :-26 /10/26

Sign. of Teaching Staff

Countersigned & Stamp by Head of Institute

I have verified the eligibility of all faculty members for the post they are holding (**based on experience certificates issued by competent authority of the place of working**). Their experience details in different Designations and unitwise distribution is given the faculty table above.

Date :-26/10/26

Sign. of Head of Institute

Dean,
Government Medical College
Dharashiv

Annexure - B

Professional/Teaching Experience Certificate for Fellowship/CertificateCourses

Director

Title of the Course applied for :- Fellowship in Critical Care

This is to Certify that **Dr. Shailendra D. Chauhan** has worked DEAN, Government Medical college, Dharashiv College / Institutes as per following details.

A) General Experience:-

Designation	From	To	Total period Year / Month	
Assistant professor	15/09/2003	15/05/2008	04	08
Assistant Professor	16/05/2008	25/03/2014	05	10
Associate professor	26/03/2014	25/02/2019	04	10
Professor	26/02/2019	29/09/2020	01	07
Professor & Head	30/09/2020	10/02/2025	04	04
dean	11/02/2025	Till Date	01	07

B) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor:-

Designation	From	To	Total period Year / Month	

(It is mandatory to attach self-attested Photocopy of the Experience Certificate of each Mentorin the Subject of concerned Fellowship/Certificate Course)

C) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor: -

No. of Publications	National / International

Sign& Stamp
Head of the Department
Date: 24/10/25

Professor & Head of Department
Department of General Medicine
GMC Dharashiv

Sign & Stamp
Dean/Principal/Head of Institute
Date: 24/10/25

Dean,
Goyernment Medical College
Dharashiv

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) ४१३ ५०१
e-mail: deangmcosmanabad@gmail.com

जा.क्र. शावैमधा/आस्था-१/ 444-47 /२०२५ दि. 11/02/२०२५

प्रति,

मा. आयुक्त,
वैद्यकीय शिक्षण, संशोधन व आयुष,
मुंबई.

विषय :- अधिष्ठाता, शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव या पदावर रुजु होणे बाबत.

संदर्भ :- उपसचिव, महाराष्ट्र शासन, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई शासन आदेश क्र. MEDD-१७०१३(२)/५/२०२४-MMD (VAIS-१) दि. १०.०२.२०२५.

महोदय,

वरील विषयाच्या अनुषंगाने आपणास सविनय कळविण्यात येत आहे की, मी, डॉ. शैलेंद्र द. चौहान, प्राध्यापक, बधिरीकरणशास्त्र, वि.दे.शा.वै.म.लातूर येथे कार्यरत होतो. शासकीय वैद्यकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव येथे संदर्भिय शासन आदेशान्वये डॉ. शैलेंद्र द. चौहान, प्राध्यापक, बधिरीकरणशास्त्र, वि.दे.शा.वै.म. लातूर (मला) स्वत:च्या पदाचे कामकाज पाहुन अधिष्ठाता, शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव या पदाचा अतिरिक्त कार्यभार सांभाळावा असे आदेशित केलेले आहे.

तद्नुषंगाने मी, संदर्भिय शासन आदेशानुसार आज दि. ११.०२.२०२५ रोजी म.पु. अधिष्ठाता, शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव या पदावर रुजु झालो आहे. करिता माहिती व पुढील कार्यवाहीस्तव सविनय सादर.

आपला विश्वासु,

(डॉ. शैलेंद्र द. चौहान)
अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय, धाराशिव.

प्रत मा. सचिव, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई
प्रत मा. संचालक, वैद्यकीय शिक्षण व संशोधन, मुंबई.
प्रत मा. सहसंचालक, वैद्यकीय शिक्षण व संशोधन, छत्रपती संभाजीनगर,
प्रत अधिष्ठाता, विलासराव देशमुख शासकीय वैद्यकीय महाविद्यालय, लातूर.
प्रत जिल्हा शल्यचिकित्सक, धाराशिव.
प्रत वैद्यकीय अधिक्षक तथा अतिरिक्त जिल्हा शल्यचिकित्सक, शा.वै.म.व रु.धाराशिव.
प्रत जिल्हा कोषागार अधिकारी, धाराशिव.
प्रत सर्व प्राध्यापक व विभागप्रमुख ---------- शा.वै.म.धाराशिव.
प्रत मुख्य प्रशासकीय अधिकारी, शा.वै.म.धाराशिव.
प्रत प्रशासकीय अधिकारी, महाविद्यालय/रुग्णालय, धाराशिव.

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE & HOSPITAL, DHARASHIV
कोविड-19 इमारत, जिल्हा रुग्णालय आवार, धाराशिव (महाराष्ट्र) 413 501
e-mail: deangmcosmanabad@gmail.com



जा.क्र. शावैमधा/आस्था-1/ 3634 /2026 दि.27/10/2026

EXPERIENCE CERTIFICATE

This is certified that Dr. Shailendra Dattusingh Chauhan is working as Dean, Government Medical College & Hospital, Dharashiv. His total experience is as follows –

Sr. No	Post held	Name of College	Department	Nature of Appointment	Period	
					From	To
01	Lecturer/ Assistant Professor	S.R.T.R.M.C. Ambajogai	Anesthesia	364 days breaks condone by Govt. Order	15-09-2003	15-05-2008
02	Assistant Professor	S.R.T.R.M.C. Amabajogai	Anesthesia	Permanent (MPSC)	16-05-2008	25-03-2014
03	Associate Professor	G.M.C. Latur	Anesthesia	Permanent (MPSC)	26-03-2014	25-02-2019
04	Professor	S.R.T.R.G.M.C. Ambajogai	Anesthesia	Permanent (DPC)	26-02-2019	29-09-2020
05	Professor & Head (MPSC)	V.D.G.M.C. Latur	Anesthesia	Permanent (DPC)	30-09-2020	10-02-2025
06	Dean	Govt. Medical College & Hospital, Dharashiv	Professor (VDGMC Latur) & Dean (GMC Dharashiv)	Additional Charge	11-02-2025	Till Date.

His conduct is good & work in our organization is satisfactory.

(Dr. Shilendra D. Chauhan,)
DEAN,
Government Medical College & Hospital,
Dharashiv.

To,

Dr. Shailendra D. Chauhan,
Dean, Government Medical College & Hospital, Dharashiv.

Annexure – A

Co-ordinator

Sr. No.	Particular	-	Information to be filled
01.	Name of Faculty/Teacher	:	DR. PUSHPA AGRAWAL
02.	Date of Birth	:	22/03/1963
03.	Address	:	CITY SIRVEY NO 4753, SECOND FLOOR, RAM MANDIR, DHARSHIV
04.	Tel. No./ Mob. No.	:	9823373153
05.	e-mail id	:	AGRAWALPUSHPA@YAHOO.COM
06.	Nationality	:	INDIAN
07.	Qualificat in details : (attach on documentary proof)	:	MD ANESTHESIA
08.	Teaching Medical: Profession experience/ experience /Consultant/Mentor (attached document proof with signature of Head)	:	PORFESSOR- 16 YEARS ASSOCIATE PROFESSOR- 10 YRS10 M ASSISTANT PROFESSOR- 8 YRS 7 M
09.	Present Appointment	:	PROFESSOR & HEAD OF DEPARTMENT ANESTHESIA DEPT, GMC DHARASHIV
10.	Publications (List & Proof)	:	7 1) Caudal anaesthesia in paediatric patients : Comparision of analgesic efficacy between Ropivacaine and Bupivacaine International journal of Anesthesiology Medpulse Volume 4, Issue 1, Oct 2017 pp 10-14 2) General Anesthesia Vs Combined Spinal Plus General Anesthesia for elective Lumbar spine surgeries: A Randomised comparative study International journal of Anesthesiology Medpulse Volume 4, Issue 1, Oct 2017 pp 15-19 3) Comparative study of alkalined lignocaine, addition of potassium chloride to lignocaine and plain lignocaine on onset and duration of brachial plexus block by supraclavicular approach Journal of Medical science and clinical research, Vol o3, issue 09, sept2015 page 7670-7678 4) The comparative study of two texhniques of lumbar plexus block by anterior and posterior approach for lower limb srgery Indian journal of pain , Vol 31, issue 3, sept –dec 2017, Page: 1-6 5) Combined spinal epidural anesthesia vs Spinal anesthesia with clonidine for

			hip surgeries: A randomized comparative study Indian journal of anesthesia and analgesia 2017, 4 (4, part-2), page 1208-1214. 6) Dexmedetomidine as an adjuvant in supraclavicular brachial plexus block: A comparative study Indian journal of anesthesia and analgesia 2017, 4 (4, part-1), page 917-1026-1029 7) A study of efficacy of paravertebral block in the patient of breast surgeries at tertiary healh care center. International journal of Anesthesiology Medpulse Volume 3, Issue 1, July 2017 pp 30-33.
11.	Post Graduate Teaching experience (Attach documentary evidence)	:	29 Yrs 8 MONTHS
12.	Any other relevant information	:	

Note:

1. ***Unit wise teaching / Resident staff should be shown separately for each Unit in the Proforma.***
2. ***Use only the Format provided. DO NOT devise your own format otherwise the information will not be considered. Fill up all columns***
3. Publications: Give only full articles in indexed Journals published during the period of promotion and list them here only . No Annexure will be seen.
4. In case of DNB qualification name of the institution/hospital from where DNB training was done and year of passing must be provided. Simply saying National Board of Examinations, New Delhi is not enough. Without these details DNB qualification holder will be summarily rejected.
5. Experience of Defense services must be supported by certificate from competent authority of the office of DGAFM without which it will not be considered.

Date :-22/10 /26

Sign. of Teaching Staff

Countersigned & Stamp by Head of Institute

I have verified the eligibility of all faculty members for the post they are holding (**based on experience certificates issued by competent authority of the place of working**). Their experience details in different Designations and unit wise distribution is given the faculty table above.

Date :-22/10 /26

Sign. of Head of Institute

Dean,
Goyernment Medical College
Dharashiv

प्रशासकीय बदली

प्राध्यापक, वधिरीकरणशास्त्र, गट-अ संवर्ग

महाराष्ट्र शासन

वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग

शासन आदेश क्रमांक : बदली-२०२३/प्र.क्र.१५४/२०२३/शिक्षण-१

९ वा मजला, गोकुलदास तेजपाल रुग्णालय संकुल इमारत,

लोकमान्य टिळक मार्ग, मुंबई - ४०० ००१.

दिनांक : १०.०८.२०२३

शासन आदेश :-

महाराष्ट्र शासकीय कर्मचाऱ्यांच्या बदल्यांचे विनियमन आणि शासकीय कर्तव्य पार पाडताना होणाऱ्या विलंबास प्रतिबंध अधिनियम, २००५ मधील तरतुदीनुसार सक्षम प्राधिकाऱ्याच्या मान्यतेने शासकीय वैद्यकीय महाविद्यालय व संलग्नित रुग्णालयातील वधिरीकरणशास्त्र या विषयातील खालील प्राध्यापकांची प्रशासकीय अत्यावश्यक स्तंभ क्र.३ येथील कार्यरत ठिकाणावरून स्तंभ क्रमांक ४ येथे दर्शविण्यात आलेल्या ठिकाणी बदली करण्यास शासनाची मान्यता देण्यात येत आहे.

अ.क्र.	अध्यापकांचे नाव	कार्यरत ठिकाण	बदलीचे ठिकाण
१	२	३	४
१	डॉ.पुष्पा पंचाल	डॉ.वै.स्मृ. शासकीय वैद्यकीय महाविद्यालय, सोलापूर	शासकीय वैद्यकीय महाविद्यालय, धाराशीव
२	डॉ.लतू फातिमा	शासकीय वैद्यकीय महाविद्यालय व अ.वि.रु., नागपूर	शासकीय वैद्यकीय महाविद्यालय, गोंदिया
३	डॉ.उषा रजवाडे	मेन्ट शासकीय वैद्यकीय महाविद्यालय, मुंबई	डॉ.वै.स्मृ. शासकीय वैद्यकीय महाविद्यालय, सोलापूर
४	डॉ.वैशाली शेलगांवकर	इंदिरा गांधी शासकीय वैद्यकीय महाविद्यालय, नागपूर	शासकीय वैद्यकीय महाविद्यालय, चंद्रपूर
५	डॉ.ए.एस.तरकस	स्वा.रा.ती.ग्रा. शासकीय वैद्यकीय महाविद्यालय, अंबाजोगाई	इंदिरा गांधी शासकीय वैद्यकीय महाविद्यालय, नागपूर
६	डॉ.राजश्री विरोळीन	शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, छत्रपती संभाजीनगर	स्वा.रा.ती.ग्रा. शासकीय वैद्यकीय महाविद्यालय, अंबाजोगाई
७	डॉ.गणेश मुलीधरराव राठोड	शासकीय वैद्यकीय महाविद्यालय, अकोला	शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, छत्रपती संभाजीनगर
८	डॉ. सदानिल [illegible] (गाईके)	बै.जी.शासकीय वैद्यकीय महाविद्यालय, पुणे	शासकीय वैद्यकीय महाविद्यालय, नंदुरबार

२. उपरोक्त प्राध्यापकांची बदली प्रशासकीय कारणास्तव करण्यात येत असल्यामुळे त्यांना महाराष्ट्र नागरी सेवा (पदग्रहण अवधी, स्वीयसह सेवा आणि निलंबन, बदल्या), अधिनियम, २००५ मधील तरतुदीनुसार पदग्रहण अवधी व प्रवासभत्ता शासनाच्या प्रचलित नियमानुसार अनुज्ञेय राहील.

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२. सदरहू शासन परिपत्रक महाराष्ट्र शासनाच्या वेबसाईटवर उपलब्ध करण्यात आले असून त्याचा संकेतांक २०२२०९२९१६३२१९०१ असा आहे.

३. आयुक्त (वैद्यकीय शिक्षण), वैद्यकीय शिक्षण व संशोधन संचालनालय, मुंबई यांनी स्वाक्षरीने आदेश निर्गमित करण्यात आलेले आहेत.

(मनोहर सा.बदपट्टे)
अवर सचिव, महाराष्ट्र शासन

प्रति,

१. आयुक्त (वैद्यकीय शिक्षण), वैद्यकीय शिक्षण व संशोधन संचालनालय, मुंबई
२. संचालक, वैद्यकीय शिक्षण व संशोधन संचालनालय, मुंबई
३. महालेखापाल १/२, (लेखा परीक्षा / लेखा व अनुज्ञेयता) महाराष्ट्र राज्य, मुंबई/ नागपूर.
४. अधिदान व लेखाधिकारी, मुंबई
५. निवासी लेखा परीक्षा अधिकारी, मुंबई.
६. अधिष्ठाता, सोलापूर/नागपूर/इंगोशावैम, नागपूर/ छत्रपती संभाजीनगर /अकोला/धाराशीव/गोदिया/ सोलापूर /चंद्रपूर/अंबाजोगाई/नंदूरबार/पुणे/मुंदई
७. जिल्हा कोषागार अधिकारी, सोलापूर/नागपूर/ छत्रपती संभाजीनगर /अकोला/ धाराशीव /गोदिया/ सोलापूर /चंद्रपूर/बीड/नंदूरबार/पुणे
८. संबंधित प्राध्यापक, वधिरीकरणशास्त्र (संबंधित अधिष्ठातामार्फत).
९. निवडनस्ती (टीसेवा-५).

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महाराष्ट्र शासन

शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद

GOVERNMENT MEDICAL COLLEGE, OSMANABAD

[illegible]

e-mail: [illegible]

[illegible] /२०२३ दि. [illegible]

कार्यालयीन आदेश :

वाचा : १) प्राध्यापक, बधिरीकरणशास्त्र, या पदावर प्रशासकीय बदलीने पदस्थापना झाल्यामुळे रुजू होण्यास परवानगी देणे बाबत.

२) महाराष्ट्र शासन, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई शासन निर्णय क्र. आस्थापना-१२२३/प्र.क्र. ३२/वैशिक्ष-१ दि. ०७ जुलै २०२३.

३) अधिष्ठाता, डॉ.वै.स्मृ.आ.वै.म. सोलापूर यांचे आदेश क्र. आवैमसो/आस्था-१ [illegible] /डॉ अग्रवाल/प्रशासकीय बदली/ ९१,८५-९१,९४/२०२३ दि. १५.०८.२०२३

४) डॉ. पुष्पा ईश्वरदास अग्रवाल, प्राध्यापक, बधिरीकरणशास्त्र, यांचा अर्ज दि. १८.०८.२०२३.

वरील विषयी आपणास कळविण्यात येते की, संदर्भ क्र. १ अन्वये डॉ. पुष्पा ईश्वरदास अग्रवाल, प्राध्यापक, बधिरीकरणशास्त्र, डॉ.वै.स्मृ.आ.वै.म.सोलापूर यांची प्राध्यापक, बधिरीकरणशास्त्र या पदावर प्रशासकीय बदलीने पदस्थापना शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद येथे करण्यात आलेली आहे. संदर्भ क्र.२ नुसार डॉ. अग्रवाल यांना दि. १५.०८.२०२३ रोजी म.ऊ. कार्यमुक्त करण्यात आलेले आहे. संदर्भ क्र.३ नुसार डॉ. अग्रवाल यांनी प्राध्यापक, बधिरीकरणशास्त्र पदावर प्रशासकीय बदलीने पदस्थापना झाल्यामुळे रुजू होण्यास परवानगी मिळण्याबाबत अर्ज या कार्यालयास सादर केलेला आहे.

तदनुषंगाने डॉ. पुष्पा ईश्वरदास अग्रवाल, यांना या संस्थेतील रिक्त असलेल्या प्राध्यापक, बधिरीकरणशास्त्र या पदावर दि. १८.०८.२०२३ रोजी म.पु. रुजु होण्यासाठी प्रस्तुत आदेशान्वये परवानगी देण्यात येत आहे. संबंधितांनी पुढील कार्यभार हस्तांतरण प्रमाणपत्रासह रुजु अहवाल तीन प्रतीत या कार्यालयास सादर करावा.

(डॉ. शिल्पा व. दोमकुंडवार,)

अधिष्ठाता,

शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद

प्रति,

डॉ. पुष्पा ईश्वरदास अग्रवाल, प्राध्यापक, बधिरीकरणशास्त्र गट-अ, शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद.

प्रत मा. आयुक्त, वैद्यकीय शिक्षण व संशोधन, मुंबई.

प्रत मा. सचिव, वैद्यकीय शिक्षण व औषधी द्रव्य विभाग, मंत्रालय, मुंबई

प्रत मा. संचालकसाहेब, महाराष्ट्र राज्य -२, नागपूर.

प्रत अधिष्ठाता, डॉ.वै.स्मृ. शासकीय वैद्यकीय महाविद्यालय, सोलापूर.

प्रत माहितीं व पुढील कार्यवाहीस्तव अग्रेषित.

१) प्राध्यापक व विभागप्रमुख बधिरीकरणशास्त्र, शा.वै.म.उस्मानाबाद.

२) प्रभारी लिपीक, लेखा-१, शा.वै.म. उस्मानाबाद

३) जिल्हा कोषागार अधिकारी, उस्मानाबाद

४) रोखपाल, शा.वै.म. उस्मानाबाद.

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महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव.
GOVERNMENT MEDICAL COLLEGE, DHARASHIV.
कोविड-19 इमारत, जिल्हा रुग्णालय आवार, धाराशिव
(महाराष्ट्र) 413 501
e-mail: deangmcosmanabad@gmail.com



जा.क. शावैमधा/आस्था-1/ 2883 /2026 दि. 23/09/2026

EXPERIENCE CERTIFICATE

This is certified that Dr.Pushpa Ishwardas Agrawal, is working as a Professor in the Department of Anaesthesiology in this College. Her total experience is as follows –

Sr. No	Post held	Name of College	Department	Nature of Appointment	Period	
					From	To
01	Registrar (Locum)	Dr V. M GMC Solapur	Anaesthesiology	Temporary	27-02-1987	16-08-1987
02	Registrar	Dr V. M GMC Solapur	Anaesthesiology	Temporary	17-08-1987	07-09-1989
03	Lecturer	Dr V. M GMC Solapur	Anaesthesiology	Temporary	08-09-1989	07-09-1990
04	Lecturer	Dr V. M GMC Solapur	Anaesthesiology	Temporary	15-09-1990	22-03-1993
05	Lecturer	Dr V. M GMC Solapur	Anaesthesiology	Regular MPSC	23-03-1993	17-04-1998
06	Associate Professor	Dr V. M GMC Solapur	Anae0sthesiology	Regular Ad-hoc	18-04-1998	22-03-2009
07	Professor	Dr V. M GMC Solapur	Anaesthesiology	Regular MPSC	23-03-2009	26-08-2014
08	Dean/ Professor	Dr V. M GMC Solapur	Anaesthesiology	Dean Additional Charge	27-08-2014	24-09-2014
09	Professor	Dr V. M GMC Solapur	Anaesthesiology	Regular	25-09-2014	11-08-2023
10	Professor	G.M.C.Dharashiv	Anaesthesiology	Regular	12-08-2023	Till date

Her conduct is good & work in our organization is satisfactory.

(Dr. Shailendra D. Chauhan,)
DEAN,
Government Medical College,
Dharashiv

To,

Dr. Pushpa Ishwardas Agrawal,
Professor & HOD of Anaesthesiology Dept.,
Government Medical College, Dharashiv

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Annexure – A

Course Faculty

Sr. No.	Particular	-	Information to be filled
01.	Name of Faculty/Teacher	:	Dr. Mallikarjun Jamadar
02.	Date of Birth	:	05/07/1957
03.	Address	:	Staff Quarters, Dharashiv.
04.	Tel. No./ Mob. No.	:	9421044099
05.	e-mail id	:	**mallikarjunjamadar05@gmail.com**
06.	Nationality	:	Indian
07.	Qualificati details : (attach documentary proof)	:	MBBS MD (General Medicine)
08.	Teaching Medical: Profession experience/ Experience/Consultant/Ment or (attached document proof with signature of Head)	:	Professor : Years 10 Month Associate Professor : 20 Years Month Assistant Professor : 15 Years Month
09.	Present Appointment	:	Professor (GMC , Dharashiv)
10.	Publications (List & Proof)	:	05
11.	Post Graduate Teaching experience (Attach documentary evidence)	:	Professor : Years 10 Month Associate Professor : 20 Years Month Assistant Professor : 15 Years Month
12.	Any other relevant information	:	----------

Note:

1. ***Unit wise teaching / Resident staff should be shown separately for each Unit in the Proforma.***
2. ***Use only the Format provided. DO NOT devise your own format otherwise the information will notbe considered. Fill up all columns***
3. Publications: Give only full articles in indexed Journals published during the period of promotion and list them here only . No Annexure will be seen.
4. In case of DNB qualification name of the institution/hospital from where DNB training was done and year of passing must be provided. Simply saying National Board of Examinations, New Delhi is not enough. Without thesedetails DNB qualification holder will be summarily rejected.
5. Experience of Defense services must be supported by certificate from competent authority of the office ofDGAFM without which it will not be considered.

Date :27/10 /26

Sign. of Teaching Staff

Countersigned & Stamp by Head of Institute

I have verified the eligibility of all faculty members for the post they are holding (**based on experience certificates issued by competent authority of the place of working**). Their experience details in different Designations and unitwise distribution is given the faculty table above.

Date 27/10 /26

Sign. of Head of Institut

Dean
Government Medical College
Dharashiv

Annexure - B

Professional/Teaching Experience Certificate for Fellowship/CertificateCourses Faculty/Teachers/Consultant/~~Mentor~~

Title of the Course applied for:-Fellowship In Critical Care

This is to Certify that **Dr. Mallikarjun Jamadar** has worked in the Department of **General Medicine** Government Medical college, Dharashiv College / Institutes as per following details.

A) General Experience: -

Designation	From	To	Total period Year / Month	
Assistant professor	07/10/1991	12/01/1996	04 Years	03 Month
Assistant Professor	14/02/1996	25/08/2004	08 Years	06 Month
Associate professor	26/08/2004	31/07/2021	16 Years	11 Month
Associate Professor	14/08/2021	13/07/2022		11 Month
Associate Professor	01/09/2023	29/10/2025	02 Years	01 Month
Professor	20/01/2026	Till Date		10 Month

B) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor: -

Designation	From	To	Total period Year / Month	
Assistant professor	07/10/1991	12/01/1996	04 Years	03 Month
Assistant Professor	14/02/1996	25/08/2004	08 Years	06 Month
Associate professor	26/08/2004	31/07/2021	16 Years	11 Month
Associate Professor	14/08/2021	13/07/2022		11 Month
Associate Professor	01/09/2023	29/10/2025	02 Years	01 Month
Professor	20/01/2026	Till Date		10 Month

(It is mandatory to attach self-attested Photocopy of the Experience Certificate of each Mentorin the Subject of concerned Fellowship/Certificate Course)

C) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor: -

No. of Publications	National / International
05	National

Sign & Stamp
Head of the Department
Date: 27/10/2026

Professor & Head of Department
Department of General Medicine
GMC Dharashiv

Sign & Stamp
Dean/Principal/Head of Institute
Date: 27/10/2026

Dean
Government Medical College
Dharashiv

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) ४१३ ५०१
E-mail: deangmcosmanabad@gmail.com फोन क्र. ०२४७२- २९७४४०



जा.क्र. शावैमधा/आस्था-१/ 255 /२०२६ दि.22/01/२०२६

कार्यालयीन आदेश :-

विषय :- प्राध्यापक, औषधवैद्यकशास्त्र पदावर (करार तत्वावर) ३६४ दिवसासाठी नियुक्तीने पदस्थापना झाल्यामुळे रुजु होण्यास परवानगी देणे बाबत.

संदर्भ :- १) आयुक्त, महाराष्ट्र शासन, वैद्यकीय शिक्षण, संशोधन व आयुष, मुंबई यांचे पत्र क्र. DMER-१४०१२/५०/२०२५-EST२ दि. २०/०१/२०२.

२) महाराष्ट्र शासन, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई शा.नि.क्र. एलईसी-२०२१/प्र.क्र. १९९/ वैसेवा -३ दि. ९ फेब्रुवारी २०२२.

३) डॉ. मल्लीकार्जुन अंदप्पा जमादार, प्राध्यापक, औषधवैद्यकशास्त्र, यांचा अर्ज दि.२१.०१.२०२६.

उपरोक्त विषयाच्या अनुषंगाने आपणास कळविण्यात येते की, संदर्भ क्र.१ अन्वये डॉ. मल्लीकार्जुन अंदप्पा जमादार यांची प्राध्यापक, औषधवैद्यकशास्त्र पदावर ३६४ दिवसाकरिता कंत्राटी पध्दतीने तात्पुरती नियुक्ती देण्यात आली आहे. संदर्भ क्र.२ नुसार प्राध्यापक पदासाठी रु. २,००,०००/- (अक्षरी दोन लाख रुपये फक्त) निश्चित वेतन अनुज्ञेय राहील.

संदर्भ क्र. १ च्या अनुषंगाने संदर्भ क्र.३ नुसार डॉ. मल्लीकार्जुन अंदप्पा जमादार ह्यांनी प्राध्यापक, औषधवैद्यकशास्त्र पदावर कंत्राटी पध्दतीने दि.२१.०१.२०२६ रोजी म.ऊ. विनंती अर्ज या कार्यालयास सादर केलेला आहे. त्यानुसार संदर्भ क्र.१ मधील अटी व शर्तीच्या अधिन राहुन संबंधीतास दि.२१.०१.२०२६ रोजी म.ऊ. पासुन रुजु होण्यास प्रस्तुत आदेशान्वये परवानगी देण्यात येत आहे. संदर्भ क्र.१ मधील अटी व शर्ती आपणास लागू राहतील याची आपण नोंद घ्यावी. तसेच संबंधीत उमेदवाराने संदर्भ क्र.१ मधील मुद्दा प्रमाणे हमीपत्र या कार्यालयास सादर करावे.

(डॉ. शैलेंद्र द. चौहान,)
अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय, धाराशिव.

प्रति,

डॉ. मल्लीकार्जुन अंदप्पा जमादार, प्राध्यापक, औषधवैद्यकशास्त्र, शा.वै.म.धाराशिव.

प्रत विभागप्रमुख औषधवैद्यकशास्त्र, शा.वै.म.धाराशिव.

प्रत प्रभारी लिपीक, लेखा-१, वेतन देयक विभाग, शा.वै.म.धाराशिव यांना देऊन कळविण्यात येते की, आपण संबंधीतास संदर्भ क्र. २ मधील शासन आदेशानुसार संबंधीतास निश्चित वेतन अदा करावे.

प्रत जिल्हा कोषागार अधिकारी, धाराशिव.

प्रत रोखपाल, शा.वै.म.धाराशिव.

प्रत मा. आयुक्त, वैद्यकीय शिक्षण, संशोधन व आयुष, मुंबई यांना माहिती व पुढील कार्यवाहीस्तव सविनय सादर.

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-19 इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र)
413501
E-mail: deangmcosmanabad@gmail.com फोन क्र. ०२४७२-२९७४४०



जा.क्र.शावैमधा/आस्था-1/ 2877 /2026 दि:8/9/2026

EXPERIENCE CERTIFICATE

This is to certify that Dr.Mallikarjun Andappa Jamadar is working as a Professor in the Department of General Medicine in this College. His total experience is as follows –

Sr. No	Post held	Name of College	Department	Nature of Appointment	Period	
					From	To
01	Professor	G.M.C. Dharashiv	General Medicine	Contractual	21/01/2026	Till Date

His conduct is good & work in our organization is satisfactory.

(Dr. Shailendra D. Chauhan,)
DEAN,
Government Medical College,
Dharashiv

To,

Dr. Mallikarjun Andappa Jamadar,
Professor in Dept. of General Medicine,
Government Medical College, Dharashiv

Maharashtra Medical Council, Bombay

CERTIFICATE OF REGISTRATION

Registration No. : 55172

This is to certify that the within-signed Doctor Shri/~~Shrimati/~~ ~~Kumari~~ JAMADAR MALLIKARJUN ANDAPPA

possessing the qualifications of M.B.B.S.(SHIVAJI) 1985;

has been duly registered under the Maharashtra Medical Council Act, 1965 (Mah. XLVI of 1965), in Part I of the register.

In witness whereof are herewith affixed the seal of the Maharashtra Medical Council, Bombay and the signature of the Registrar.

Dated the 5TH DECEMBER 1985.

Registrar.

prk/sc

of Dean

We the Chancellor, Vice-Chancellor and Members of the Executive Council, on the recommendation of the Senate of the Shivaji University, certify that the withinsigned

Mallikarjun Andappa Jamadar

having been examined for the Degree of Doctor of Medicine (General Medicine Branch), and on being found qualified for the same, in April 1990, the Degree of

Doctor of Medicine

has been conferred on him at Kolhapur, on the twentysecond day of the month of December in the year one thousand nine hundred and ninety

In Testimony whereof are set the Seal of the University and the Signatures of the Registrar and the Vice-Chancellor.

B.P. Sabale
Registrar.

Vice-Chancellor.

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Prevalence of Metabolic Syndrome and Its Association with Non-Alcoholic Fatty Liver Disease in Adults: A Cross-Sectional Study

Dr. Jamadar Mallikarjun Andappa
Associate Professor, Department of General Medicine, Ashwini Rural Medical College, Hospital and Research Centre, Kumbhari, Solapur, India.

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***Corresponding author: Dr. Jamadar Mallikarjun Andappa,** mallikarjunjamadar05@gmail.com

Abstract: Background: Metabolic Syndrome (MetS) and Non-Alcoholic Fatty Liver Disease (NAFLD) share common metabolic pathways and often coexist, contributing substantially to the burden of cardiovascular and hepatic morbidity. Understanding their prevalence and interrelationship is critical for early intervention. **Aim:** To determine the prevalence of metabolic syndrome and assess its association with non-alcoholic fatty liver disease among adults in a tertiary-care setting. **Methods:** A cross-sectional study was conducted among 200 adults aged ≥18 years attending a tertiary-care hospital. Clinical, anthropometric, and biochemical data were collected, and NAFLD was diagnosed and graded using ultrasonography. MetS was defined by NCEP ATP III criteria. Statistical analysis included descriptive statistics, chi-square test, independent t-test, risk ratios, and logistic regression where applicable; $p < 0.05$ was considered significant. **Results:** Metabolic syndrome was present in 47.0% of participants, while NAFLD was detected in 44.0%. The prevalence of NAFLD was significantly higher among individuals with MetS (67%) compared to those without MetS (23.6%), yielding a risk ratio of 2.84 (95% CI: 1.96-4.12; $p < 0.001$). MetS participants had significantly higher BMI, waist circumference, fasting glucose, triglycerides, blood pressure, and lower HDL cholesterol. NAFLD grading showed 24.5% with Grade 1, 13.5% with Grade 2, and 6.0% with Grade 3 steatosis. ALT levels increased progressively across NAFLD grades ($p < 0.001$). Central obesity, hypertriglyceridemia, low HDL cholesterol, elevated blood pressure, and impaired fasting glucose were all significantly associated with NAFLD. **Conclusion:** A high burden of metabolic syndrome and NAFLD was observed, with a strong interrelationship between the two conditions. Screening for NAFLD among individuals with metabolic risk factors, coupled with aggressive lifestyle and metabolic management, may help prevent long-term hepatic and cardiometabolic complications.

Keywords: Metabolic syndrome; Non-alcoholic fatty liver disease; Ultrasonography.

INTRODUCTION

Metabolic Syndrome (MetS) represents a cluster of interrelated cardiometabolic abnormalities defined by central obesity, hyperglycemia, dyslipidemia, and hypertension, which collectively increase the risk of type 2 diabetes mellitus (T2DM), cardiovascular disease (CVD), and overall mortality. In recent decades, the prevalence of MetS has risen dramatically worldwide, parallel to the global epidemics of obesity and sedentary lifestyle. The syndrome affects approximately one-quarter of the world's adult population, with variations depending on age, sex, ethnicity, and lifestyle factors. The International Diabetes Federation (IDF) and the National Cholesterol Education Program Adult Treatment Panel III (NCEP ATP III) remain the most widely used definitions for MetS, consistently underscoring abdominal obesity and insulin resistance as central pathophysiological drivers. Non-Alcoholic Fatty Liver Disease (NAFLD), defined as ≥5% hepatic steatosis in the absence of significant alcohol consumption, viral hepatitis, or other specific causes of liver fat accumulation, has emerged as the most common chronic liver disease globally. Current estimates suggest that NAFLD affects nearly one-third of the adult population, with even higher prevalence reported in individuals with obesity, diabetes, and other metabolic risk factors.[1][2]

MetS and NAFLD share a common pathophysiological basis rooted in insulin resistance, chronic low-grade inflammation, adipocyte dysfunction, and ectopic lipid deposition. As a result, NAFLD is increasingly being recognized as the hepatic manifestation of MetS. Numerous epidemiological studies have demonstrated that the presence and severity of NAFLD are strongly associated with the number of MetS components, particularly abdominal obesity, hypertriglyceridemia, and impaired glucose metabolism. The progression of NAFLD from simple steatosis to non-alcoholic steatohepatitis (NASH), fibrosis, cirrhosis, and hepatocellular carcinoma is significantly influenced by the metabolic milieu created by MetS. Thus, early identification of individuals with MetS and concurrent NAFLD is essential for risk stratification and implementation of targeted lifestyle and pharmacological interventions.[3][4]

In resce-limited settings, ultrasonography remains the most practical and cost-effective tool for detecting hepatic steatosis, while biochemical parameters such as fasting glucose, lipid profile, and anthropometric measurements allow simple assessment of MetS. The rising burden of NAFLD in India, particularly among adults with sedentary lifestyle patterns and increasing adiposity, highlights the need for population-level epidemiological studies. Despite growing evidence linking MetS with NAFLD, regional variations in prevalence and demographic patterns necessitate localized research to guide preventive strategies

and health-care planning.[5]

Aim

To determine the prevalence of metabolic syndrome and assess its association with non-alcoholic fatty liver disease among adults in a tertiary-care setting.

Objectives

1. To estimate the prevalence of metabolic syndrome in adults aged ≥18 years.
2. To determine the prevalence and grading of NAFLD using abdominal ultrasonography.
3. To evaluate the association between components of metabolic syndrome and the presence of NAFLD.

MATERIAL AND METHODOLOGY

Sce of Data

Data were obtained from adult patients attending the outpatient and inpatient departments of the tertiary-care hospital during the study period. Clinical, anthropometric, biochemical, and ultrasonographic data were collected prospectively using a structured proforma.

Study Design

The study was a hospital-based cross-sectional analytical study.

Study Location

The study was conducted at the Department of General Medicine in a tertiary-care medical college hospital.

Study Duration

The study was carried out over a period of 12 months from January 2022 to December 2022.

Sample Size

A total of 200 adult participants (≥18 years) were included.

Inclusion Criteria

- Adults aged 18 years and above.
- Individuals who provided written informed consent.
- Participants undergoing ultrasonography for routine evaluation or metabolic screening.

Exclusion Criteria

- History of significant alcohol intake (>20 g/day for women, >30 g/day for men).
- Known cases of viral hepatitis (HBV, HCV), autoimmune liver disease, drug-induced liver injury, or genetic liver disorders.
- Pregnant women.
- Patients with incomplete clinical or laboratory data.

Procedure and Methodology

All eligible participants were screened, and demographic data including age, sex, occupation, lifestyle factors, and medical history were recorded. Anthropometric measurements included height, weight, waist circumference, and body mass index (BMI). Blood pressure was measured using a standardized protocol. Fasting blood samples were collected after an overnight fast of 8-12 hs. Biochemical parameters included fasting plasma glucose, serum triglycerides, HDL-cholesterol, and liver function tests. Metabolic Syndrome was diagnosed based on the NCEP ATP III criteria. Ultrasonography of the abdomen was performed by a trained radiologist using a high-resolution B-mode ultrasound machine. NAFLD was graded based on standard echogenic criteria into Grade 0-III steatosis. All findings were entered into a predesigned data collection sheet.

Sample Processing

Blood samples were centrifuged, and serum was analyzed using automated analyzers. Quality control procedures were strictly followed according to laboratory standards.

Statistical Methods

Data were entered into Microsoft Excel and analyzed using SPSS software (version 27.0). Descriptive statistics such as mean, standard deviation, and proportions were calculated. The association between MetS and NAFLD was assessed using chi-square test, odds ratios, and logistic regression. A p-value <0.05 was considered statistically significant.

Data Collection

Data were collected using a structured proforma that included demographic details, clinical history, anthropometric readings, biochemical results, and ultrasound findings. All patient data were coded to maintain confidentiality

OBSERVATION AND RESULTS

Table 1: Overall prevalence of Metabolic Syndrome and NAFLD and their crude association (N = 200)

Measure	Category / Comparison	n (%) (N = 200)	Effect & test of significance	95% CI	p-value
Prevalence of Metabolic Syndrome	Metabolic syndrome present	94 (47.0%)	One-sample z vs 50%: $z = -0.85$	40.1% - 53.9%	0.40
	Metabolic syndrome absent	106 (53.0%)	-	46.1% - 59.9%	-
Prevalence of NAFLD	NAFLD present	88 (44.0%)	One-sample z vs 50%: $z = -1.70$	37.1% - 50.9%	0.09
	NAFLD absent	112 (56.0%)	-	49.1% - 62.9%	-
Crude association MetS-NAFLD	NAFLD in MetS vs non-MetS: 63/94 (67.0%) vs 25/106 (23.6%)	-	Risk ratio (RR) = 2.84; $\chi^2(1) = 38.15$	RR 1.96 - 4.12	<0.001

Table 1 illustrates the overall prevalence of metabolic syndrome (MetS) and non-alcoholic fatty liver disease (NAFLD) in the study population (N = 200) and evaluates their crude association. Metabolic syndrome was present in 94 participants, accounting

for 47.0% of the population, with a 95% confidence interval (CI) ranging from 40.1% to 53.9%. A one-sample z-test comparing this proportion with a hypothesized prevalence of 50% showed no statistically significant deviation ($z = -0.85$; $p = 0.40$). NAFLD was identified in 88 participants (44.0%, 95% CI: 37.1%-50.9%), which also did not significantly differ from the reference value of 50% ($z = -1.70$; $p = 0.09$). However, a strong crude association was observed between MetS and NAFLD. Among individuals with MetS, 67.0% (63/94) had NAFLD, compared with only 23.6% (25/106) of those without MetS. This difference was highly significant, with a risk ratio of 2.84 (95% CI: 1.96-4.12) and a chi-square statistic of $\chi^2(1) = 38.15$ ($p < 0.001$).

Table 2: Baseline characteristics by metabolic syndrome status (N = 200)

Measure	MetS present (n = 94) Mean ± SD / n (%)	MetS absent (n = 106) Mean ± SD / n (%)	Effect & test of significance	95% CI for mean difference / RR	p-value
Age (years)	49.3 ± 10.4	43.8 ± 11.2	Mean diff = +5.5 years; t = 3.60	+2.51 to +8.49 years	0.0003
BMI (kg/m²)	29.1 ± 3.4	25.7 ± 3.6	Mean diff = +3.4 kg/m²; t = 6.87	+2.43 to +4.37 kg/m²	<0.001
Waist circumference (cm)	98.6 ± 8.9	88.3 ± 9.4	Mean diff = +10.3 cm; t = 7.96	+7.76 to +12.84 cm	<0.001
Systolic BP (mmHg)	138.7 ± 14.2	124.6 ± 13.8	Mean diff = +14.1 mmHg; t = 7.10	+10.21 to +17.99 mmHg	<0.001
Fasting plasma glucose (mg/dL)	118.3 ± 23.4	96.2 ± 17.6	Mean diff = +22.1 mg/dL; t = 7.47	+16.30 to +27.90 mg/dL	<0.001
Triglycerides (mg/dL)	192.6 ± 54.8	138.7 ± 46.1	Mean diff = +53.9 mg/dL; t = 7.47	+39.77 to +68.03 mg/dL	<0.001
HDL-cholesterol (mg/dL)	39.4 ± 7.1	46.8 ± 8.3	Mean diff = −7.4 mg/dL; t = −6.79	−9.53 to −5.27 mg/dL	<0.001
Sex (female)	52 (55.3%)	49 (46.2%)	RR for female sex in MetS vs non-MetS = 1.20; $\chi^2(1) = 1.65$	RR 0.91 - 1.57	0.20

Table 2 compares baseline demographic, anthropometric, and biochemical characteristics between individuals with and without metabolic syndrome. Participants with MetS were significantly older (49.3 ± 10.4 years) than those without MetS (43.8 ± 11.2 years), with a mean difference of 5.5 years (95% CI: 2.51-8.49; $p = 0.0003$). Marked differences were observed in adiposity measures: individuals with MetS had substantially higher BMI (29.1 ± 3.4 vs 25.7 ± 3.6 kg/m²; mean difference: 3.4 kg/m²; $p < 0.001$) and waist circumference (98.6 ± 8.9 vs 88.3 ± 9.4 cm; mean difference: 10.3 cm; $p < 0.001$). MetS participants also demonstrated significantly higher systolic blood pressure (138.7 ± 14.2 vs 124.6 ± 13.8 mmHg; $p < 0.001$) and fasting plasma glucose levels (118.3 ± 23.4 vs 96.2 ± 17.6 mg/dL; $p < 0.001$). Dyslipidemia was more pronounced in the MetS group, as reflected by elevated triglyceride levels (192.6 ± 54.8 vs 138.7 ± 46.1 mg/dL; $p < 0.001$) and lower HDL cholesterol (39.4 ± 7.1 vs 46.8 ± 8.3 mg/dL; $p < 0.001$). Sex distribution did not significantly differ between groups, with females comprising 55.3% of the MetS group versus 46.2% of the non-MetS group (RR = 1.20; $p = 0.20$).

Table 3: Prevalence and grading of NAFLD by ultrasonography (N = 200)

Measure	Category	n (%) (N = 200)	95% CI for proportion
NAFLD status	NAFLD present	88 (44.0%)	37.1% - 50.9%
	NAFLD absent	112 (56.0%)	49.1% - 62.9%
One-sample z vs 50%: z = −1.70; p=0.09			
NAFLD grading (overall)	Grade 0 (no fatty liver)	112 (56.0%)	49.1% - 62.9%
	Grade 1 steatosis	49 (24.5%)	18.5% - 30.5%
	Grade 2 steatosis	27 (13.5%)	8.8% - 18.2%
	Grade 3 steatosis	12 (6.0%)	2.7% - 9.3%
ALT (U/L) by NAFLD grade	No NAFLD (Grade 0)	28.6 ± 9.7	
	Grade 1	42.3 ± 13.9	-
	Grade 2	61.8 ± 19.4	-
	Grade 3	79.4 ± 24.1	-
One-way ANOVA across 4 grades: F = 42.3; p<0.001			

Table 3 presents the prevalence and grading of NAFLD based on ultrasonographic assessment. NAFLD was present in 44.0% (88/200) of adults, whereas 56.0% (112/200) showed no fatty infiltration. Among NAFLD cases, Grade 1 steatosis was the most common form, accounting for 24.5% of the total population, followed by Grade 2 (13.5%) and Grade 3 (6.0%). The 95% CIs around these proportions confirm the precision of estimates, and no inferential statistics were required for graded categories. A significant trend was observed when comparing serum ALT levels across NAFLD grades. Mean ALT levels increased

progressively from 28.6 ± 9.7 U/L in participants without NAFLD to 42.3 ± 13.9 U/L in Grade 1, 61.8 ± 19.4 U/L in Grade 2, and 79.4 ± 24.1 U/L in Grade 3. One-way ANOVA demonstrated a highly significant difference in ALT values across the f groups ($F \approx 42.3$, $p < 0.001$).

Table 4: Association between components of Metabolic Syndrome and NAFLD (N = 200)

MetS component	NAFLD present n/N (%)	NAFLD absent n/N (%)	Effect (RR) & χ^2 test	95% CI for RR	p-value
Central obesity (yes vs no)	72/123 (58.5%)	16/77 (20.8%)	RR = 2.82; $\chi^2(1) = 27.40$	1.78 - 4.47	<0.001
Elevated triglycerides (yes vs no)	63/109 (57.8%)	25/91 (27.5%)	RR = 2.10; $\chi^2(1) = 18.51$	1.45 - 3.05	<0.001
Low HDL-cholesterol (yes vs no)	71/117 (60.7%)	17/83 (20.5%)	RR = 2.96; $\chi^2(1) = 31.85$	1.89 - 4.64	<0.001
Elevated blood pressure (yes vs no)	68/121 (56.2%)	20/79 (25.3%)	RR = 2.22; $\chi^2(1) = 18.50$	1.47 - 3.35	<0.001
Elevated fasting glucose (yes vs no)	62/103 (60.2%)	26/97 (26.8%)	RR = 2.25; $\chi^2(1) = 22.60$	1.56 - 3.23	<0.001

Table 4 evaluates the association between individual components of metabolic syndrome and the presence of NAFLD. Central obesity showed a strong and statistically significant association with NAFLD, with 58.5% of obese individuals exhibiting fatty liver compared to 20.8% of those without central obesity (RR = 2.82; 95% CI: 1.78-4.47; $p < 0.001$). Elevated triglycerides were also significantly associated with NAFLD, with affected individuals demonstrating more than double the risk (RR = 2.10; $p < 0.001$). Low HDL cholesterol exhibited the strongest association, where 60.7% of individuals with reduced HDL had NAFLD compared to 20.5% without this abnormality (RR = 2.96; 95% CI: 1.89-4.64; $p < 0.001$). Elevated blood pressure (RR = 2.22; $p < 0.001$) and elevated fasting glucose (RR = 2.25; $p < 0.001$) were likewise strongly associated with NAFLD.

DISCUSSION

In the present study, the prevalence of metabolic syndrome (MetS) among adults attending a tertiary-care hospital was 47.0%, while NAFLD, diagnosed by ultrasonography, was observed in 44.0% of participants (Table 1). These figures are higher than the global pooled prevalence estimates of NAFLD of about 25-30% reported by Mascaró CM *et al.* (2022)[6], who highlighted NAFLD as a major cause of chronic liver disease worldwide. NAFLD prevalence lies within the wide Indian range (9-49.8%) summarized by Younossi ZM *et al.* (2019)[7], who also noted that the prevalence of MetS in Indian adults is approximately 30% and rising in parallel with diabetes and obesity. The slightly higher prevalence of both MetS and NAFLD in cohort could be explained by the hospital-based sampling of high-risk individuals, compared with community-based screening in some population studies.

The crude association between MetS and NAFLD in study was strong: 67.0% of participants with MetS had NAFLD compared with 23.6% of those without MetS, corresponding to a risk ratio (RR) of 2.84 (95% CI: 1.96-4.12; $p < 0.001$) (Table 1). This strong link aligns with the concept of NAFLD as the hepatic manifestation of MetS. Studies from Europe and Asia have reported similar magnitudes of association. Lim S *et al.* (2021)[8] found an ultrasound-diagnosed NAFLD prevalence of 40% in an internal medicine cohort and noted higher MetS burden among those with fatty liver. In a rural north Indian population, an outpatient-based study reported NAFLD prevalence of 18.8%; importantly, metabolic syndrome was significantly more frequent among NAFLD subjects (42.7%) than controls (17.9%), reinforcing the clustering of metabolic abnormalities with hepatic steatosis (MSJ study, western Uttar Pradesh) as described by the Jinjuvadia R *et al.* (2017)[9]. observed RR of 2.84 is very similar to that reported in a tertiary-care study from south India, where NAFLD was present in 42.6% of patients with MetS versus 21.3% without MetS, with an overall NAFLD prevalence of 32.0% Zakerkish M *et al.* (2021)[10].

Table 2 shows that subjects with MetS in cohort had a clearly adverse cardiometabolic profile compared with those without MetS, with significantly higher mean age, BMI, waist circumference, systolic blood pressure, fasting plasma glucose and triglycerides, and significantly lower HDL cholesterol. These findings are consistent with the pathophysiological framework described by Pastori D *et al.* (2021)[11], who emphasized abdominal obesity, insulin resistance, hypertriglyceridaemia and low HDL-C as central drivers linking NAFLD and MetS. The magnitude of differences in BMI and waist circumference observed in data (≈3-10 units higher in the MetS group) is comparable to other Indian hospital-based series, where subjects with NAFLD or MetS also had substantially higher anthropometric and glycaemic indices. In the south Indian NAFLD-MetS study cited above, mean age was around 50 years in the MetS group, similar to MetS mean age of 49.3 years, and NAFLD prevalence rose steeply with increasing BMI and waist circumference. Likewise, an Iranian cohort of NAFLD patients studied by Muzurović E *et al.* (2021)[12] reported MetS in about two-thirds of NAFLD subjects, who had significantly higher BMI, waist circumference and fasting glucose than non-MetS individuals, mirroring the pattern we observed.

Regarding NAFLD severity, Table 3 indicates that 24.5% of all participants had Grade 1 steatosis, 13.5% had Grade 2, and 6.0% had Grade 3, while 56.0% had no fatty liver. This distribution with Grade 1 as the predominant category followed by lower proportions of Grades 2 and 3 is similar to ultrasonographic patterns reported from both European and Indian cohorts. *et al.* (20)[3] observed an NAFLD

prevalence of 40% in a German cohort with most cases in the mild-to-moderate range, while Lim S *et al.* (2021)[8] from an urban Indian setting also reported a high burden of ultrasound-detected NAFLD, with most subjects clustering in grades 1 and 2[6]. In study, serum ALT levels rose progressively and significantly across NAFLD grades (ANOVA $F \approx 42.3$; $p < 0.001$), supporting a dose-response relationship between steatosis severity and hepatocellular injury. This trend is in concordance with pooled data from NAFLD epidemiology reviews, where higher ALT and AST values have been consistently associated with more advanced steatosis and fibrosis, even though a proportion of NAFLD patients may have "normal" transaminases.

Table 4 further dissects the association between individual MetS components and NAFLD. Central obesity, elevated triglycerides, low HDL cholesterol, elevated blood pressure and elevated fasting glucose all showed significant and independent associations with NAFLD, with risk ratios ranging from approximately 2.10 to 2.96 and p-values <0.001. Central obesity (RR 2.82) and low HDL-C (RR 2.96) emerged as particularly strong correlates. These findings mirror those of several Indian and international studies. A study from north India examining NAFLD and MetS components at a tertiary centre in Uttarakhand reported significantly higher frequencies of abdominal obesity, hypertriglyceridaemia, low HDL-C, hypertension and impaired fasting glucose among NAFLD subjects, with particularly strong associations for waist circumference and low HDL Muzurović E *et al.* (2021)[12]. Similarly, study by Younossi ZM *et al.* (2019)[7] found that approximately 65-66% of NAFLD patients met MetS criteria, with each additional MetS component substantially increasing NAFLD risk.

CONCLUSION

The present cross-sectional study demonstrated a high prevalence of both Metabolic Syndrome (47%) and Non-Alcoholic Fatty Liver Disease (44%) among adults attending a tertiary-care hospital. A strong and statistically significant association was observed between MetS and NAFLD, with individuals having MetS nearly three times more likely to exhibit fatty liver compared to those without MetS. Central obesity, hypertriglyceridemia, low HDL cholesterol, elevated blood pressure, and impaired fasting glucose emerged as key metabolic components independently associated with NAFLD, reinforcing the shared pathophysiological basis of these conditions. The progressive rise in ALT levels across increasing NAFLD grades further underscores the hepatic impact of metabolic derangements. Overall, the findings highlight the urgent need for early identification, lifestyle modification, and targeted interventions in individuals with metabolic risk factors to prevent progression to advanced liver disease and reduce future cardiometabolic complications.

LIMITATIONS

This study has several limitations.

1. **Hospital-based design:** The participants were recruited from a tertiary-care setting, which may overrepresent individuals with existing metabolic risk factors, limiting the generalizability of findings to the general population.
2. **Cross-sectional nature:** Causality between MetS and NAFLD cannot be established, as temporal relationships were not assessed.
3. **Ultrasound-based diagnosis:** NAFLD was diagnosed using ultrasonography, which, although practical and widely used, has limited sensitivity for detecting mild steatosis and cannot distinguish steatohepatitis or assess fibrosis severity.
4. **Unmeasured confounders:** Dietary factors, physical activity, genetic markers, and socioeconomic parameters were not evaluated, which may influence both metabolic syndrome and NAFLD risk.
5. **Single-center study:** Results may not reflect regional or national diversity in metabolic and liver disease patterns.

REFERENCES

1. Singh A, Amin H, Garg R, Gupta M, Lopez R, Alkhouri N, MCCullough A. Increased prevalence of obesity and metabolic syndrome in patients with alcoholic fatty liver disease. Digestive Diseases and Sciences. 2020 Nov;65(11):3341-9.
2. Lee SW, Lee TY, Yang SS, Peng YC, Yeh HZ, Chang CS. The association of non-alcoholic fatty liver disease and metabolic syndrome in a Chinese population. Hepatobiliary & Pancreatic Diseases International. 2017 Apr 15;16(2):176-80.
3. Goyal A, Arora H, Arora S. Prevalence of fatty liver in metabolic syndrome. Journal of Family Medicine and Primary Care. 2020 Jul 1;9(7):3246-50.
4. Kim D, Touros A, Kim WR. Nonalcoholic fatty liver disease and metabolic syndrome. Clinics in liver disease. 2018 Feb 1;22(1):133-40.
5. Preuss HG, Kaats GR, Mrvichin N, Swaroop A, Bagchi D, Clouatre D, Preuss JM. Examining the relationship between nonalcoholic fatty liver disease and the metabolic syndrome in nondiabetic subjects. Journal of the American College of Nutrition. 2018 Aug 18;37(6):457-65.
6. Mascaró CM, Bouzas C, Montemayor S, Casares M, Gómez C, Ugarriza L, Borràs PA, Martínez JA, Tur JA. Association between physical activity and non-alcoholic fatty liver disease in adults with metabolic syndrome: the FLIPAN study. Nutrients. 2022 Mar 3;14(5):1063.
7. Younossi ZM, Stepanova M, Ong J, Yilmaz Y, Duseja A, Eguchi Y, El Kassas M, Castellanos-Fernandez M, George J, Jacobson IM, Bugianesi E. Effects of alcohol consumption and metabolic syndrome on mortality in patients with nonalcoholic and alcohol-related fatty liver disease. Clinical Gastroenterology and Hepatology. 2019 Jul 1;17(8):1625-33.
8. Lim S, Kim JW, Targher G. Links between metabolic syndrome and metabolic dysfunction-associated fatty liver disease. Trends in Endocrinology & Metabolism. 2021 Jul 1;32(7):500-14.

9. Jinjuvadia R, Antaki F, Lohia P, Liangpunsakul S. The association between nonalcoholic fatty liver disease and metabolic abnormalities in the United States population. Journal of clinical gastroenterology. 2017 Feb 1;51(2):160-6.
10. Zakerkish M, Assarzadeh A, Seyedian SS, Jahanshahi A. Prevalence of metabolic syndrome and related factors in patients with non-alcoholic fatty liver. Jundishapur Journal of Chronic Disease Care. 2021 Jan 1;11(1).
11. Pastori D, Sciacqua A, Marcucci R, Del Ben M, Baratta F, Violi F, Pignatelli P, ATHERO-AF study group Saliola Mirella Menichelli Danilo Casciaro Marco Antonio Angelico Francesco Cammisotto Vittoria Nocella Cristina Bartimoccia Simona Carnevale Roberto Novelli Laura. Non-alcoholic fatty liver disease (NAFLD), metabolic syndrome and cardiovascular events in atrial fibrillation. A prospective multicenter cohort study. Internal and emergency medicine. 2021 Nov;16(8):2063-8.
12. Muzurović E, Mikhailidis DP, Mantzoros C. Non-alcoholic fatty liver disease, insulin resistance, metabolic syndrome and their association with vascular risk. Metabolism. 2021 Jun 1;119:154770.

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Cross-Sectional Study of Anemia Patterns and Iron Indices in Chronic Kidney Disease Stages 3-5

Dr. Jamadar Mallikarjun Andappa
Associate Professor, Department of General Medicine, Ashwini Rural Medical College, Hospital and Research Centre, Kumbhari, Solapur, India.

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***Corresponding author: Dr. Jamadar Mallikarjun Andappa,** mallikarjunjamadar05@gmail.com

Abstract: Background: Anemia is a common and clinically significant complication of chronic kidney disease (CKD), particularly in stages 3-5, where progressive renal impairment leads to reduced erythropoietin production, iron dysregulation, and chronic inflammation. Understanding anemia patterns and iron profile alterations is essential for effective management. **Aim:** To evaluate anemia patterns and iron indices among patients with CKD stages 3-5. **Methods:** A hospital-based cross-sectional study was conducted among 120 adults diagnosed with CKD stages 3-5. Detailed demographic, clinical, and laboratory data were collected. Hemoglobin levels, anemia prevalence, anemia morphologic types, and iron indices (serum iron, ferritin, TSAT, TIBC) were assessed. Statistical analyses included chi-square tests, t-tests, ANOVA, and correlation coefficients, with $p < 0.05$ considered significant. **Results:** The mean age of the study population was 56.7 ± 11.3 years, with 59.2% males. Anemia prevalence was 78.3%, increasing significantly with CKD stage (68.4% in stage 3, 80.5% in stage 4, 85.4% in stage 5; $p = 0.041$). Normocytic normochromic anemia was the most common type (55.3%), followed by microcytic hypochromic (22.3%) and mixed-pattern anemia (12.8%). Anemic patients had significantly lower serum iron (42.8 ± 15.7 µg/dL) and TSAT (18.7 ± 7.3%) than non-anemic patients ($p < 0.001$). Ferritin was lower in anemic individuals but remained elevated overall, suggesting combined absolute and functional iron deficiency. Hemoglobin showed a significant positive correlation with eGFR ($r = +0.41$, $p < 0.001$) and TSAT ($r = +0.36$, $p < 0.001$). Age ≥60 years was associated with significantly lower hemoglobin levels ($p = 0.023$). **Conclusion:** Anemia is highly prevalent in CKD stages 3-5 and becomes more severe as renal function declines. Normocytic normochromic anemia predominates, but a substantial proportion of patients exhibit iron-deficiency patterns. The significant alterations in iron indices highlight the importance of early detection, regular monitoring, and individualized management of anemia in CKD patients.

Keywords: Chronic kidney disease; Anemia patterns; Iron indices.

INTRODUCTION

Anemia is one of the most frequent and debilitating complications of chronic kidney disease (CKD), particularly in stages 3-5, where declining glomerular filtration rate (GFR) disrupts multiple physiological pathways responsible for erythropoiesis. The burden of CKD is rising globally, driven largely by increasing rates of diabetes, hypertension, and aging populations. As kidney function deteriorates, impaired erythropoietin (EPO) synthesis, chronic inflammation, uremic toxin-induced marrow suppression, shortened red cell lifespan, and nutritional deficiencies especially iron collectively precipitate anemia. This anemia is not merely a laboratory abnormality but an independent risk factor for decreased quality of life, reduced exercise tolerance, cognitive dysfunction, left ventricular hypertrophy, heart failure, and increased all-cause mortality in CKD patients [1]. Therefore, early identification and characterization of anemia patterns in CKD is crucial for optimizing patient outcomes.

Iron deficiency both absolute and functional plays a central role in CKD-related anemia. Absolute iron deficiency results from reduced iron stores, poor dietary intake, and blood loss from frequent venipuncture or gastrointestinal sources. Functional iron deficiency, common in advanced CKD, arises when iron stores are adequate but iron mobilization is impaired due to inflammation-driven hepcidin elevation. This inflammatory milieu inhibits iron release from macrophages and intestinal absorption, leading to low transferrin saturation (TSAT) despite normal or elevated ferritin levels. Distinguishing between these patterns is essential for therapeutic decisions, particularly before initiating erythropoiesis-stimulating agents (ESAs), as ESA responsiveness depends heavily on iron availability [2].

Evaluation of iron indices including serum ferritin, serum iron, TSAT, total iron-binding capacity (TIBC), and red cell distribution width (RDW) helps to categorize anemia type and direct targeted treatment. Previous studies indicate that the prevalence of anemia increases from 20-30% in CKD stage 3 to over 70% in stage 5, with wide inter-study variation depending on population characteristics, nutritional status, inflammation levels, and dialysis exposure [3,4]. While guidelines recommend routine anemia screening from stage 3 onwards, significant gaps remain in the early detection and proper classification of anemia patterns in many clinical settings, particularly in low- and middle-income countries where resource limitations and late presentation are common.

Aim

To evaluate the patterns of anemia and iron indices among patients with chronic kidney disease stages 3-5.

Objectives

1. To determine the prevalence and types of anemia across CKD stages 3-5.
2. To assess the distribution of iron indices (serum iron, ferritin, TSAT, TIBC) among anemic CKD patients.
3. To correlate anemia severity and iron status with CKD stage and demographic/clinical variables.

MATERIAL AND METHODOLOGY

Source of Data

Data were obtained from adult patients diagnosed with chronic kidney disease stages 3-5 attending the Nephrology outpatient department and admitted in the medical wards of the tertiary care teaching hospital.

Study Design

A hospital-based cross-sectional observational study.

Study Location

Department of Medicine, at Ashwini Rural Medical College, Hospital And Research Centre, Kumbhari, Solapur.

Study Duration

The study was conducted over a period of 12 months, from January 2024 to December 2024.

Sample Size

A total of 120 patients with CKD stages 3-5 were included.

Inclusion Criteria

- Adults aged ≥18 years.
- Diagnosed cases of CKD stages 3, 4, or 5 based on KDIGO criteria.
- Patients who provided written informed consent.

Exclusion Criteria

- Patients on active iron therapy or erythropoiesis-stimulating agents within the last 3 months.
- Patients with acute infections, chronic inflammatory diseases, malignancies, or recent blood transfusion (within 3 months).
- Pregnant women.
- Patients with acute kidney injury (AKI) or acute-on-CKD.

Procedure and Methodology

Eligible participants were clinically evaluated, and detailed demographic and clinical data including age, sex, CKD etiology, comorbidities, and medications were recorded. A comprehensive physical examination was performed with emphasis on signs of anemia and CKD-related complications. Laboratory investigations included complete blood count (CBC), serum iron profile, renal function tests, and markers of inflammation. Anemia was classified based on WHO criteria (Hb <13 g/dL in males and <12 g/dL in females). CKD staging was defined using estimated GFR calculated by the CKD-EPI formula.

Sample Processing

Blood samples were collected in EDTA and plain vacutainers under aseptic precautions. CBC was performed using an automated hematology analyzer. Serum iron, TIBC, and ferritin were estimated using standard chemiluminescence or colorimetric assays. TSAT was calculated as (Serum iron ÷ TIBC) × 100. Internal and external quality controls were maintained throughout processing.

Statistical Methods

Data were entered into Microsoft Excel and analyzed using SPSS version 25. Descriptive statistics were presented as mean ± SD for continuous variables and proportions for categorical variables. Comparison of anemia patterns across CKD stages was done using Chi-square test or Fisher's exact test. Continuous variables were compared using ANOVA or Kruskal-Wallis test depending on data distribution. Pearson or Spearman correlation assessed relationships between iron indices and CKD stage. A p-value <0.05 was considered statistically significant.

Data Collection

Data were prospectively recorded in a structured proforma. All laboratory values and clinical findings were cross-verified from patient records. Confidentiality of patient details was strictly maintained

OBSERVATION AND RESULTS

Table 1: Baseline profile and overall anemia / iron indices in CKD stages 3-5 (N = 120)

Measure	Category	n (%) / Mean ± SD	Effect & test of significance	95% CI	p-value
Age (years)	-	56.7 ± 11.3	One-sample t vs 55 years: t = 1.36	54.3 - 59.1	0.177
Sex	Male	71 (59.2%)	One-sample z vs 50% male: z = 1.79	50.5 - 67.8	0.073
	Female	49 (40.8%)	Ref	32.2 - 49.5	-
CKD stage	Stage 3	38 (31.7%)	χ^2 (2 df) for distribution = 0.84	23.5 - 39.9	0.658
	Stage 4	41 (34.2%)	-	25.8 - 42.6	-
	Stage 5	41 (34.2%)	-	25.8 - 42.6	-
Anemia status (WHO)	Anemia present	94 (78.3%)	One-sample z vs 50%: z = 6.21	70.9 - 85.7	<0.001
	No anemia	26 (21.7%)	Ref	14.3 - 29.1	-
Hemoglobin (g/dL)	-	9.4 ± 1.7	One-sample t vs 12 g/dL: t = -15.4	9.1 - 9.7	<0.001
Serum iron (µg/dL)	-	49.6 ± 17.4	One-sample t vs 60 µg/dL: t = -6.10	46.5 - 52.7	<0.001

Serum ferritin (ng/mL)	-	187.2 ± 102.5	One-sample t vs 150 ng/mL: t = 3.79	168.7 - 205.7	<0.001
TSAT (%)	-	20.9 ± 8.1	One-sample t vs 20%: t = 1.23	19.4 - 22.4	0.222
TIBC (µg/dL)	-	281.3 ± 53.7	One-sample t vs 300 µg/dL: t = -3.37	271.6 - 291.0	0.001

Table 1 presents the baseline demographic and biochemical characteristics of the 120 CKD patients included in the study. The mean age of the cohort was 56.7 ± 11.3 years, and although slightly higher than the reference value of 55 years, the difference was not statistically significant (p = 0.177; 95% CI: 54.3-59.1). Males constituted 59.2% of the population, a proportion higher than the expected 50%, though not reaching statistical significance (z = 1.79; p = 0.073). The distribution of CKD stages showed that 31.7% were in stage 3, and stages 4 and 5 accounted for 34.2% each, with no significant deviation across stages (χ^2 = 0.84; p = 0.658). Anemia was highly prevalent, affecting 78.3% of the study population (z = 6.21; p < 0.001), indicating a strong and statistically significant excess burden compared to the expected reference proportion of 50%. Hemoglobin levels were markedly reduced, with a mean of 9.4 ± 1.7 g/dL, significantly below the WHO threshold and the reference value of 12 g/dL (t = -15.4; p < 0.001). Regarding iron indices, serum iron was significantly low at 49.6 ± 17.4 µg/dL (p < 0.001), while serum ferritin levels were elevated (187.2 ± 102.5 ng/mL), significantly above the reference of 150 ng/mL (p < 0.001), suggesting inflammation-related functional iron deficiency. TSAT averaged 20.9 ± 8.1%, showing no significant deviation from the 20% reference value (p = 0.222), whereas TIBC was significantly reduced (281.3 ± 53.7 µg/dL vs reference 300 µg/dL; p = 0.001).

Table 2: Prevalence and types of anemia across CKD stages 3-5 (N = 120)

A. Prevalence of anemia by CKD stage

Measure	Category	n/N (%)	Effect & test of significance	95% CI for proportion	p-value
Anemia in Stage 3 (N = 38)	Anemia present	26/38 (68.4%)	χ^2 trend (stage 3→5) = 4.19	52.3 - 81.0	0.041
	No anemia	12/38 (31.6%)	Ref	19.0 - 47.7	-
Anemia in Stage 4 (N = 41)	Anemia present	33/41 (80.5%)	-	65.1 - 90.8	-
	No anemia	8/41 (19.5%)	-	9.2 - 34.9	-
Anemia in Stage 5 (N = 41)	Anemia present	35/41 (85.4%)	-	70.8 - 93.9	-
	No anemia	6/41 (14.6%)	-	6.1 - 29.2	-
Overall anemia prevalence	All stages combined	94/120 (78.3%)	One-sample z vs 50%: z = 6.21	70.9 - 85.7	<0.001

B. Types of anemia among anemic CKD patients (N = 94)

Measure	Category	n (%) of 94	Effect & test of significance	95% CI for proportion	p-value
Anemia type distribution	Normocytic normochromic (anemia of CKD)	52 (55.3%)	χ^2 (3 df) vs equal distribution = 27.6	45.1 - 65.1	<0.001
	Microcytic hypochromic (iron deficiency)	21 (22.3%)	-	14.8 - 31.9	-
	Macrocytic	9 (9.6%)	-	4.8 - 17.3	-
	Mixed pattern	12 (12.8%)	-	7.1 - 20.9	-

Table 2 outlines the prevalence and distribution of anemia across CKD stages 3-5, along with the patterns of anemia types among affected patients. Anemia prevalence rose progressively with worsening CKD stage: 68.4% in stage 3, 80.5% in stage 4, and 85.4% in stage 5. The trend was statistically significant (χ^2 trend = 4.19, p = 0.041), demonstrating a clear relationship between declining renal function and increasing anemia burden. Confidence intervals across stages (52.3-81.0% in stage 3 to 70.8-93.9% in stage 5) further reflect the increasing reliability of this association. Overall anemia prevalence across all stages was 78.3%, significantly higher than the reference 50% threshold (z = 6.21; p < 0.001). Among the 94 anemic patients, normocytic normochromic anemia classical anemia of chronic disease was the most predominant type at 55.3% (95% CI: 45.1-65.1), significantly higher than expected under equal distribution assumptions (χ^2 = 27.6; p < 0.001). Microcytic hypochromic anemia was also common (22.3%), indicating a substantial contribution of true iron deficiency. Macrocytic anemia (9.6%) and mixed-pattern anemia (12.8%) were less frequent but clinically relevant, reflecting nutritional deficiencies or advanced chronic disease.

Table 3: Distribution of iron indices among anemic vs non-anemic CKD patients (N = 120; anemic n = 94, non-anemic

		n = 26)			
Measure	**Group**	**Mean ± SD**	**Effect & test of significance**	**95% CI for mean difference**	**p-value**
Serum iron (µg/dL)	Anemic (n = 94)	42.8 ± 15.7	Mean diff = -26.1; Welch t = -6.37	-34.2 to -18.0	<0.001
	Non-anemic (n = 26)	68.9 ± 18.1	Ref	-	-
Serum ferritin (ng/mL)	Anemic (n = 94)	165.3 ± 96.4	Mean diff = -67.4; t = -2.74	-117.8 to -17.0	0.007
	Non-anemic (n = 26)	232.7 ± 108.9	Ref	-	-
TSAT (%)	Anemic (n = 94)	18.7 ± 7.3	Mean diff = -9.7; t = -5.54	-13.1 to -6.3	<0.001
	Non-anemic (n = 26)	28.4 ± 8.1	Ref	-	-
TIBC (µg/dL)	Anemic (n = 94)	287.4 ± 51.2	Mean diff = +19.5; t = 1.94	-0.3 to +39.3	0.055
	Non-anemic (n = 26)	267.9 ± 48.7	Ref	-	-

Table 3 compares iron indices between anemic and non-anemic CKD patients, illustrating significant biochemical differences between the two groups. Serum iron levels were markedly lower in anemic patients (42.8 ± 15.7 µg/dL) compared to non-anemic individuals (68.9 ± 18.1 µg/dL), with a large and statistically significant mean difference of -26.1 µg/dL ($p < 0.001$; 95% CI: -34.2 to -18.0). Serum ferritin, although elevated in both groups, was significantly lower in anemic patients (165.3 ± 96.4 ng/mL vs 232.7 ± 108.9 ng/mL; $p = 0.007$), suggesting that despite inflammation-related ferritin elevation, true iron depletion may coexist. TSAT values were significantly reduced in anemic patients (18.7 ± 7.3%) compared to non-anemic patients (28.4 ± 8.1%), with a highly significant mean difference (-9.7%, $p < 0.001$), reinforcing the presence of functional or absolute iron deficiency. TIBC was marginally higher in anemic individuals (287.4 ± 51.2 µg/dL) compared with non-anemic patients (267.9 ± 48.7 µg/dL), though this difference approached but did not reach statistical significance ($p = 0.055$).

Table 4: Correlation of anemia severity and iron status with CKD stage and demographic/clinical variables (N = 120)

A. CKD stage and anemia severity (based on Hb)

Measure	**Category**	**n**	**Mean Hb (g/dL) ± SD**	**Effect & test of significance**	**95% CI for mean Hb**	**p-value**
CKD stage	Stage 3 (N = 38)	38	10.1 ± 1.6	ANOVA F (2,117) = 9.42	9.6 - 10.6	<0.001
	Stage 4 (N = 41)	41	9.3 ± 1.5	-	8.8 - 9.8	-
	Stage 5 (N = 41)	41	8.8 ± 1.8	-	8.2 - 9.4	-

B. Age group and anemia severity

Measure	**Category**	**n**	**Mean Hb (g/dL) ± SD**	**Effect & test of significance**	**95% CI for mean difference**	**p-value**
Age group	<60 years	73	9.7 ± 1.6	Mean diff = +0.7; Welch t = 2.31	+0.1 to +1.3	0.023
	≥60 years	47	9.0 ± 1.8	Ref	-	-

C. Sex and anemia prevalence

Measure	**Category**	**n/N (%)**	**Effect & test of significance**	**95% CI**	**p-value**
Anemia by sex	Male (n = 71)	52/71 (73.2%)	χ^2 (1 df) = 1.21	61.5 - 82.7	0.271
	Female (n = 49)	42/49 (85.7%)	Ref	73.8 - 93.6	-

D. Diabetes status, anemia severity and ferritin

Measure	**Category**	**n**	**Mean Hb (g/dL) ± SD**	**Mean ferritin (ng/mL) ± SD**	**Effect & test of significance**	**95% CI for Hb difference**	**p-value**
Diabetes	Diabetes present	81	9.2 ± 1.7	194.6 ± 104.2	Mean Hb diff vs non-diabetic = -0.5; t = -1.88	-1.0 to +0.0	0.063
	No diabetes	39	9.7 ± 1.6	173.3 ± 98.1	Ref	-	-

E. Correlation of iron status with eGFR and Hb (continuous)

Measure	Correlation pair	r (Pearson)	95% CI for r	p-value
Correlation	eGFR vs Hb	+0.41	+0.25 to +0.55	<0.001
	TSAT vs Hb	+0.36	+0.19 to +0.51	<0.001
	Ferritin vs Hb	+0.18	-0.01 to +0.35	0.067

Table 4 evaluates the relationship between anemia severity, iron status, and various demographic and clinical variables. Hemoglobin levels showed a clear decline with advancing CKD stage: 10.1 ± 1.6 g/dL in stage 3, 9.3 ± 1.5 g/dL in stage 4, and 8.8 ± 1.8 g/dL in stage 5. ANOVA confirmed a statistically significant difference across stages ($F = 9.42$; $p < 0.001$), reinforcing the progressive nature of anemia in CKD. Age also influenced anemia severity, with patients ≥60 years having significantly lower hemoglobin (9.0 ± 1.8 g/dL) compared to those <60 years (9.7 ± 1.6 g/dL), the difference being statistically significant ($p = 0.023$). Sex differences in anemia prevalence were observed 85.7% among females versus 73.2% in males although this difference was not statistically significant ($\chi^2 = 1.21$; $p = 0.271$). Diabetic patients exhibited slightly lower hemoglobin (9.2 ± 1.7 g/dL) than non-diabetics (9.7 ± 1.6 g/dL), with ferritin levels paradoxically higher in diabetics, consistent with chronic low-grade inflammation; however, the difference in hemoglobin approached but did not reach statistical significance ($p = 0.063$). Correlation analysis further revealed that hemoglobin positively correlated with eGFR ($r = +0.41$; $p < 0.001$), confirming worsening anemia with declining kidney function. TSAT also showed a moderate positive correlation with hemoglobin ($r = +0.36$; $p < 0.001$), indicating that reduced iron availability is closely linked with anemia severity. Ferritin demonstrated a weak, non-significant correlation with hemoglobin ($r = +0.18$; $p = 0.067$), likely due to its elevation in inflammation rather than iron sufficiency.

DISCUSSION

The present study demonstrates a high burden of anemia and disordered iron homeostasis among CKD stages 3-5, and the patterns observed are broadly consistent with, but somewhat more severe than, those reported in the literature. The mean age of 56.7 years and male predominance (59.2%) in our cohort are comparable to large epidemiological series of CKD patients, where mean ages in the mid-50s and a male majority have been described in both US and international cohorts. The roughly even distribution of patients across stages 3, 4, and 5 reflects a typical tertiary-care, pre-dialysis case mix rather than a community CKD population, which likely contributes to the high anemia prevalence observed.

Our overall anemia prevalence of 78.3% is substantially higher than community-based CKD data from the US, where Stauffer and Fan reported anemia in about 15% of CKD patients overall, with prevalence rising to just over 50% in stage 5. *et al.*(20)[5] described anemia in 47.7% of 5,222 predialysis CKD patients in a large managed-care cohort, with a clear gradient of increasing anemia as kidney function declined. More recent reviews also note anemia rates up to 60% in non-dialysis CKD populations, depending on definitions and case mix. In comparison, our stage-specific rates 68.4% in stage 3, 80.5% in stage 4, and 85.4% in stage 5 with a significant trend ($p = 0.041$) are closer to hospital-based or low- and middle-income country cohorts, where late referral, poor nutritional status, and limited anemia treatment often yield prevalences above 70-80%.

The mean hemoglobin of 9.4 g/dL in our study, significantly below the WHO threshold ($p < 0.001$), is also consistent with international data on moderate anemia in advanced CKD. Sofue T *et al.*(2020)[6] summarised multiple cohorts where mean hemoglobin frequently fell in the 9-11 g/dL range in stages 4-5, with lower values in populations with limited use of ESA and iron therapy. In line with this, KDIGO guidelines emphasise routine screening for anemia from stage 3 onwards and highlight that hemoglobin typically declines as eGFR falls, mirroring our finding of a significant positive correlation between eGFR and hemoglobin ($r = 0.41$, $p < 0.001$). Our age-stratified analysis further showed significantly lower hemoglobin in patients ≥60 years ($p = 0.023$), which is compatible with observations that older CKD patients are particularly vulnerable to anemia due to comorbidities, marrow senescence, and polypharmacy.

The pattern of anemia types in our cohort predominantly normocytic normochromic anemia (55.3%), followed by microcytic hypochromic (22.3%), mixed (12.8%), and macrocytic (9.6%) is in keeping with the classic description of CKD anemia. Al Sharifi LM *et al.*(2024)[7] recently reported normocytic anemia as the most frequent type in CKD patients (around 40-50%), with microcytic forms reflecting additional iron deficiency and less common macrocytic forms linked to nutritional deficiencies or marrow toxicity. Similarly, another spectrum analysis of anemia in CKD highlighted normocytic normochromic and microcytic hypochromic patterns as the dominant phenotypes, attributable respectively to erythropoietin deficiency/inflammation and true iron deficiency. Distribution therefore reinforces the concept that "pure" renal anemia remains the most common entity, but concomitant iron deficiency and mixed pictures are frequent and clinically relevant.

The iron indices in our study provide further insight into the interplay between absolute and functional iron deficiency. Anemic patients had markedly lower serum iron (42.8 vs 68.9 µg/dL, $p < 0.001$) and TSAT (18.7 vs 28.4%, $p < 0.001$) compared with non-anemic counterparts, in line with the central role of impaired iron availability in CKD anemia. Fu S *et al.*(2024)[8] similarly reported low serum iron and TSAT in anemic CKD patients and noted significant associations with anemia severity. Although ferritin was elevated in the entire cohort, anemic patients showed significantly lower values than non-anemic patients (165 vs 233 ng/mL, $p = 0.007$), yet still above the usual thresholds for depletion, suggesting a mixture of depleted stores and inflammation-driven ferritin elevation. Lopes MB *et al.*(2021)[9] described this apparent paradox in haemodialysis CKD patients, where functional iron

deficiency occurred despite high ferritin, particularly in the context of inflammation and prior IV iron exposure. More recent narrative reviews on CKD anemia note that hepcidin-mediated iron sequestration and reduced transferrin synthesis can produce exactly such a profile low iron and TSAT with normal or high ferritin complicating the interpretation of iron indices. Our borderline higher TIBC in anemic patients ($p = 0.055$) may hint at coexisting absolute iron deficiency in a subset, but the overlap of patterns underscores the need for careful, guideline-based interpretation. Wittbrodt ET *et al.*(2022)[10]

Our correlation analysis supports the mechanistic links described in earlier work. The moderate positive correlation between TSAT and hemoglobin ($r = 0.36$, $p < 0.001$) is in agreement with both pathophysiological models and clinical data showing that impaired iron delivery to the marrow is a key determinant of hemoglobin levels in CKD. The weak, non-significant correlation between ferritin and hemoglobin ($r = 0.18$, $p = 0.067$) also mirrors previous observations that ferritin is heavily confounded by inflammation and therefore less reliable as a standalone marker of iron-restricted erythropoiesis. The trends toward lower hemoglobin in diabetics and women, although not statistically significant in our sample, are consistent with risk patterns described in large CKD cohorts, where diabetes and female sex emerged as independent predictors of anemia. Shen Y *et al.*(2021)[11]

CONCLUSION

The present cross-sectional study demonstrates that anemia is highly prevalent among patients with CKD stages 3-5, affecting more than three-fourths of the population and increasing significantly with advancing renal dysfunction. Normocytic normochromic anemia emerged as the predominant morphological pattern, underscoring erythropoietin deficiency and chronic inflammation as major contributors. However, a considerable proportion of patients also exhibited microcytic and mixed-pattern anemia, reflecting concomitant absolute or functional iron deficiency. Iron indices revealed significantly reduced serum iron and TSAT among anemic patients, with ferritin levels suggestive of both inflammation-driven sequestration and variable iron reserve status. Hemoglobin levels correlated strongly with CKD stage and iron availability, highlighting the interplay between renal function decline and impaired erythropoiesis. Overall, the findings reinforce the need for early identification of anemia, comprehensive assessment of iron status, and timely initiation of targeted interventions such as iron supplementation and erythropoiesis-stimulating therapies to improve outcomes in CKD patients.

LIMITATIONS

This study has certain limitations. First, as a hospital-based cross-sectional study, the findings may not be fully generalizable to community-based CKD populations or early-stage CKD patients. The cross-sectional design precludes establishing causal relationships or monitoring changes in anemia or iron indices over time. Iron biomarkers such as hepcidin, soluble transferrin receptors, reticulocyte hemoglobin content, and inflammatory markers (CRP/IL-6) were not assessed, limiting deeper characterization of functional iron deficiency. ESA use, dietary patterns, and history of recent iron therapy were not quantified in detail and may have influenced iron indices. Bone marrow assessment and advanced nutritional profiling were also not performed. Finally, the sample size, although adequate for descriptive analysis, limited subgroup comparisons across diabetes status, sex, and age groups. Larger longitudinal studies are needed to validate and expand upon these findings.

REFERENCES

1. Wong MM, Tu C, Li Y, Perlman RL, Pecoits-Filho R, Lopes AA, Narita I, Reichel H, Port FK, Sukul N, Stengel B. Anemia and iron deficiency among chronic kidney disease Stages 3-5ND patients in the Chronic Kidney Disease Outcomes and Practice Patterns Study: often unmeasured, variably treated. Clinical kidney journal. 2020 Aug;13(4):613-24.
2. Awan AA, Walther CP, Richardson PA, Shah M, Winkelmayer WC, Navaneethan SD. Prevalence, correlates and outcomes of absolute and functional iron deficiency anemia in nondialysis-dependent chronic kidney disease. Nephrology Dialysis Transplantation. 2021 Jan;36(1):129-36.
3. Bishaw F, Woldemariam MB, Mekonen G, Birhanu B, Abebe A. Prevalence of anemia and its predictors among patients with chronic kidney disease admitted to a teaching hospital in Ethiopia: A hospital-based cross-sectional study. Medicine. 2023 Feb 10;102(6):e31797.
4. Vestergaard SV, Heide-Jørgensen U, van Haalen H, James G, Hedman K, Birn H, Thomsen RW, Christiansen CF. Risk of anemia in patients with newly identified chronic kidney Disease-A population-based cohort study. Clinical epidemiology. 2020 Sep 11:953-62.
5. Fujisawa H, Nakayama M, Haruyama N, Fukui A, Yoshitomi R, Tsuruya K, Nakano T, Kitazono T. Association between iron status markers and kidney outcome in patients with chronic kidney disease. Scientific reports. 2023 Oct 25;13(1):18278.
6. Sofue T, Nakagawa N, Kanda E, Nagasu H, Matsushita K, Nangaku M, Maruyama S, Wada T, Terada Y, Yamagata K, Narita I. Prevalence of anemia in patients with chronic kidney disease in Japan: A nationwide, cross-sectional cohort study using data from the Japan Chronic Kidney Disease Database (J-CKD-DB). PloS one. 2020 Jul 20;15(7):e0236132.
7. Al Sharifi LM, Haddawi KH. Anemia and Iron Profile in Hemodialysis and Nonhemodialysis Patients with Chronic Kidney Disease. Journal of Applied Hematology. 2024 Jul 1;15(3):192-6.
8. Fu S, Huang J, Feng Z, Wang H, Xu H, Wu M, Ma F, Xu Z. Inflammatory indexes and anemia in chronic kidney disease: correlation and survival analysis of the National Health and Nutrition Examination Survey 2005-2018. Renal Failure. 2024 Dec 31;46(2):2399314.

9. Lopes MB, Tu C, Zee J, Guedes M, Pisoni RL, Robinson BM, Foote B, Hedman K, James G, Lopes AA, Massy Z. A real-world longitudinal study of anemia management in non-dialysis-dependent chronic kidney disease patients: a multinational analysis of CKDopps. Scientific reports. 2021 Jan 19;11(1):1784.
10. Wittbrodt ET, James G, Kumar S, van Haalen H, Chen H, Sloand JA, Kalantar-Zadeh K. Contemporary outcomes of anemia in US patients with chronic kidney disease. Clinical kidney journal. 2022 Feb;15(2):244-52.
11. Shen Y, Wang J, Yuan J, Yang L, Yu F, Wang X, Zhao MH, Zhang L, Zha Y. Anemia among Chinese patients with chronic kidney disease and its association with quality of life-results from the Chinese cohort study of chronic kidney disease (C-STRIDE). BMC nephrology. 2021 Feb 22;22(1):64.

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EVANS Syndrome - A Rare Cause of AIHA with ITP: A Case Report

Dr Shruti Bharat Nelekar[1], Dr M. A. Jamadar[2]

[1]Junior Resident, Department of Medicine, Dr VMGMC and SCSMSR, Solapur, Maharashtra, India
Email ID-shrutinelekar[at]gmail.com

[2]Associate Professor, Department of Medicine, Dr VMGMC and SCSMSR, Solapur, Maharashtra, India
Correspondence: shrutinelekar[at]gmail.com, 9049239630

Abstract: *Background: Evan's syndrome is a rare autoimmune hematological condition, characterized by warm antibody AIHA with ITP with or without neutropenia. Secondary associations may include connective tissue disorders, infections and malignancies. Introduction: We present a case of a middle aged female patient who presented with anemia, bleeding manifestations refractory to repeated transfusions. Clinical features and laboratory and immunological workup was done and diagnosis was Evan's syndrome was made. Interventions: blood transfusion initially given to alleviate symptoms and corticosteroids were started. Outcome: with corticosteroids patient experienced dramatic improvement and patient is being followed up monthly and no remission is observed with the steroid doses being tapered. Conclusion: It can be concluded that considering Evan's syndrome in the differential diagnosis of AIHA and ITP can help to initiate early treatment with steroids, IVIG or immunemodulators and prevent the dreadful complications of massive bleeding.*

Keywords: AIHA, ITP, neutropenia, autoimmune disorder, corticosteroids, IVIG, Immunomodulators

1. Introduction

Evans syndrome was first described in 1951 by Dr. Robert Evans and associates[1]. Evans syndrome is a rare autoimmune disorder in which antibodies are directed against red blood cells (Coomb's positive autoimmune hemolytic anemia), platelets (idiopathic thrombocytopenic purpura) and white blood cells mainly neutrophils (idiopathic neutropenia). The cytopenias may occur simultaneously or may occur in succession, one following the other. The exact etiology remains unknown and mostly remains the diagnosis of exclusion. It may be primary or occur secondary to other autoimmune conditions like SLE, lymphoproliferative disease or primary immunodeficiencies. Signs and symptoms may include purpura, pallor, fatiguability, and light-headedness. Treatment varies from steroids, immunoglobulin therapy to splenectomy. Here we present a case of young female who presented with bleeding, jaundice and acute decompensated anemia. Although she was successfully treated with steroids, the exact etiology remains a mystery.

2. Case Report

A 35 years old female patient presented with complaints of
Dyspnoea on exertion
Hematuria
Easy fatiguability
Yellowish discolouration of skin and sclera.

Patient was a middle aged female. Initially patient observed shortness of breath on exertion which made her unable to do daily household activities since 15 to 20 days.

Then patient observed yellowish discolouration of skin and eyes and later she observed bleeding from gums and hematuria. She had consulted outside hospital where blood transfusion was given. Patient again started having similar complaints after 1 month and hence consulted out hospital. She was admitted for further investigations and treatment. On examination her pulse rate was 110 beats per minute, blood pressure was 120/80mm Hg, Respiratory rate was 18 cycles per minute. There was presence of pallor, icterus and mild splenomegaly. Bleeding from gums was present and collected urine samples showed evidence of hematuria. There was no significant family history. Patient has 2 offsprings and no history of similar episodes during antenatal or postnatal period.

Patient then underwent Laboratory Investigations whose results were as follows:

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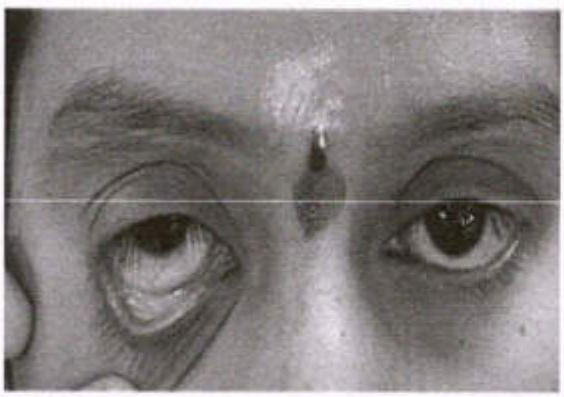
Investigations	Day 1	Day 2	Day 5	Day 7
Hb(g/dl))	2.8	5.4	6.8	10.1
HCT(%)	12.3	19.8	22.3	29.8
TLC(x10^3/ul)	12.3	10.2	8.9	7.6
RBC(x10^6/ul)	1.20	2.20	2.56	2.98
MCV(fl)	105.7	103.2	98.9	98.6
MCH(pg)	45.0	43.5	41.7	41.3
MCHC(g/dl)	43.9	41.8	41.9	40.3
Platelet count	7000	23000	32000	81000
Bilirubin(T)(mg/dl)	5.1	4.6	3.6	2.2
Bilirubin(ID)	4.7	4.3	3.2	1.8
Bilirubin(D)	0.4	0.3	0.4	0.4
AST(U/L)	72	65	49	39
ALT(U/L)	31	32	33	33
ALP(U/L)	97	98	104	98

Figure 1: leucoerythroblastic blood picture showing nucleated RBCs, tear drop cells, micro and macrocytosis and hypochromasia (right). Peripheral smear picture showing reticulocytois (left)





Figure 2: Icterus (right), pallor of nail beds (left)



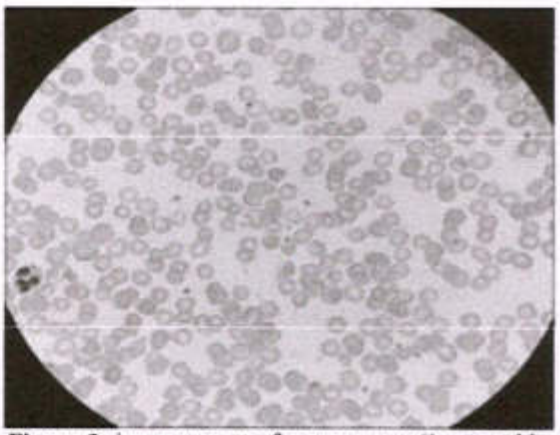


Figure 3: improvement after treatment (1st monthly follow up)-pallor (right), peripheral smear showing increased platelets and no normoblasts (left)

Peripheral blood smear showed reduced erythron, microcytosis, hypochromasia, moderate to severe anisopoikilocytosis, pencil cells; tear drop cells, scistocytes present, 20 nucleated RBCs per 100 WBCs present, suggestive of a leucoerythroblastic picture. Erythrocyte sedimentation rate (ESR) was 68 mm at the end of first hour. Immature platelet fraction was 5.4%. Reticulocyte count was 4.5%. Direct Coomb's test was positive. Direct Coomb's test was positive implying warm auto-immune haemolytic anaemia. Serum LDH was also raised (1317U/L). Unconjugated bilirubin was raised. Coagulation profile was normal. Kidney function tests were normal. Ultrasonography of abdomen show mild splenomegaly. Chest-X-ray and high resolution computed tomography of chest were normal. Based on Coomb's positive haemolytic anemia and thrombocytopenia, the present case was diagnosed as Evans syndrome. To find the secondary cause of Evan's syndrome, Antinuclear antibody (ANA) [immunoflourescence (IF) method] was tested and it was positive, however, other rheumatologic laboratory tests, including anti-SSA, anti-SSB, anti-double-stranded deoxyribonucleic acid (anti-dsDNA),

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anti-ribonucleoprotein (anti-RNP), and anti-Smith, were negative. Bone marrow biopsy was not done considering the risk of bleeding and low platelet counts. Treatment was started with methyl prednisone 500 mg intravenously for 3 days and then was started on gradually tapering dose of oral prednisolone starting from 1 mg/kg/day. She dramatically responded to steroids and her platelets came to normal after five days. On seventh day she was discharged and advised follow-up. At discharge she was advised maintenance dose of 0.5 mg/kg/day of oral prednisolone. She was explained about the chronic nature of the condition and also counselled about the exacerbations and remissions. Patient had come for follow up after 1 month when her Hb was 10.2 and Platelet count was 189000 and patient was clinically better.

The dose of corticosteroid was tapered and she was adviced to follow up monthly.

3. Discussion

Evans syndrome is defined as the association of AIHA with ITP and neutropenia (occurs less often; only in 15% cases[2]). Evans' syndrome is listed as a "rare disease" by the Office of Rare Diseases (ORD) of the National Institutes of Health (NIH) [3]. The type of AIHA that presents in Evans syndrome is warm AIHA, in which IgG antibodies react with red blood cell (RBC) surface antigens at body temperature, as opposed to cold AIHA. In ITP, the immune system is directed against GPIIb/IIIa on the platelets. Evan's Syndrome was considered as "primary" in half of the cases or is associated with an underlying disorder in remaining half of the cases, including mainly systemic lupus, lymphoproliferative disorders, and common variable immunodeficiency[2]. The use of drugs and vaccines has also documented in some cases as trigger for Evan's syndrome.

Exact etiology is not known and hence considered as idiopathic and few cases are thought to be familial referred to as 'Familial Evan's syndrome'. Some of these cases have been reported to co-occur with other disorders, such as heart defects, [4] or with inherited disorders such as hereditary spastic paraplegia[5] It is an autoimmune condition in which autoantibodies are produced by B cells which destroy own red cell, platelets and neutrophils.

It is a rare disease diagnosed in less than 5% patients of AIHA at onset and prevalence is more in females[2]. Patients present with shortness of breath on exertion, pallor, jaundice, fatigue, lightheadedness.

Work up includes complete blood counts (anemia, thrombocytopenia). To confirm hemolysis, investigations like Lactate Dehydrogenase, haptoglobulin, bilirubin and reticulocytosis is necessary. In our case Positive direct Coomb's test and spherocytes on peripheral smear further confirmed the diagnosis of warm AIHA and raised LDH, raised unconjugated bilirubin and reticulocytosis supported the diagnosis. Bone marrow biopsy and flow cytometry are helpful in the workup of Evans syndrome to assess for malignancies. For our patient, the workup for these possible secondary causes was only positive for ANA, which is nonspecific. As it is diagnosis of exclusion, it is important to rule out other possible diagnosis. Hence common etiologies such as cold agglutinin disease, thrombotic thrombocytopenic purpura (TTP) were ruled out through careful evaluation of the peripheral blood smear; infectious causes (such as HIV, Hepatitis C), other autoimmune conditions and malignancies were also ruled out through CXR, CT chest and abdomen. There are no specific guidelines for diagnosis and treatment hence and the evidence for treatment is based on case reports, case series, and retrospective studies. In an acute setting, blood transfusions and/or platelet transfusions may be required to alleviate symptoms, although their use should be minimized. In our patient 2 pint PCV and 4 pints of Platelets were transfused.

The Definitive management, first-line treatment is usually corticosteroids or intravenous immunoglobulin (IVIG). Steroids are given in the dose of 1-2mg/kg body weight in tapering doses over weeks. Most patients respond to steroids and some show relapses which may necessitate the use of alternative treatment. Rituximab or splenectomy may be considered in those refractory to the standard treatment or if steroid-dependent [5]. Again, the responses can be variable. Rituximab is usually preferred due to increased response and particularly when Evans syndrome is likely secondary to an underlying condition such as a malignancy or SLE[6], and also in those at increased risk of infections due to co-morbidities making it necessary to avoid splenectomy. Additional treatment modalities include intravenous immunoglobulin (IVIG), vincristine, cyclophosphosmide, azathioprine for the steroid-resistant or relapsing cases[6]. Danazol is effective for the treatment of refractory Evans' syndrome[7]. splenectomy has markedly reduced the sequestration and clearance of the IgG-coated erythrocytes but splenectomized patients were unable to maintain a steroid-free remission and the majority have become steroid dependent or refractory.[5]

Hence Evans syndrome carries grave prognosis in view of no specific diagnostic guidelines, ineffective treatment regimens and frequent remissions and relapses.

4. Conclusion

Evans syndrome is a very rare entity and a rare cause of AIHA with ITP.

Suspecting it as a differential diagnosis and initiating an early treatment can prevent the patient from dreadful complications from massive bleeding and also risk of thrombotic tendancies[8]. Workup for secondary causes like connective tissue disorders, hematological and other malignancies and infections can narrow down our spectrum.

An early diagnosis & prompt treatment can save the patient from life threatening condition of intense haemolysis.

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References

[1] Lyu CJ, Park KI, Kim KY. A case of Evans syndrome, successfully treated with 6-mercaptopurine. *Yonsei Med J*.1986; 27 (2): 147-151. doi: 10.3349/YMJ.1986.27.2.147
[2] Michel M, Chanet V, Dechartres A, et al. The spectrum of Evans syndrome in adults: new insight into the disease based on the analysis of 68 cases. *Blood*.2009; 114 (15): 3167-3172. doi: 10.1182/BLOOD-2009-04-215368
[3] Evans syndrome | Genetic and Rare Diseases Information Center (GARD) - An NCATS Program. Accessed January 3, 2022. https://rarediseases.info.nih.gov/diseases/6389/evans-syndrome
[4] (PDF) Neonatal familial Evans syndrome associated with joint hypermobility and mitral valve regurgitation in three siblings in a Saudi Arab family. Accessed January 3, 2022. https://www.researchgate.net/publication/24433273_Neonatal_familial_Evans_syndrome_associated_with_joint_hypermobility_and_mitral_valve_regurgitation_in_three_siblings_in_a_Saudi_Arab_family
[5] Kabir A, Banik J, Gupta R Das, et al. Evans Syndrome. *J Med*.2021; 11 (1): 78-82. doi: 10.3329/jom.v11i1.4280
[6] Chi YP, Choon HC. A patient with mixed type Evans syndrome: efficacy of rituximab treatment. *J Korean Med Sci*.2006; 21 (6): 1115-1116. doi: 10.3346/JKMS.2006.21.6.1115
[7] Danazol for systemic lupus erythematosus with refractory autoimmune thrombocytopenia or Evans' syndrome-PubMed. Accessed January 3, 2022. https://pubmed.ncbi.nlm.nih.gov/8991983/
[8] Otaibi ZD, Rao R, Sadashiv SK. A Case of Evans Syndrome: A Clinical Condition with Under-Recognized Thrombotic Risk. *J Hematol*.2015; 4 (3): 205-209. doi: 10.14740/JH222W
[9] Lyu CJ, Park KI, Kim KY. A case of Evans syndrome, successfully treated with 6-mercaptopurine. *Yonsei Med J*.1986; 27 (2): 147-151. doi: 10.3349/YMJ.1986.27.2.147
[10] Michel M, Chanet V, Dechartres A, et al. The spectrum of Evans syndrome in adults: new insight into the disease based on the analysis of 68 cases. *Blood*.2009; 114 (15): 3167-3172. doi: 10.1182/BLOOD-2009-04-215368
[11] Evans syndrome | Genetic and Rare Diseases Information Center (GARD) – an NCATS Program. Accessed January 3, 2022. https://rarediseases.info.nih.gov/diseases/6389/evans-syndrome
[12] (PDF) Neonatal familial Evans syndrome associated with joint hypermobility and mitral valve regurgitation in three siblings in a Saudi Arab family. Accessed January 3, 2022. https://www.researchgate.net/publication/24433273_Neonatal_familial_Evans_syndrome_associated_with_joint_hypermobility_and_mitral_valve_regurgitation_in_three_siblings_in_a_Saudi_Arab_family
[13] Kabir A, Banik J, Gupta R Das, et al. Evans Syndrome. *J Med*.2021; 11 (1): 78-82. doi: 10.3329/jom.v11i1.4280
[14] Chi YP, Choon HC. A patient with mixed type Evans syndrome: efficacy of rituximab treatment. *J Korean Med Sci*. 2006; 21 (6): 1115-1116. doi: 10.3346/JKMS.2006.21.6.1115
[15] Danazol for systemic lupus erythematosus with refractory autoimmune thrombocytopenia or Evans' syndrome-PubMed. Accessed January 3, 2022. https://pubmed.ncbi.nlm.nih.gov/8991983/
[16] Otaibi ZD, Rao R, Sadashiv SK. A Case of Evans Syndrome: A Clinical Condition with Under-Recognized Thrombotic Risk. *J Hematol*.2015; 4 (3): 205-209. doi: 10.14740/JH222W

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Annexure – A

Course Faculty

Sr. No.	Particular	-	Information to be filled
01.	Name of Faculty/Teacher	:	Dr. Rushikesh Sadashiv Haridas
02.	Date of Birth	:	16/06/1987
03.	Address	:	Staff Quarters , Dharashiv.
04.	Tel. No./ Mob. No.	:	7030514661
05.	e-mail id	:	rishi.s.haridas@gmail.com
06.	Nationality	:	Indian
07.	Qualificati details : (attach documentary proof)	:	MBBS MD (General Medicine)
08.	Teaching Medical: Profession experience/ Experience/Consultant/Ment or (attached document proof with signature of Head)	:	UG : 10 Years PG : 04 Years
09.	Present Appointment	:	Associate Professor (GMC , Dharashiv)
10.	Publications (List & Proof)	:	02
11.	Post Graduate Teaching experience (Attach documentary evidence)	:	04 Years
12.	Any other relevant information	:	----------

Note:

1. ***Unit wise teaching / Resident staff should be shown separately for each Unit in the Proforma.***
2. ***Use only the Format provided. DO NOT devise your own format otherwise the information will notbe considered. Fill up all columns***
3. Publications: Give only full articles in indexed Journals published during the period of promotion and list them here only . No Annexure will be seen.
4. In case of DNB qualification name of the institution/hospital from where DNB training was done and year of passing must be provided. Simply saying National Board of Examinations, New Delhi is not enough. Without thesedetails DNB qualification holder will be summarily rejected.
5. Experience of Defense services must be supported by certificate from competent authority of the office ofDGAFM without which it will not be considered.

Date :26/10/26

Sign. of Teaching Staff

Countersigned & Stamp by Head of Institute

I have verified the eligibility of all faculty members for the post they are holding (**based on experience certificates issued by competent authority of the place of working**). Their experience details in different Designations and unitwise distribution is given the faculty table above.

Date 26/10/26

Sign. of Head of Institute

Dean,
Government Medical College
Dharashiv

Annexure - B

Professional/Teaching Experience Certificate for Fellowship/CertificateCourses Faculty/Teachers/Consultant/~~Mentor~~

Course faulty

Title of the Course applied for:-Fellowship In Diabetology

This is to Certify that **Dr. Rushikesh Sadashiv Haridas** has worked in the Department of **General Medicine** Government Medical college, Dharashiv College / Institutes as per following details.

A) General Experience: -

Designation	From	To	Total period Year / Month	
Assistant Professor (RMC Loni , PIMS DU)	14/06/2016	05/05/2018	01Years	10 Month
Assistant Professor (MIMSR Medical college Latur)	07/05/2018	10/1/2019	00 Years	08 Month
Assistant professor (VDGMC Latur)	14/01/2019	01/12/2025	06 Years	11 Month
Associate Professor (GMC Dharashiv)	01/12/2025	Till Date	00 Years	10 Month

B) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor: -

Designation	From	To	Total period Year / Month	
Assistant Professor (RMC Loni , PIMS DU)	14/06/2016	05/05/2018	01Years	10 Month
Assistant Professor (MIMSR Medical college Latur)	07/05/2018	10/1/2019	00 Years	08 Month
Assistant professor (VDGMC Latur)	14/01/2019	01/12/2025	06 Years	11 Month
Associate Professor (GMC Dharashiv)	01/12/2025	Till Date	00 Years	10 Month

(It is mandatory to attach self-attested Photocopy of the Experience Certificate of each Mentorin the Subject of concerned Fellowship/Certificate Course)

C) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor: -

No. of Publications	National / International
02	International

Sign& Stamp
Head of the Department
Date: 26/10/2026
Professor & Head of Department
Department of General Medicine
GMC Dharashiv

Sign& Stamp
Dean/Principal/Head of Institute
Date: 27/10/2026
Dean
Government Medical College
Dharashiv

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) ४१३ ५०१
e-mail: deangmcosmanabad@gmail.com फोन क्र. ०२४७२- २९७४४०

जा.क्र. शावैमधा/आस्था-१/4197 /२०२५ दि. 1/12/२०२५

कार्यालयीनआदेश :-

विषय :- सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र या पदावर आस्थापनामंडळामार्फत पदोन्नतीने पदस्थापना शा.वै.म. धाराशिव येथे झाल्यामुळे रुजु होण्यास परवानगी देणे बाबत.

संदर्भ :- १) महाराष्ट्र शासन, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई शासन आदेश क्र. MEDD-१२/१११/२०२५-MMD (Vais-२)/१३८३६३३ दि.०३.११.२०२५.

२) अधिष्ठाता, वि.दे.शा.वै.म. लातुर यांचे आदेश क्र.विदेशावैमला/आस्था-राजप /८९३६/२०२५ दि. ०१.१२.२०२५.

३) डॉ. ऋषिकेश सदाशिव हरिदास, सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र, यांचा अर्ज दि. ०१.१२.२०२५.

उपरोक्त विषयनुसार आपणास कळविण्यात येते की, डॉ. ऋषिकेश सदाशिव हरिदास, सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र, वि.दे.शा.वै.म. लातूर येथुन यांची सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र या पदावर शा.वै.म. धाराशिव येथे आस्थापनामंडळामार्फत पदोन्नतीने पदस्थापना होऊन वेतनश्रेणी रु. १३१४००-२१७१०० स्तर १३ (A) मध्ये संदर्भ क्र. १ नुसार करण्यात आलेली आहे. संदर्भ क्र.२ नुसार डॉ हरिदास यांना लातूर येथुन दि. ०१.१२.२०२५ रोजी म.पु. कार्यमुक्त करण्यात आलेले आहे.

तद्नुषंगाने डॉ हरिदास, यांना या संस्थेतील रिक्त असलेल्या सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र पदावर संदर्भ क्र.१ व २ च्या अनुषंगाने रुजु होण्यासाठी आल्यामुळे संबंधीतास दि. ०१.१२.२०२५ रोजी म.ऊ. पासुन प्रस्तुत आदेशान्वये परवानगी देण्यात येत आहे. डॉ.हरिदास यांनी सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र पदावर विभागात रुजु होऊन कार्यभार हस्तांतरण प्रमाणपत्रासह अहवाल या कार्यालयास ३ प्रतीत सादर करावा.

1.12.25

(डॉ. स्वाती र. पांढरे,)
अधिष्ठाता (प्रभारी),
शासकीय वैद्यकीय महाविद्यालय, धाराशिव

प्रति,

१. डॉ. ऋषिकेश सदाशिव हरिदास,
सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र, शा.वै.म. धाराशिव.
मार्फत :- प्राध्यापक व विभागप्रमुख औषधवैद्यकशास्त्र,शा.वै.म. धाराशिव.

२. डॉ. प्रविण बाळासाहेब डुमने, सहाय्यक प्राध्यापक, क्षयरोगशास्त्र तथा विभागप्रमुख औषधवैद्यकशास्त्र., शा.वै.म. धाराशिव

प्रत आयुक्त, वैद्यकीय शिक्षण व संशोधन, मुंबई यांना माहितीस्तव
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प्रत अधिष्ठाता, विलासराव देशमुख शासकीय वैद्यकीय महाविद्यालय, सोलापूर.
प्रत प्रभारी लिपीक, लेखा-१, वेतन देयक विभाग, शा.वै.म.धाराशिव
प्रत जिल्हा कोषागार अधिकारी, जिल्हा कोषागार कार्यालय, धाराशिव.
प्रत रोखपाल, शा.वै.म. धाराशिव.

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Vice Chancellor
and
Members of the Management Council,
Academic Council
confer the Degree of

Bachelor of Medicine & Bachelor of Surgery

on

Haridas Rushikesh Sadashiv

(PRN 0107112117)

of

Maharashtra Institute of Medical Sciences & Research, Medical College, Latur

for the examination held in Nov-2010
at the Convocation
held on 26th April,2012



VICE-CHANCELLOR / कुलगुरू

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कुलपती, प्र.कुलपती,
कुलगुरु
आणि
व्यवस्थापन परिषद व
विद्यापरिषदेचे सदस्य
वैद्यक आणि शल्यचिकित्सा स्नातक

ही पदवी नोव्हेंबर-२०१० मधील परीक्षेत उत्तीर्ण
झाल्याबद्दल
लातूर येथील महाराष्ट्र इन्स्टिटयुट ऑफ मेडीकल
सायन्सेस अॅन्ड रिसर्च वैद्यकीय महाविद्यालया चे/च्या

हरीदास ऋषिकेश सदाशिव

यांना
२६ एप्रिल, २०१२ च्या
दीक्षांत समारंभात प्रदान करीत आहोत

The authenticity of this certificate can be verified on our University website www.muhsnashik.com

Pravara Institute of Medical Sciences

(University established under Section (3) of UGC Act 1956 vide MHRD, Govt. of India Notification No. F.9-11/2000-U-3 dated 29th Sept. 2003)

We, the Chancellor,
the Vice-Chancellor, the Pro-Vice-Chancellor,
the members of Board of Management and
the Academic Council of
Pravara Institute of Medical Sciences
certify that

Haridas Rushikesh Sadashiv

of Rural Medical College, Loni having been
examined and found duly qualified for the degree of

Doctor of Medicine
in General Medicine

at the examination held in May 2016
The said degree has been conferred on him /her
at Loni- 413736 on Twenty Seventh day of the month
of May, in the year Two Thousand Seventeen.
In testimony where of are set the seal of the said
University and the Signature of the Vice-Chancellor



Vice-Chancellor

PRN. 13011P0502

2830

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-19 इमारत, जिल्हा रुग्णालय आवार, धाराशिव (महाराष्ट्र) 413 501
e-mail: deangmcosmanabad@gmail.com



जा.क्र. शावैमधा/आस्था-1/ 2874 /2026 दि. 08/09/2026

EXPERIENCE CERTIFICATE

This is to certify that Dr.Rushikesh Sadashiv Haridas, is working as Associate Professor in General Medicine dept. at this College. His total experience is as follows –

Sr. No	Post held	Name of College	Department	Nature of Appointment	Period	
					From	To
01	Assistant Professor	Govt. Medical College, Dharashiv	General Medicine	Permanent	14/01/2019	01-12-2025 (A.M)
02	Associate Professor	Govt. Medical College, Dharashiv	General Medicine	Permanent	01/12/2025 (A.N)	Till Date

His conduct is good & work in our organization is satisfactory.

(Dr. Shailendra D. Chauhan,)
DEAN,
Government Medical College,
Dharashiv.

To,
Dr. Rushikesh Sadashiv Haridas,
Associate Professor, General Medicine,
Government Medical College, Dharashiv

Annexure – A

Mentor

Sr. No.	Particular	-	Information to be filled
01.	Name of Faculty/Teacher	:	Dr. Ramrao Madhukarrao Mundhe
02.	Date of Birth	:	15/05/1983
03.	Address	:	Staff Quarters, Dharashiv.
04.	Tel. No./ Mob. No.	:	9422706891
05.	e-mail id	:	rammundhe7@gmail.com
06.	Nationality	:	Indian
07.	Qualificat in details : (attach on documentary proof)	:	MBBS MD (General Medicine)
08.	Teaching Medical: Profession experience/ Experience/Consultant/Ment or (attached document proof with signature of Head)	:	UG : 12 Years PG : 07 Years
09.	Present Appointment	:	Associate Professor
10.	Publications (List & Proof)	:	05
11.	Post Graduate Teaching experience (Attach documentary evidence)	:	07 Years
12.	Any other relevant information	:	----

Note:

1. ***Unit wise teaching / Resident staff should be shown separately for each Unit in the Proforma.***
2. ***Use only the Format provided. DO NOT devise your own format otherwise the information will notbe considered. Fill up all columns***
3. Publications: Give only full articles in indexed Journals published during the period of promotion and list them here only . No Annexure will be seen.
4. In case of DNB qualification name of the institution/hospital from where DNB training was done and year of passing must be provided. Simply saying National Board of Examinations, New Delhi is not enough. Without thesedetails DNB qualification holder will be summarily rejected.
5. Experience of Defense services must be supported by certificate from competent authority of the office ofDGAFM without which it will not be considered.

Date: :26/10 /26

Sign. of Teaching Staff

Countersigned & Stamp by Head of Institute

I have verified the eligibility of all faculty members for the post they are holding (**based on experience certificates issued by competent authority of the place of working**). Their experience details in different Designations and unitwise distribution is given the faculty table above.

Date :-16/10 /26

Sign. of Head of Institute

Dean,
Government Medical College
Dharashiv

Annexure - B

Professional/Teaching Experience Certificate for Fellowship/CertificateCourses Faculty/Teachers/Consultant/Mentor

Mentor

Title of the Course applied for :-Fellowship In Diabetology

This is to Certify that **Dr. Ramrao Madhukarrao Mundhe** has worked in the Department **General Medicine** Department Government Medical college, Dharashiv College / Institutes as per following details.

A) General Experience:-

Designation	From	To	Total period Year / Month	
Assistant professor (VDGMC Latur)	24/09/2014	13/12/2018	04	03
Assistant Professor (VDGMC Latur)	26/05/2020	19/01/2026	05	08
Associate Professor (VDGMC Latur)	14/12/2018	25/05/2020	01	06
Associate professor (GMC Dharashiv)	20/01/2026	Till Date	00	08

B) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor:-

Designation	From	To	Total period Year / Month	
Assistant professor (VDGMC Latur)	24/09/2014	13/12/2018	04	03
Assistant Professor (VDGMC Latur)	26/05/2020	19/01/2026	05	08
Associate Professor (VDGMC Latur)	14/12/2018	25/05/2020	01	06
Associate professor (GMC Dharashiv)	20/01/2026	Till Date	00	08

(It is mandatory to attach self-attested Photocopy of the Experience Certificate of each Mentorin the Subject of concerned Fellowship/Certificate Course)

C) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor: -

No. of Publications	National / International
05	International

Sign& Stamp
Head of the Department
Date: 26/10/26
Professor & Head of Department
Department of General Medicine
GMC Dharashiv

Sign & Stamp
Dean/Principal/Head of Institute
Date: 26/10/26
Dean,
Government Medical College
Dharashiv

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) ४१३ ५०१
e-mail: deangmcosmanabad@gmail.com फोन क्र. ०२४७२- २९७४४०



जा.क्र. शावैमधा/आस्था-१/ 233 /२०२६ दि 20/01/२०२६

कार्यालयीनआदेश :-

विषय :- सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र या पदावर आस्थापनामंडळामार्फत पदोन्नतीने पदस्थापना शा.वै.म. धाराशिव येथे झाल्यामुळे रुजु होण्यास परवानगी देणे बाबत.

संदर्भ :- १) महाराष्ट्र शासन, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई शासन आदेश क्र. MEDD-१२/१११/२०२५-MMD (Vais-२)/१३८३६३३ दि.०३.११.२०२५.

२) महाराष्ट्र शासन, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई शासन आदेश क्र. MEDD-१२/१११/२०२५-MMD (Vais-२)/१३८३६३३ दि.१९.०१.२०२६.

३) अधिष्ठाता, वि.दे.शा.वै.म. लातुर यांचे आदेश क्र.विदेशावैमला/आस्था-राजप /५४७/२०२६ दि. २०.०१.२०२६ (म.पु.) (कार्यमुक्त).

४) डॉ. रामराव मधुकरराव मुंढे, सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र, यांचा अर्ज दि. २०.०१.२०२६.

५) दि.२०.०१.२०२६ च्या मंजूर टिप्पनी नुसार

उपरोक्त विषयानुसार आपणास कळविण्यात येते की, संदर्भ क्र.१ अन्वये डॉ. रामराव मधुकरराव मुंढे, सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र, वि.दे.शा.वै.म. लातूर येथुन सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र या पदावर शा.वै.म. वाशिम येथे आस्थापनामंडळामार्फत पदोन्नतीने पदस्थापना होऊन वेतनश्रेणी रु. १३१४००-२१७१०० स्तर १३ (A) मध्ये करण्यात आलेली होती. संदर्भ क्र.२ नुसार डॉ मुंढे यांच्या पदस्थापनेत अंशत: बदल करुन सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र, शा.वै.म. वाशिम ऐवजी शा.वै.म. धाराशिव येथे पदस्थापना करण्यात आलेली आहे. संदर्भ क्र.३ नुसार डॉ. मुंढे यांना सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र या पदावरुन वि.दे.शा.वै.म.लातूर येथुन दि. २०.०१.२०२६ रोजी म.पु. कार्यमुक्त करण्यात आलेले आहे.

तद्नुषंगाने डॉ मुंढे, यांना या संस्थेतील रिक्त असलेल्या सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र पदावर संदर्भ क्र.१ व २ च्या अनुषंगाने रुजु होण्यासाठी आल्यामुळे संबंधीतास दि. २०.०१.२०२६ रोजी म.ऊ. पासुन प्रस्तुत आदेशान्वये परवानगी देण्यात येत आहे. डॉ.मुंढे यांनी सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र पदावर विभागात रुजु होऊन कार्यभार हस्तांतरण प्रमाणपत्रासह अहवाल या कार्यालयास ३ प्रतीत सादर करावा.

(डॉ. शैलेंद्र द. चौहान,)
अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय, धाराशिव

प्रति,
डॉ. रामराव मधुकरराव मुंढे,
सहयोगी प्राध्यापक, औषधवैद्यकशास्त्र, शा.वै.म. धाराशिव.
मार्फत :- प्राध्यापक व विभागप्रमुख औषधवैद्यकशास्त्र,शा.वै.म. धाराशिव.

प्रत आयुक्त, वैद्यकीय शिक्षण व संशोधन, मुंबई यांना माहितीस्तव
प्रत मा.महालेखापाल, महाराष्ट्र राज्य (ले व ह), नागपुर यांना माहितीस्तव.
प्रत अधिष्ठाता, विलासराव देशमुख शासकीय वैद्यकीय महाविद्यालय, लातूर.
प्रत प्रभारी लिपीक, लेखा-१, वेतन देयक विभाग, शा.वै.म.धाराशिव
प्रत जिल्हा कोषागार अधिकारी, जिल्हा कोषागार कार्यालय, धाराशिव.
प्रत रोखपाल, शा.वै.म. धाराशिव.

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कौवेट 19 इमारत, जिल्हा रुग्णालय आवार धाराशिव (महाराष्ट्र) 413 501
e-mail: deangmcosmanabad@gmail.com



जा.क. शावैमधा/आस्था-1/ 2873 /2026 दि. 08/09//2026

EXPERIENCE CERTIFICATE

This is to certify that Dr.Ramrao Madhukarrao Mundhe, is working as Associate Professor in General Medicine dept. at this College. His total experience is as follows –

Sr. No	Post held	Name of College	Department	Nature of Appointment	Period	
					From	To
01	Assistant Professor	VDGMC Latur	General Medicine	364 days Bond order	24/09/2014	22/09/2015
02	Assistant Professor	VDGMC Latur	General Medicine	120 days order	24/09/2015	28/12/2015
03	Assistant Professor	VDGMC Latur	General Medicine	MPSC (Permanent)	29/12/2015	13/12/2018
04	Associate Professor	VDGMC Latur	General Medicine	Adhoc	14/12/2018	11/06/2019
05	Associate Professor	VDGMC Latur	General Medicine	Adhoc	13/06/2019	19/01/2026
06	Assistant Professor	VDGMC Latur	General Medicine	MPSC (Permanent)	26/05/2020	19/01/2026
07	Associate Professor	GMC Dharashiv	General Medicine	DPC	20/01/2026	Till Date

His conduct is good & work in our organization is satisfactory.

(Dr. Shailendra D. Chauhan,)
DEAN,
Government Medical College,
Dharashiv.

To,
Dr. Ramrao Madhukarrao Mundhe,
Associate Professor, General Medicine,
Government Medical College, Dharashiv

MUHS

20F10011314

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

महाराष्ट्र आरोग्य विज्ञान विद्यापीठ, नाशिक

We,
the Chancellor, Pro-Chancellor,
Vice-Chancellor
and
Members of the Management Council,
Academic Council
confer the Degree of

Doctor of Medicine (General Medicine)

on

Mundhe Ramrao Madhukarrao

(PRN 2114160133)

of

Government Medical College, Nagpur

for the examination held in Summer-2014
at the Convocation
held on 08th October 2014



आम्ही,
कुलपती, प्र.कुलपती,
कुलगुरु
आणि
व्यवस्थापन परिषद व
विद्यापरिषदेचे सदस्य
डॉक्टर ऑफ मेडिसीन (औषधवैद्यकशास्त्र)

ही पदवी उन्हाळी-२०१४ मधील परीक्षेत उत्तीर्ण
झाल्याबद्दल
नागपूर येथील शासकीय वैद्यकीय महाविद्यालया चे/च्या

मुंढे रामराव मधुकरराव

यांना
०८ ऑक्टोबर, २०१४ च्या
दीक्षांत समारंभात प्रदान करीत आहोत

MUHS

VICE-CHANCELLOR
कुलगुरू

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

We, the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Members of the Management Council and the Academic Council of the Maharashtra University of Health Sciences, Nashik, certify that

Shri/Smt. MUNDHE RAMRAO MADHUKARRAO

of Government Medical College, Aurangabad



having been examined and found duly qualified for the

Bachelor of Medicine & Bachelor of Surgery

in Nov.-2006 the said Degree has been conferred on him/her. In testimony whereof is set the seal of the said University.

PRN 0103123527
15th May 2008

VICE-CHANCELLOR

महाराष्ट्र आरोग्य विज्ञान विद्यापीठ, नाशिक

0812574

आम्ही, महाराष्ट्र आरोग्य विज्ञान विद्यापीठाचे कुलपति, प्रकुलपति, कुलगुरू, व्यवस्थापन परिषद व विद्यापरिषद सदस्य प्रमाणित करतो की,
औरंगाबाद येथील शासकीय वैद्यकीय महाविद्यालया चे/च्या

मुंढे रामराव मधुकरराव

हे/हया नोव्हेंबर-२००६ मध्ये

वैद्यक आणि शल्यचिकित्सा स्नातक

परीक्षा उत्तीर्ण झाल्याबद्दल त्यांना ही पदवी प्रदान करण्यात येत आहे.

याची साक्ष म्हणून विद्यापीठाची अधिकृत मुद्रा येथे अंकित करण्यात येत आहे.

कुलगुरू

Annexure – A

course faculty

Sr. No.	Particular	-	Information to be filled
01.	Name of Faculty/Teacher	:	Dr. Pravin Balasaheb Dumne
02.	Date of Birth	:	10/06/1985
03.	Address	:	Kakade plot, DIC Road, Dharashiv.
04.	Tel. No./ Mob. No.	:	8446245786
05.	e-mail id	:	Pdumne3085@gmail.com
06.	Nationality	:	Indian
07.	Qualificat in details : (attach on documentary proof)	:	MBBS DTCD DNB (Respiratory Medicine) KEM Hospital Pune, 430 bedded hospital Passed in 2016
08.	Teaching Medical: Profession experience/ Experience/Consultant/Mentor (attached document proof with signature of Head)	:	UG : 04 Years 3 Month PG :0 Years
09.	Present Appointment	:	Assistant Professor
10.	Publications (List & Proof)	:	04
11.	Post Graduate Teachingexperience (Attach documentary evidence)	:	Years
12.	Any other relevant information	:	----

Note:

1. ***Unit wise teaching / Resident staff should be shown separately for each Unit in the Proforma.***
2. ***Use only the Format provided. DO NOT devise your own format otherwise the information will notbe considered. Fill up all columns***
3. Publications: Give only full articles in indexed Journals published during the period of promotion and list them here only . No Annexure will be seen.
4. In case of DNB qualification name of the institution/hospital from where DNB training was done and year of passing must be provided. Simply saying National Board of Examinations, New Delhi is not enough. Without thesedetails DNB qualification holder will be summarily rejected.
5. Experience of Defense services must be supported by certificate from competent authority of the office ofDGAFM without which it will not be considered.

Date: :- 26 /10 /26

Sign. of Teaching Staff

Countersigned & Stamp by Head of Institute

I have verified the eligibility of all faculty members for the post they are holding (**based on experience certificates issued by competent authority of the place of working**). Their experience details in different Designations and unitwise distribution is given the faculty table above.

Date :- 26 /10 /26

Sign. of Head of Institute

Dean
Government Medical College
Dharashiv

Annexure - B

Professional/Teaching Experience Certificate for Fellowship/CertificateCourses Faculty/Teachers/Consultant/Mentor

Faculty

Title of the Course applied for :-Fellowship In Critical Care

This is to Certify that **Dr. Pravin Balasaheb Dumne** has worked in the Department – Respiratory Medicine , Government Medical college, Dharashiv College / Institutes as per following details.

A) General Experience:-

Designation	From	To	Total period Year / Month	
Assistant professor (GMC Dharashiv)	10/8/2022	Till Date	04	03
Associate Professor	NA	NA	NA	NA
Associate professor	NA	NA	NA	NA

B) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor:-

Designation	From	To	Total period Year / Month	
Assistant professor (GMC Dharashiv)	10/8/2022	Till Date	04	03
Associate Professor	NA	NA	NA	NA
Associate professor	NA	NA	NA	NA

(It is mandatory to attach self-attested Photocopy of the Experience Certificate of each Mentorin the Subject of concerned Fellowship/Certificate Course)

C) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor: -

No. of Publications	National / International
04	International-3 ,national 1

Sign& Stamp
Head of the Department
Date:- 26 /10 /26
Professor & Head of Department
Department of General Medicine
GMC Dharashiv

Sign & Stamp
Dean/Principal/Head of Institute
Date:- 26 /10 /26
Dean,
Government Medical College
Dharashiv

महाराष्ट्र शासन

शासकीय वैद्यकीय महाविद्यालय, धाराशिव

GOVERNMENT MEDICAL COLLEGE, DHARASHIV

कोविड-19 इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) 413 501

e-mail: deangmcosmanabad@gmail.com

जा.क्र. शावैमधा/आस्था-1/ 1836-44 /2024 दि. 9 /05/2024

कार्यालयीन आदेश :-

विषय :- सहाय्यक प्राध्यापक, क्षयरोग व उरोरोगशास्त्र गट-ब पदावर सरळसेवेने निवड झाल्यामुळे रुजु होण्यास परवानगी देणे बाबत.

संदर्भ :-१) महाराष्ट्र शासन, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई शासन आदेश क्र. एलईसी-१४२४/प्र.क्र.११२/वैसेवा-३ दि. ८ मे, २०२४.

२) डॉ. प्रविण बाळासाहेब डुमणे, सहाय्यक प्राध्यापक, क्षयरोग व उरोरोगशास्त्र यांचा अर्ज दि. ९.५.२०२४.

उपरोक्त विषयाच्या अनुषंगाने आपणास कळविण्यात येत आहे की, संदर्भ क्र.१ अन्वये डॉ. प्रविण बाळासाहेब डुमणे हयांची महाराष्ट्र लोकसेवा आयोगाच्या शिफारसीनुसार व शासन आदेशानुसार सहाय्यक प्राध्यापक, गट-ब, क्षयरोग व उरोरोगशास्त्र या पदावर वेतनश्रेणी ५७७००-१८२४०० (लेव्हल १०) या वेतनश्रेणीत मुळ प्रवर्ग -खुला शिफारस केलेला प्रवर्ग Against EWS General मधुन निवड होऊन शा.वै.म.धाराशिव येथे पदस्थापना करण्यात आलेली आहे.

डॉ. डुमणे हे सहाय्यक प्राध्यापक, क्षयरोग व उरोरोगशास्त्र या पदावर स्थानिक निवडमंडळामार्फत १२० दिवसांच्या नियुक्तीने कार्यरत होते. डॉ. डुमणे यांना दि. ८.५.२०२४ म.ऊ. पदावन्नत करुन संदर्भ क्र.१ मधील अटी व शर्तीच्या अधिन राहुन दि. ९.५.२०२४ रोजी म.पु. सहाय्यक प्राध्यापक, क्षयरोग व उरोरोगशास्त्र या पदावर शा.वै.म.धाराशिव येथे रुजु होण्यास प्रस्तुत आदेशान्वये परवानगी देण्यात येत आहे. संबंधीतांनी विभागात रुजु होऊन अनुपालन अहवाल व कार्यभार हस्तांतरण प्रमाणपत्र ५ प्रतीत या कार्यालयास सादर करावे.

(डॉ. शिल्पा व. दोमकुंडवार,)
अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय, धाराशिव

प्रति,

डॉ. प्रविण बाळासाहेब डुमणे, सहाय्यक प्राध्यापक, क्षयरोग व उरोरोगशास्त्र, शा.वै.म.धाराशिव.

प्रत मा. आयुक्त, वैद्यकीय शिक्षण व आयुष, संचालनालय, मुंबई.

प्रत मा. सचिव, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई.

प्रत मा. महालेखाकार, महाराष्ट्र राज्य, (ले व ह), नागपुर.

प्रत वैद्यकीय अधिक्षक तथा अतिरिक्त जिल्हा शल्यचिकित्सक, शा.वै.म.व रु. धाराशिव.

प्रत विभागप्रमुख क्षयरोग व उरोरोगशास्त्र, शा.वै.म.धाराशिव.

प्रत प्रभारी लिपीक, लेखा-२, शा.वै.म.धाराशिव.

प्रत जिल्हा कोषागार अधिकारी, धाराशिव.

प्रत रोखपाल, शा.वै.म.धाराशिव.

सहाय्यक प्राध्यापक
क्षय व उरोरोग विभाग,
शा.वै.म.धाराशिव

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) ४१३ ५०१
E-mail: deangmcosmanabad@gmail.com फोन क्र. ०२४७२- २९७४४०



जा.क्र.शावैमधा/आस्था - २/अनुभव प्रमाणपत्र/ 3230 /२०२६ दि:- २५/ ०९/२०२६

EXPERIENCE CERTIFICATE

This is to certify that Dr. Pravin Balasaheb Dumne, **is** working as Assistant Professor in dept. of T.B. & Chest in this College. His total experience is as follows –

Sr. No	Post held	Name of College	Department	Nature of Appointment	Period		Years & Month
					From	To	
01	Assistant Professor	G.M.C.Dharashiv	T.B. & Chest	DSB Order Period with Breaks Condone by Government Order No. E-1039936/2025/ Vais-3 Dated. 13.06.2025	10-08-2022	08-05-2024	04 Years, 01 Months
02	Assistant Professor	G.M.C.Dharashiv	T.B. & Chest	MPSC (Permanent)	09-05-2024	Till Date	

His conduct is good & work in our organization is satisfactory.

(Dr. Shailendra D. Chauhan,)
DEAN,
Government Medical College,
Dharashiv

To,

Dr. Pravin Balasaheb Dumne,
Assistant Professor, Dept., of T.B. & Chest,
Government Medical College, Dharashiv

National Board of Examinations

New Delhi

hereby certifies that

Dumne Pravin Balasaheb

has pursued the prescribed course of

postgraduate training

and has demonstrated his proficiency at an examination held in June 2016 session to the satisfaction of the Board. Accordingly, on this Twenty First Day of September in the year

Two Thousand Eighteen

the Board admits him at the Convocation

held at New Delhi as

Diplomate of National Board

for the practice of

Respiratory Medicine

Dr. Abhijit Shete

President

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MUHS

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

महाराष्ट्र आरोग्य विज्ञान विद्यापीठ, नाशिक

We,
the Chancellor, Pro-Chancellor,
Vice-Chancellor
and
Members of the Management Council,
Academic Council
confer the Degree of

PG Diploma In Tuberculosis & Chest Diseases

on

Dumne Pravin Balasaheb
(PRN 2314162803)

of

Government Medical College, Nagpur

for the examination held in Summer-2014
at the Convocation
held on 08th October 2014



MUHS

VICE-CHANCELLOR
कुलगुरू

आम्ही,
कुलपती, प्र.कुलपती,
कुलगुरु
आणि
व्यवस्थापन परिषद व
विद्यापरिषदेचे सदस्य
क्षयरोगशास्त्र व उरोरोगशास्त्र पदव्युत्तर पदविका

ही पदवी उन्हाळी-२०१४ मधील परीक्षेत उत्तीर्ण
झाल्याबद्दल
नागपूर येथील शासकीय वैद्यकीय महाविद्यालया चे/च्या

डुमने प्रविण बाळासाहेब

यांना
०८ ऑक्टोबर, २०१४ च्या
दीक्षांत समारंभात प्रदान करीत आहोत

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MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

We, the Chancellor, the Pro-Chancellor, the Vice-Chancellor, the Members of the Management Council and the Academic Council of the Maharashtra University of Health Sciences, Nashik, certify that

Shri/Smt. DUMNE PRAVIN BALASAHEB

of Jawaharlal Nehru Medical College, Sawangi(Meghe), Wardha



having been examined and found duly qualified for the

Bachelor of Medicine & Bachelor of Surgery

in Nov-2008 the said Degree has been conferred on him / her. In testimony whereof is set the seal of the said University.

PRN 0105143129
20th May 2010

N. Umakrishnan
VICE-CHANCELLOR

महाराष्ट्र आरोग्य विज्ञान विद्यापीठ, नाशिक

आम्ही, महाराष्ट्र आरोग्य विज्ञान विद्यापीठाचे कुलपति, प्रकुलपति, कुलगुरू, व्यवस्थापन परिषद व विद्यापरिषद सदस्य प्रमाणित करतो की, सावंगी (मेघे), वर्धा येथील जवाहरलाल नेहरू वैद्यकीय महाविद्यालया चे/च्या

डुमने प्रवीण बाळासाहेब

हे/हया नोव्हेंबर-२००८ मध्ये

वैद्यक आणि शल्यचिकित्सा स्नातक

परीक्षा उत्तीर्ण झाल्याबद्दल त्यांना ही पदवी प्रदान करण्यात येत आहे.

याची साक्ष म्हणुन विद्यापीठाची अधिकृत मुद्रा येथे अंकित करण्यात येत आहे.

निलेश गांधी
कुलगुरू

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Research Article

Study of clinical profile and radiological imaging in patients with cerebral venous sinus thrombosis at tertiary care hospital

Shubham R. Jamadar[1]*, Pravin B. Dumne[2], Saurabh S. Patil[3]
[1]Assistant Professor, Department of General Medicine, G.M.C. Dharashiv, India.
[2]Assistant Professor, Department of TB and Chest Disease, G.M.C. Dharashiv, India.
[3]Assistant Professor, Department of General Medicine, G.M.C. Dharashiv, India.

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***Corresponding author:** Dr. Shubham R. Jamadar **Email:** drsrjamadar@gmail.com

Abstract: ***Background:*** Cerebral venous thrombosis have wide spectrum of symptoms and signs with headache is the most common presenting symptom, in 70–90% of cases. Neuroimaging is the corner stone in the diagnosis of cerebral venous thrombosis. In the present study we are going to investigate the clinical profile, radiological findings and risk factors of cerebral venous thrombosis. ***Material and Methods:*** Present study was single-center, prospective, observational study, conducted in patients age group 18 years and above irrespective of genders admitted to the hospital with a radiological evidence of cerebral venous thrombosis. ***Results:*** Most of the patients were in the age group of 18-40 years contributing to 65%. Mean age of patients was found to be 36.23 years. Males to females ratio (sex ratio) found to be 1:1.2. Most common risk factor in male patients is addiction (alcohol and smoking) found in 55% of total male patients. Most common risk factors in female patients was use of OC pills and HRT accounting for 30.3% of total female patients and pregnancy related (ANC and PNC) found in 30.3% patients out of which 21.21% females belongs to puerperium period. The most common presenting symptom was Headache (60%) followed by convulsions (41%), focal deficits (15%) and altered sensorium was present in 13.33% patients. Most common neurological sign was papilledema (23.33) followed by Hemiparesis (15%). Most common radiological finding was cerebral edema seen in 28.33% followed by hemorrhagic infarction seen in 23.34% of cases. 3.33% patients had sub arachnoid hemorrhage. In this study multiple (more than one) sinus involvement. ***Conclusion:*** CVST is mostly seen in third decade. Addiction, drugs, underlying procoagulant state like pregnancy, puerperium, coagulation disorders, infections are major risk factors for CVST.

Keywords: Cerebral venous thrombosis, addiction, procoagulant state, puerperium, coagulation-disorders, anticoagulation.

INTRODUCTION

Cerebral venous thrombosis is a rare condition with varied clinical presentation and often affects young to middle-aged patients. Although known for more than 100years,1 it has been diagnosed frequently ante-mortem in recent years because of greater awareness among physicians and neurologists and improved noninvasive imaging techniques. More than 100 causes of cerebral venous thrombosis have been recorded in the literature.1 However, even with extensive investigation no cause is identified in 20–25% of the cases.2

Cerebral venous thrombosis have wide spectrum of symptoms and signs with headache is the most common presenting symptom, in 70–90% of cases.2,3,4 In one-third to three-quarters of cases focal deficits such as hemiparesis and hemisensory disturbance, seizures, impairment of level of consciousness and papilledema occur.2,4 Superior sagittal sinus (72%) most commonly involved followed by lateral sinus (70%). More than one sinus is involved in 30 to 40% of cases.5

High index of suspicion required for the diagnosis because of its varied clinical presentations. Neuroimaging is the corner stone in the diagnosis of cerebral venous thrombosis. Imaging modalities of choice are CT scan and MRI with MR venogram. CT scan may be normal in 15-30% cases but MRI with MRV is almost 100% diagnostic.6,7,8 In the present study we are going to investigate the clinical profile, radiological findings and risk factors of cerebral venous thrombosis.

MATERIALS AND METHODS

Present study was single-center, prospective, observational study, conducted in department of General Medicine, at J. J. Hospital, Mumbai, Maharashtra, India. Study duration was of 2 years (August 2020 to December 2022). Study was approved by institutional ethical committee.

Inclusion criteria

- All patients age group 18 years and above irrespective of genders admitted to the hospital with a radiological evidence of cerebral venous thrombosis, willing to participate in present study

Exclusion criteria

1. Patients of age group below 18 yrs
2. Patients not willing to participate in the study

Study was explained to participants in local language & written informed consent was taken. In patients not able to give consent, consent will be taken from relatives.

Detailed information of the patient was collected which includes–demographic data, onset & duration of illness, risk factors, history of past illness, personal history, symptoms and signs on presentation in hospital and during stay in hospital, detailed general physical & systemic examination including detailed neurological examinations, Glasgow coma scale at the time of admission. Radiological imaging, Haematological and biochemical investigations, which are available in tertiary care center were done in all cases. The data was documented in attached case proforma.

Data was collected and compiled using Microsoft Excel, analysed using SPSS 23.0 version. Statistical analysis was done using descriptive statistics.

RESULTS

A total of 60 cases of cerebral venous thrombosis were recorded in our study. Majority of the patients, 22 (36.67%) were in 18- 30-year age group. The mean age of the patients in the present study was 36.23 years. In our study more than half, 33 (55%) of the patients were female & male patients were 27 (45%).

Table 1: General characteristics

Characteristics	No. of subjects	Percentage
Age group (in years)		
18–30	22	36.67
31–40	17	28.33
41–50	14	23.33
51–60	5	8.33
61-70	2	3.33
Gender		
Male	27	45
Female	33	55

In 60 patients, 10 (6.67%) had obesity, 12 (20%) had hypertension and 5 (8.33%) had diabetes. Obesity, Hypertension and diabetes were more predominant in female patients 8 (80%), 7 (58.33%) and 4 (80%) respectively, as compared to male patients. Chi square test was applied to test the association between hypertension and sex but was found to be statistically not significant as p- value is more than 0.05 (p- value= 0.79). Also, no statistically significant association was observed between obesity (p- value= 0.08), diabetes (p- value= 0.24) and sex as p- value was found to be more than 0.05 when Fischer exact test was applied as the test of association. Therefore, we can say that there is no statistically significant association between existing co-morbid conditions i.e. obesity, hypertension, diabetes and sex of cerebral venous thrombosis patients.

Table 2: Distribution of Co-morbidity with respect to sex

SEX	OBESITY	HTN	DM
MALE	2 (20%)	5 (41.67%)	1 (20%)
FEMALE	8 (80%)	7 (58.33%)	4 (80%)
TOTAL	10 (100%)	12 (100%)	5 (100%)

Majority of the patients 43 (71.67%) had no addictions, of which 31 (51.67%) were female and 12 (20%) were male. Alcohol and smoking was present in 7 (11.67%).

Table 3: Distribution of addiction with respect to sex

	Smoking	Alcohol	Alcohol & smoking	Tobacco chewing	Absent	Total
Male	2 (3.34%)	6 (10%)	7 (11.67%)	0	12 (20%)	27 (45%)
Female	0	0	0	2 (2.33%)	31 (51.67%)	33 (55%)
Total	2 (3.34%)	6 (10%)	7 (11.67%)	2 (2.33%)	43 (71.67%)	60 (100%)

Past history of acute gastroenteritis 2 (3.33%), COVID- 19 in 3 (5%), Polycythemia vera in 1 (1.67%), Road traffic accident in 1 (1.67%) and retroviral disease in 2 (3.33%) patients in male patients. In female patients 2 (3.33%) had history of CVST and SLE. 1 (1.67%) had history of seizure, TTP and CVA. Past history of Pulmonary tuberculosis was in 3 (5%) patients, of which 2 (3.33%) were female and 1 (1.67%) was male.

Table 4: Distribution of past history with respect to sex

PAST HISTORY	FEMALE	MALE	TOTAL
Covid-19	0	3 (5%)	3 (5%)
Pulmonary tuberculosis	2 (3.33%)	1 (1.67%)	3 (5%)
Acute gastroenteritis	0	2 (3.33%)	2 (3.33%)
Cerebral venous sinus thrombosis	2 (3.33%)	0	2 (3.33%)
Systemic lupus erythematosus	2 (3.33%)	0	2 (3.33%)
Retroviral disease	0	2 (3.33%)	2 (3.33%)
Polycythemia vera	0	1 (1.67%)	1 (1.67%)
Cerebrovascular Accident	1 (1.67%)	0	1 (1.67%)
Road Traffic Accident	0	1 (1.67%)	1 (1.67%)
Thrombotic Thrombocytopenic Purpura	1 (1.67%)	0	1 (1.67%)
Seizure	1 (1.67%)	0	1 (1.67%)
Absent	24 (40%)	17 (28.33%)	60 (100%)

Mastoiditis was seen 1 (1.67%) male patient. Tubercular meningitis was seen in 3 (5%) female patients and 1 (1.67%) male patient. Lumbar puncture was performed in 2 (3.33%) female patients. Craniotomy was performed in 1 (1.67%) male patient. And 1 (1.62%) had RTA as traumatic etiology.

Table 5: Distribution of etiology with respect to sex

Etiology	Male	Percentage	Female	Percentage
Infectious				
Mastoiditis	1	1.67	0	0
Tubercular meningitis	1	1.67	3	5
Traumatic				
Lumbar puncture	0	0	2	3.33
Craniotomy	1	1.67	0	0
Road Traffic Accident	1	1.67	0	0

Of 27 (45%) male patients in our study, 7 (25.93%) had alcohol and smoking addiction, smoking addiction was seen in 6 (22.22%) and infectious etiology was seen in 2 patients. 1 (3.70%) had mastoiditis and 1 (3.70%) had Tubercular Meningitis. 1 (3.70%) had undergone Craniotomy and 1 (3.70%) was admitted due to a Road Traffic Accident (RTA).

Table 6: Etiology in male patients

ETIOLOGY	NUMBER OF PATIENTS	PERCENTAGE
Alcohol and smoking	7	25.93
Alcohol	6	22.22
Smoking	2	7.41
Mastoiditis	1	3.70
Tubercular meningitis	1	3.70
Craniotomy	1	3.70
RTA	1	3.70

In 33 (55%) female patients, majority of the patients 23 (69.70%) had history of no drug consumption. 6 (18.18%) were on HRT and 4 (12.12%) were on OC pills. In 33 (55%) female patients, Cerebral Venous Thrombosis was seen more in PNC patients, 7 (21.21%). And in 6 (18.18%) patients who were on Hormone Replacement Therapy (HRT). 4 (12.90%) were on Oral Contraceptive (OC) pills, 3 (9.78%) were ANC, 3 (9.68%) had Tubercular Meningitis and 2 (6.45%) patients had undergone Lumbar Puncture.

Table 7: Etiology in female patients

ETIOLOGY	NUMBER OF PATIENTS	PERCENTAGE
TOBACCO CHEWING	2	6.06
TBM	3	9.09
LUMBAR PUNCTURE	2	6.06
ANC	3	9.09
PNC	7	21.21
HRT	6	18.18
OC PILLS	4	12.12

More than half, 15 (55.56%) male patients had addiction and only 2 (6.06%) female patients had addiction. A very highly statistically significant association was observed between addiction and sex as p- value was found to be less than 0.001. Therefore, we can say that the association between addiction (alcohol, smoking or both) and sex of cerebral venous thrombosis patients is very highly significant statistically. 10 (37.03%) of male and 9 (27.28%) of female patients had past history. Chi-square test was applied to test for association between past history in cerebral venous thrombosis patients and sex wise distribution of patients. P- value was found to be 0.41 which is greater than 0.05. Therefore, we can say that there is no statistically significant relationship between past history of patients and sex of the patients.

Table 8: Correlation between gender, addiction & past history

SEX	ADDICTION		Past history	
	PRESENT	ABSENT	Present	Absent
MALE	15 (55.56%)	12 (44.44%)	10 (38.46%)	17 (65.38%)
FEMALE	2 (6.06%)	31 (93.94%)	9 (27.27%)	24 (72.73%)
TOTAL	17 (28.33%)	43 (71.67%)	19 (31.67%)	41 (68.33%)

Fischer's exact test was applied to test the association between infectious etiology in patients and sex of the patient. At 1 degree of freedom, p- value was found to be 1 which is greater than 0.05. Therefore, we can say that there is no statistically significant association between sex of the patient and infectious etiology.

Fischer's exact test was applied to test the association between traumatic etiology in patients and sex of the patient. At 2 degree of freedom, p- value was found to be 1 which is greater than 0.05. Therefore, we can say that there is no statistically significant association between sex of the patient and traumatic etiology.

Table 9: Correlation between gender & etiology

SEX	Infectious etiology		Traumatic etiology	
	Present	Absent	Present	Absent
MALE	2 (7.41%)	25 (92.59%)	2 (7.41%)	25 (92.59%)
FEMALE	3 (9.09%)	30 (90.91%)	2 (6.06%)	31 (93.94%)
TOTAL	5 (8.33%)	55 (91.67%)	4 (6.67%)	56 (93.93%)

In this study, out of this 53 (88.33%) belong to non-puerperal group and 7 (11.67%) belong to the puerperal group. Out of the 53 non-puerperal cases, 27 were males and 26 females. Those who presented within 48 hours were considered to have acute onset, with onset longer than 48 hours but less than 1 month were considered subacute, and with onset more than 1 month as chronic. In this study, 70% of CVST had subacute presentation, followed by 20 % with acute presentation.

In this study, 32 patients (83.34%) were conscious and 8 cases (13.33%) had altered sensorium at the time of presentation. Most common symptom was headache in 60 % followed by convulsions in 41.67 % and papilledema in 23.33%. Out of 60 patients only 6 (10%) patients had cranial nerve involvement. In them 2nd cranial nerve was involved in 2 (33.34%) patients.

Table 10: Clinical feature

Characteristics	No. of subjects	Percentage
Type of CVST		
Non-puerperal	53	88.33
Puerperal	7	11.67
Onset		
Acute	12	20.00
Subacute	42	70.00
Chronic	6	10.00
Level of consciousness		
Conscious	50	83.34%
Altered sensorium	8	13.33%
Comatose	2	3.33
Symptom		
Headache	36	60.00
Convulsions	25	41.67
Papilledema	14	23.33
Focal deficit	9	15
Altered sensorium	8	13.33
Cranial Nerve Involvement	6	10
Vomiting	5	8.33
Fever	4	6.67
Coma	2	3.33
Cranial nerve involved		
2nd nerve	2	33.34
2nd, 6th nerve	1	16.66
3rd, 4th, 6th nerve	1	16.66
2nd, 3rd, 4th, 6th nerve	1	16.66
7th nerve	1	16.66

Majority 17 (28.33%) had cerebral edema followed by VHI in 5 (8.33%) and HI and IPH was seen in 3 (5%).

Table 11: CT and MRI findings (n- 60)

Findings(CT & MRI)	Number of patients	Percent (%)
Cerebral edema	17	28.33
VHI	5	8.33
HI	3	5
IPH	3	5
IPH and HI	1	1.67
VHI and SAH	1	1.67
IPH, HI and SAH	1	1.67

In this study, superior sagittal sinus was most commonly involved in 33 (55%) patients, followed by right transverse sinus 28 (46.67%) and left transverse sinus in 23 (38.33%).

Table 12: Involvement of veins and sinuses

Involvement of veins and sinuses		No. Of patients	Percentage (%)
SSS		33	55
ST. SINUS		16	26.67
VOG and IJV		13	21.67
Transverse sinus	Right	28	46.67
	Left	23	38.33
Sigmoid sinus	Right	22	36.67
	Left	12	20
SCV and DCV		9	15

DISCUSSION

The mean age of the patients in the present study was 36.23 years. Previous studies done by Goyal et al.,9 shows 34.76 year, Nagaraja et al.,10 shows 24.2 year, Desai et al.,11 shows 31.94 years, Kotireddy CV et al.,12 shows 35.65 years, Stolz et al.,13 42.8 years. This leads us to believe that CVST primarily affects younger people, especially those in their 30s and 40s. In many research, the age range that is most frequently affected is 20 to 40 (Ameri et al.2, 61%). Similar results were also found in the current study, which included 65 % of the same age group (20-40).

In our study more than half, 33 (55%) of the patients were female. And male patients were 27 (45%) were male. The ratio of the male to female population in this study is 1:1.2. which is similar to study carried out by Raina AF et al.,14 shows 1:2.5, Kalita J et al.,15 shows 1:1.8, Goyal et al.,9 Shows 1:2, Patil VC et al.,16 shows 1:1.3, Kotireddy CV et al.,12 shows 1:1.3, study done by Kalita J et al.,17 shows 1.12:1 (male predominance). Most of the study shows similar findings to this study that CVST is most common in females than in males.

Predisposing underlying factors can be identified in up to 80% of patients of CVST.4 In the present study no risk factor could be identified in only 6.67%. no cause identified in other studies like Anadure RK et al.,18 shows 13%, Narayan et al.,19 shows 16% patients had no cause for CVST. Most common risk factor in females is the patients was on HRT or OC pills (30% of total females) followed by females in ANC and PNC (puerperium). In this study, 7 (11.67%) belong to the puerperal group. These findings are similar to Previous studies carried out by Bano S et al.,20 Gazioglu S et.al.,21 & Kashkoush Al et al.,22

In males alcohol and smoking addiction is the most common risk factor accounting of 55% (15 out of 27) of total male patients. similar finding found in previous studied carried out by, Narayan et al.,19 Bajko Z et al.,23 & Green M et al.,24

According to the duration of time between the development of the first symptom and the date of admission to the hospital, Bousser et al.4 classified modes of onset as acute (less than 48 hours), subacute (more than 48 hours but less than one month), and chronic (more than one month). In the current study, the most frequent presentation was subacute in 48 instances (70%) before acute presentation was seen in 12 cases (20%) and chronic presentation was seen in 6 cases (10%). Similar findings were noted in the study of Kotireddy CV et al.,12 which shows 53% (sub-acute), 36.7% (acute) & 10% (chronic), Anadure RK et al.,18 shows 53% (subacute) 29% (acute) & 18% (chronic).

In this study the most common presenting symptom was headache which wasobservedin60% of the study group. This was compared with the previous studies showing headache as most common symptoms like 68% in Sébire G et al.,25 79 % Raina AF et al.,14 47% in Goyal G et al.,11 80% in Desai I et al.,9 & 74 % in Bousser et al.,4 8.33% patients shows vomiting as initial symptom in this study. some previous studied like Narayan D et al.,19 Raina AF et al.,14 & Anadure RK et al.,18 shows vomiting as one of the most common manifestation 69%,54%, 62% respectively. But some studies like Koti Reddy CV.,12 shows vomiting as initial symptom in 10% patients which is similar to this study.

In this study 6.67% of the patient has presented with fever as one of the initial symptom. some of the previous studies also shows fever in a CVST patient like 10% in KotiReddy CV.,12 15% in Anadure RK et al.,18,19.5% in Raina AF et al.,14 & 38 % in Patil VC et al.,17

In this study 23.33% of total patients has papilledema, which is comparable to previous studied carried out by Narayan D et al.,19 & Patil VC et al.,17 Wasay M et al.92 which shows presence of papilledema in 18%, 26% and 32% respectively. Convulsion is the second most common

symptom in this study seen in 41.67% patients. which is comparable to previous studies like Narayan D et al.,19 Anadure RK et al.,18 KotiReddy CV.,12 shows convulsion as one of the initial symptom in 39%, 42%, 43%, 51% respectively.

In this study Focal neurological deficit and cranial nerve involvement seen in 15% and 10 % respectively. Hemiparesis is most common in all. in cranial nerves 2nd nerve involvement is most common seen in 7.5% of patients followed by 6th nerve, 3rd nerve and 7th nerve. Finding in this study comparable to previous studies like in study conducted by Narayan D et al.,19 shows incidence of focal neurological deficit in 28 %, Patil VC et al.,17 reported focal neurological deficit (hemiparesis most common) in 24% and 2% has cranial nerve involvement. Raina AF et al.,14 shows FND in 29% patients and 15.8% patients shows cranial nerve involvement, KotiReddy CV.,12 reported 23% patients has focal neurological deficit whereas 2% patient had diplopia(cranial nerve involvement) Altered sensorium was found in 13.33 % of the patients in our study which is comparable to incidence of altered sensorium in the study of Goyal G et al.,9 (14 %) and Bousser et al.,4 (26%). But some studies like KotiReddy CV.,12 & Hassan M26 showed altered sensorium as one of the most common symptom in 43% & 47% patients respectively.

The most common radiological finding in the present study is cerebral edema 28.33% secondary to brain parenchymal injury. 2nd most common presentation in this study is hemorrhagic infarction (23.34 %) followed by Sub arachnoid hemorrhage found in 3.33% cases. In previous study carried out by Raina AF et al.,14 shows 23% patient had hemorrhagic infarct with intra cranial bleed and 10% patient had SAH. Study of Goyal G et al.,9 shows 37.5% cases had hemorrhagic infarct and 6.17% patient had intraparenchymal hemorrhage and 55% patient had SAH in a cases of CVST.

In this study multiple(more than one) sinus involvement with superficial and Deep cortical veins with IJV present in some case of which commonest sinus involved was transverse sinus (84%) followed by sigmoid sinus (56.67%) and superior sagittal sinus (55%). Straight sinus involvement found in 26.67% of cases. Similar findings were reported in the studies conducted by Bousser et al.,4 demonstrated the presence of transverse sinus (74%) and superior sagittal sinus (64%); Study carried out by Goyal G et al.,9 suggestive that 74% involvement of transverse sinus, 44% of superior sagittal sinus 65% of straight sinus and 11% involvement of superficial and deep cortical veins.

Present therapeutic options for treatment include anti-thrombotic therapy with unfractionated heparin, low-molecular-weight heparins (LMWH), oral anticoagulants, intravenous thrombolysis local thrombolysis by selective sinus catheterization and a combination of thrombolysis and anticoagulation in addition to symptomatic therapy.7 Almost 80% of patients recover without sequelae and acute case fatality recorded in less than 5%.8

Early diagnosis and treatment of cerebral venous thrombosis may prevent morbidity and may even be lifesaving. In the present study we are going to investigate the clinical profile, radiological findings and risk factors of cerebral venous thrombosis.

CONCLUSION

The present study emphasizes that CVST is not an uncommon condition. All age groups can be presented with CVST but its mostly seen in third decade. Addiction, drugs, underlying procoagulant state like pregnancy, puerperium, coagulation disorders, infections are major risk factors for CVST. Evaluation for an underlying procoagulant state may be helpful for further prevention and treatment with long term anticoagulation. Clinical presentation is extremely varied and symptoms may evolve over hours to few weeks. Important clinical features to suggest this disorder are presentation with recent headache, seizures, papilledema and focal deficits in the appropriate clinical settings. Neuroimaging plays a pivotal role in diagnosis. Contrary to ischemic arterial stroke, CVST could be described as an "allor nothing" disease with good short and long term outcomes when the acute phase of illness has been survived.

Conflict of Interest: None to declare
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REFERENCES

1. Bousser MG. Cerebral venous thrombosis: nothing, heparin or local thrombolysis. Stroke, 1999 Mar;30(3):481-3.
2. Ameri A, Bousser MG. Cerebral venous thrombosis. Neurologic clinics. 1992 Feb1;10(1):87-111.
3. Villringer A, Mehraein S, Einhäupl KM. Pathophysiological aspects of cerebral sinus venous thrombosis (SVT). Journal of neuroradiology. Journal deneuro radiologie. 1994 Apr;21(2):72-80.
4. Bousser MG, Chiras J, Bories J, Castaigne P. Cerebral venous thrombosis—a review of 38 cases.Stroke.1985Mar;16(2):199-213.
5. Bousser MG, Barnett HJM. Cerebral venous thrombosis. In: stroke: pathophysiology, diagnosis and management, 4thedition. New York.ChurchillLivingstone,2004;300-21.
6. Wang AM. MRA of venous sinus thrombosis. Clinical neuroscience (NewYork,NY).1997;4(3):158-64.
7. Nagaraja D, Sarma GR. Treatment of cerebral sinus/venous thrombosis. Neurology India. 2002 Apr1;50(2):114.
8. Ferro JM, Canhão P, Stam J, Bousser MG, Barinagarr ementeria F. Prognosis of cerebral vein and dural sinus thrombosis: results of the International Study on Cerebral Vein and Dural Sinus Thrombosis(ISCVT).Stroke.2004Mar1;35(3):664-70.
9. Goyal G, Charan A, Singh R. Clinical presentation, neuroimaging findings, and predictors of brain parenchymal lesions in cerebral vein and dural sinus thrombosis: a retrospective study. Annals of Indian Academy of Neurology. 2018 Jul;21(3):203
10. Nagaraja D, Haridas T, Taly AB, Veerendrakumar M, Subbu KrishnaDK. Puerperal cerebral venous thrombosis: therapeutic benefit of low dose heparin.

NeurologyIndia. 1999Jan1;47(1):43.
11. Desai I, Tiwari A, Kumar M, Singh J, Dhar N, Kumar N. Comparison of risk factors, clinico-radiological profile and outcome in patients with acute, subacute and chronic cerebral venous sinus thrombosis. Annals of Indian Academy of Neurology. 2022 Nov 1;25(6):1233.
12. KotiReddy CV, Vikhe VB, Shende P, Kishore MS. Study of clinical profile in patients of cerebral venous sinus thrombosis. Headache.;28:93-3.
13. Stolz E, Rahimi A, Gerriets T, Kraus J, Kaps M. Cerebral venous thrombosis: an all or nothing disease?: prognostic factors and long-term outcome. Clinical neurology and neurosurgery.2005Feb1;107(2):99-107.
14. Raina AF, Chandra A, Dar W, Ganie HA, Kawaja Z, Wani M, Asimi R. Clinicoetiological profile of cerebral venous sinus thrombosis patients at a tertiary care center. Current Medical Issues. 2023 Jan 1;21(1):14.
15. Kalita J, Chandra S, Kumar B, Bansal V, Misra UK. Cerebral venous sinus thrombosis from a tertiary care teaching hospital in India. The neurologist. 2016 May 1;21(3):35-8.
16. Kalita J, Singh VK, Jain N, Misra UK, Kumar S. Cerebral venous sinus thrombosis score and its correlation with clinical and MRI findings. Journal of Stroke and Cerebrovascular Diseases. 2019 Nov 1;28(11):104324.
17. Patil VC, Choraria K, Desai N, Agrawal S. Clinical profile and outcome of cerebral venous sinus thrombosis at tertiary care center. Journal of neurosciences in rural practice. 2014 Jul;5(03):218-24.
18. Anadure RK, Wilson V, Sahu S, Singhal A, Kota S. A study of clinical, radiological and etiological profile of cerebral venous sinus thrombosis at a tertiary care center. medical journal armed forces india. 2018 Oct 1;74(4):326-32.
19. Narayan D, Kaul S, Ravishankar K, Suryaprabha T, Bandaru VS, Mridula KR, Jabeen SA, Alladi S, Meena AK, Borgohain R. Risk factors, clinical profile, and long-term outcome of 428 patients of cerebral sinus venous thrombosis: Insights from Nizam's Institute Venous Stroke Registry, Hyderabad (India). Neurology india. 2012 Mar 1;60(2):154.
20. Bano S, Farooq MU, Nazir S, Aslam A, Tariq A, Javed MA, Rehman H, Numan A. Structural imaging characteristic, clinical features and risk factors of cerebral venous sinus thrombosis: a prospective cross-sectional analysis from a tertiary care hospital in Pakistan. Diagnostics. 2021 May 26;11(6):958.
21. Gazioglu S, Dinc G. Cerebral venous sinus thrombosis in pregnancy and puerperium. ActaNeurologicaBelgica. 2021 Aug;121:967-72.
22. Kashkoush AI, Ma H, Agarwal N, Panczykowski D, Tonetti D, Weiner GM, Ares W, Kenmuir C, Jadhav A, Jovin T, Jankowitz BT. Cerebral venous sinus thrombosis in pregnancy and puerperium: a pooled, systematic review. Journal of Clinical Neuroscience. 2017 May 1;39:9-15.
23. Bajko Z, Motataianu A, Stoian A, Barcutean L, Andone S, Maier S, Drăghici IA, Cioban A, Balasa R. Gender differences in risk factor profile and clinical characteristics in 89 consecutive cases of cerebral venous thrombosis. Journal of Clinical Medicine. 2021 Mar 30;10(7):1382.
24. Green M, Styles T, Russell T, Sada C, Jallow E, Stewart J, Lazariashvili O, Lubomirova I, Cotlarciuc I, Sharma S, Han TS. Non-genetic and genetic risk factors for adult cerebral venous thrombosis. Thrombosis research. 2018 Sep 1;169:15-22.
25. Sébire G, Tabarki B, Saunders DE, Leroy I, Liesner R, Saint-Martin C, Husson B, Williams AN, Wade A, Kirkham FJ. Cerebral venous sinus thrombosis in children: risk factors, presentation, diagnosis and outcome. Brain. 2005 Mar 1;128(3):477-89.
26. Hassan M, Khan NU, Rajput HM, Shahzad W, Hassan T, Mushtaq HF, Badshah M. Clinical and radiological study profile of cerebral venous sinus thrombosis at a tertiary care center in Pakistan. Brain Hemorrhages. 2022 Dec 1;3(4):151-4.

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TO STUDY THE CLINICAL, RADIOLOGICAL AND MICROBIAL PROFILE OF PULMONARY INFECTION IN IMMUNOCOMPROMISED PATIENTS

Medicine

Dr Pravin Balasaheb Dumne* DNB (Respiratory Medicine) DTCD, EDARM. *Corresponding Author

Dr Parag Khatavkar MD Chest

Dr Madhav Kale MD, DCD, EDARM

ABSTRACT

BACKGROUND The lung is one of the most frequently involved organs in complications of immunocompromised host. Among these, pulmonary infection is the most common complication. The chest radiograph is initial diagnostic tool for detection of suspected pulmonary infection in immunocompromised. However, chest radiograph findings are nonspecific in determining pathogens. The early use of Computed Tomography (CT) is helpful in detecting pulmonary lesions which may not be evident on routine chest radiographs. But there is overlap of CT finding in different infections. This study is therefore, designed to document the clinical, radiological & microbial profile of pulmonary infection in immunocompromised patients.

AIM To study the clinical, radiological and microbial profile of pulmonary infection in immunocompromised patients, and to study diagnostic yield of sputum examination, induced Sputum examination & bronchoscopic BAL examination.

METHODS The present prospective descriptive observational study was conducted in the Department of Chest Medicine at King Edward Memorial Hospital, Pune. It included immunocompromised patients with lower respiratory tract infection symptoms. A total number of 70 indoor & OPD patient with urban & rural background were included in the study. Among them 45 patients were HIV reactive group and 25 patients were having Non-HIV immunocompromised condition. All of them had pulmonary infection. The study was conducted over a period of 15 months.

RESULTS Incidence of pulmonary infection was higher in age 31-40 years (28.58%). There were 51 males and 19 females. Opportunistic infections were more common in males as compared to females. Majority of immunocompromised patients were HIV reactive (64.3%) followed by of Malignancy (15.7%). Focal non homogenous opacity (37.5%) was most common radiological finding followed by consolidation with air brochogram (25%). Pulmonary Tuberculosis (40.5%) was most common opportunistic infection in immunocompromised patients followed by bacterial (30.38 %) and fungal infections (17.72%). Sputum (40.98), induced sputum examination (19.29), and Bronchoscopy with BAL (91.42%) had good diagnostic yield in diagnosis of pulmonary infection in immunocompromised patients.

CONCLUSION Induced sputum had less diagnostic yield in immunocompromised patients and also it is time consuming.Early bronchoscopy with BAL remains crucial to establish the diagnosis in immunocompromised patients with pulmonary infection when the cause is infectious in nature.

KEYWORDS

Pulmonary Infection, Immunocompromised Patients, Induced Sputum, Bronchoscopy with BAL

INTRODUCTION

"Immunocompromised host" defined as a condition in which individual is susceptible to life-threatening infection as a result of a primary or acquired abnormality of the immune system. Most patients of immunodeficiency are acquired but some people are born with defects in their immune system (primary immunodeficiency). With medical advances, the population of immunocompromised host has expanded enormously, reflecting the increased use of immunosuppressive agents for the treatment of malignancies, collagen vascular diseases, autoimmune disorders & for the prevention of rejection in solid organ transplant recipients. Also, HIV/AIDS pandemic has resulted in the existence of many immunocompromised patients.

The lung is one of the most frequently involved organs in complications of immunocompromised host. Among these, pulmonary infection is the most common complication and accounts for about 75% of pulmonary complications with high morbidity and mortality. Bacterial, fungal, viral & mycobacterial pathogen may infect immunocompromised patient[1].

The chest radiograph is initial diagnostic tool for detection of suspected pulmonary infection in immunocompromised. It help in detection of pattern of the abnormality and its rate of progression on serial images in the diagnosis. However, chest radiograph findings are nonspecific in determining pathogens.The early use of Computed tomography (CT) is helpful in detecting pulmonary lesions which may not be evident on routine chest radiographs. But there is overlap of CT finding in different infections[2]. Because, several infections can present with similar clinical & radiological features in immunocompromised patients, the cause of pulmonary infection is challenging in this setting. The specific aetiology should be sought and for this sputum examination, induced sputum examination, bronchoscopy with bronchoalveolar lavage (BAL) studies & trans bronchial biopsies (TBLB), CT guided lung FNAC and trucut biopsies in appropriate individuals are the investigational procedures in diagnosis, to start early therapeutic interventions and to decrease morbidity & mortality.This study is therefore, designed to document the clinical, radiological & microbial profile of pulmonary infection in immunocompromised patients.

AIM

- To study the clinical, radiological and microbial profile of pulmonary infection in immunocompromised patients.
- To study diagnostic yield of sputum examination, induced Sputum examination & bronchoscopic BAL examination.

METHODS

The present prospective descriptive observational study was conducted in the Department of Chest Medicine at King Edward Memorial Hospital, Pune. It included immunocompromised patients with lower respiratory tract infection symptoms. A total number of 70 indoor & OPD patient with urban & rural background were included in the study. Among them 45 patients were HIV reactive group and 25 patients were having Non-HIV immunocompromised condition. All of them had pulmonary infection. The study was conducted over a period of 15 months (From September 2014 to November 2015).

INCLUSION CRITERIA

Patients included in this study were those who present with lower respiratory tract infection symptoms like cough,sputum production, breathlessness, and fever with underlying disease like:

- HIV/AIDS
- Malignancy on chemotherapy and radiotherapy
- Solid organ transplant
- Hematopoietic cell transplants
- Individuals on immunosuppressive therapy

EXCLUSIONCRITERIA

- Immunocompromised patients without respiratory symptoms
- Patient not willing to give consent

- Pediatric age group less than 12 years of age
- Uncooperative patient

Procedure

A detailed history was taken and clinical examination was done. Assessment of oxygenation (usually by pulse oximetry) was done.History of presence of human immunodeficiency virus (HIV) infection, history/treatment of TB, malignancy, solid organ transplant history, use of immunosuppressive & corticosteroid medicine was documented. Investigations were performed to find out the cause of pulmonary infection.

Specimen obtained for microbiological evaluation were:

- Sputum
- Induced Sputum
- Bronchial washing or BAL

Table1: Staining Procedures used in for the Study

Staining Method	Pathogens
Gram stain	Bacteria
Ziehl Neelsen stain (20% acid fast)	Mycobacteria
10% KOH mount	Fungi
Saline mount	Fungi, parasites
Modified Ziehl Neelsen stain (1% acid fast)	Nocardia
Methenamine silver stain	P.jiroveci.
India Ink preparation	Encapsulated yeasts
Giemsa stain	P.jiroveci.

Data Collection and Statistical Analysis

All the data pertaining to detailed history including medication history, clinical examination & investigations were collected as per study proforma. Data analysis was performed by using SPSS (Statistical Package for Social Sciences version 19.0).In this observational study we described the quantitative data by Mean/SD/Range /Median and qualitative data expressed in frequency and percentage.A 'p' value was calculated using Fisher's exact test of significance for categorical variables. The p-values less than 0.05 are considered to be statistically significant.

RESULTS

In this study, incidence of pulmonary infection was higher in age 31-40 years (28.58%) followed by in age group more than 50 years (22.86%). There were 51 males and 19 females, giving a male to female ratio of 2.6:1. Opportunistic infections were more common in males as compared to females. Majority of immunocompromised patients were HIV reactive (64.3%) followed by of Malignancy (15.7%). Results showed 80% HIV reactive patients were on HAART and among all the patients, only 14 % of patients had past history of previous Tuberculosis infection.

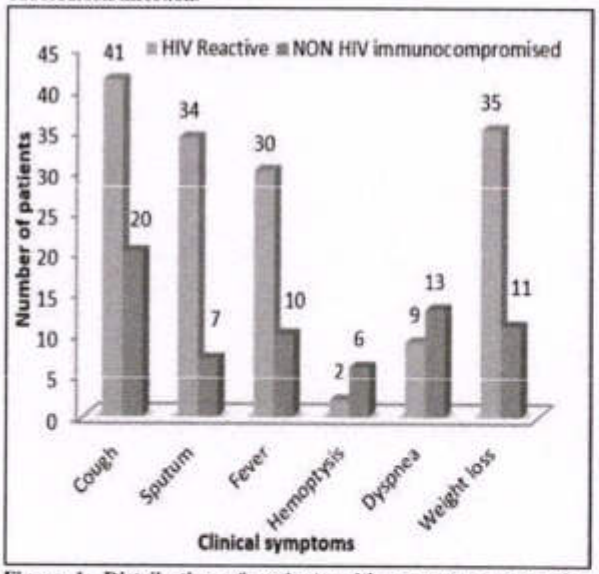

Figure 1: Distribution of patients with respect to presenting complaints

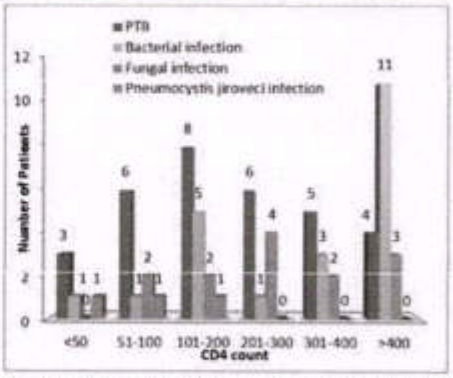

Figure 2: Distribution of CD4 count with respect to various pulmonary infections

Cough (87.14%) was most common presenting complaints, and 58.66% of all opportunistic infections seen with CD4 counts less and equal to 300 cells per cumm. Further, disseminated infections (80%) was more commonly seen with immunocompromised patients with CD4 counts < 300 per cumm.

Table 2: Spectrum of Chest Radiology finding

Chest X-Ray Findings	HIV Reactive	Non-HIV Immunocompromised	Total	Percentage
Normal	3	2	5	6.25
Non homogenous Opacity	21	9	30	37.5
Consolidation	10	10	20	25
Miliary TB	2	1	3	3.75
Cavity	3	2	5	6.25
Ground Glass Opacity	1	1	2	2.5
Pleural Effusion	4	1	5	6.25
Non-Specific Findings	5	5	10	12.5

As per table 2, focal non homogenous opacity (37.5%) was most common radiological finding followed by consolidation with air brochogram (25%). Normal chest radiograph also seen in 6.25 % patients. Further, as per Fisher's Exact Test, HIV reactive patients having CD4 count less than 200 cells per cumm, had predominant lower lobe involvement on chest radiography.

Table 3: Distribution of opportunistic Pulmonary infection in Immunocompromised Patients

Diagnosis	HIV Reactive	Non-HIV Immunocompromised	Total	Percentage (%)
Pulmonary tuberculosis	24	8	32	40.5
Bacterial infection	12	12	24	30.38
Fungal infection	7	7	14	17.72
Viral pneumonia	3	3	6	7.60
Pneumocystis jiroveci infection	3	0	3	3.80
Total	49	30	79	100

Table 3 shows that Pulmonary Tuberculosis (40.5%) was most common opportunistic infection in immunocompromised patients followed by bacterial (30.38 %) and fungal infections (17.72%). Further, figure 3 below shows that total 79 opportunistic pulmonary infections were seen in 70 patients.

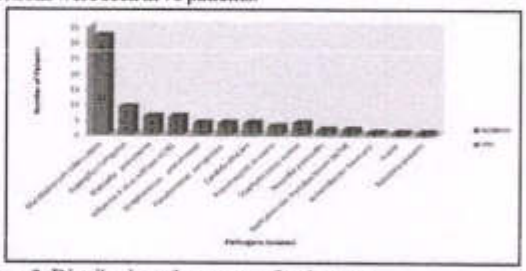

Figure 3: Distribution of spectrum of pathogens

9 patients (11.39%) had polymicrobial infection. Pulmonary Tuberculosis (40.50%) was most common opportunistic infection followed Aspergillus fumigatus (11.40%), Klebsiella pneumoniae &Influenza A virus subtype H1N1 (7.60%) in immunocompromised patients. In addition, nine patients (11.39%) had polymicrobial infection. Fisher's Exact Test showed no association between incidence of drug resistant tuberculosis in HIV and non-HIV immunocompromised. Further, MDR Pulmonary TB infection was observed in 6 patients (18.75 %) of total Pulmonary tuberculosis patients.

Table 4: Distribution ofDiagnostic Modalities that Yielded Final Diagnosis

Method	Positive yeild in number of patients	Diagnosticyeild
Sputum Examination	25/61	40.98%
Induced Sputum Examination	11/57	19.29%
BAL	32/35	91.42%
TBLB	1/2	50%
CT guided Biopsy	1/1	100%
RT PCR(In Patient of H1N1)	6/8	75%
Post mortem Biopsy	1/1	100%
Total	77	

Sputum (40.98) and induced sputum examination (19.29) had good diagnostic yield in diagnosis of pulmonary infection in immunocompromised patients. Bronchoscopy was performed on 35 patients. Bronchoscopic findings revealed that inflamed bronchial mucosa was most common finding. Secretion was seen in many patients mostly mucoid in nature and few patients associated with mucopurulent secretion; and Whitish lesion were seen on mucosa suggestive of Candida. Bronchoscopy with BAL had good diagnostic yield (91.42%) in diagnosis of opportunistic infection in immunocompromised patients. Thus, Bronchoscopy with BAL should always be performed especially when sputum and induced sputum was non-contributory for microbiological diagnosis.

Six patients throat swab were positive for H1N1 influenza A infection from National Institute of Virology, Pune. H1N1 infection also seen in immunocompromised patients as Maharashtra state specially Pune had the highest number of H1N1 bronchopneumonia patient with high mortality (83.33%). Five out of six patients with H1N1 Infection died despite of good ICU care and medical management.

DISCUSSION

In this study, the mean age of the immunocompromised patients was 40 years, and in a similar study, JA Crocket et al, studied 86 immunocompromised patients with a mean age of 45 years. Also, most of the HIV positive patients belonged to the age group of 31 to 40 years of age with mean age of the patients was 37.92 years. This is the age of maximum outdoor involvement and sexually active age. This reflects the route of transmission of the HIV virus in these individuals. Similar demographic profile with young male predominance has been observed by other studies. Most of Non-HIV Patients shows high incidence in age group above 50 years (52%) which mainly constitute malignancy patients. In study by Shreevaidya et al in 2011 reported that majority of malignancy patients with pulmonary infections belonged to age group 51-60 years of age (47.7%) followed by 41-50 years of age (15.9%). Thus, this study correlates with the above report in parameters of age distribution. In our study male gender predominated in study population. Similar observation made in study by JA Crocket et al,[7] out of total 86 patients 68 (79.07 %) were males and 18 (20.93%) females.

In this study, cough (87.14%) is the most common symptom but not always associated with expectoration, here lies the value of induced sputum and bronchoscopy. Significant relationship was observed with TB symptoms like cough, fever and weight loss and pulmonary tuberculosis patients. Similar results noted in other study from India.Patel et al studied 50 patients with HIV -TB infection and reported most common symptom was cough in 47 (94%) patients. Further, the study shows that 71.87% of pulmonary tuberculosis (n=23) infection with HIV reactive patients had CD4 count less than 300 cells per cumm. Mean CD4 count in HIV patient with Pulmonary TB coinfection was 200.7 cells per cumm. In studies conducted in India, reported that TB is unique in that it can occur over a wide range of CD4 count, although it is more frequent at CD4 counts less than 300 cells per cumm.Jaryal et al reported all the patients with disseminated tuberculosis had CD4 count below 200/cumm in HIV reactive patients.

Chest radiology finding in our study showed that unilateral non-homogenous opacities (37.5%) most common finding followed by consolidation (25%). FB Demirkazık et al studies 57 immunocompromised patients with haematological malignancy reported consolidations most common finding with bacterial infection. Chest X ray shows 20 patients with unilateral involvement (7 upper lobe and 13 lower lobe), 3 with bilateral involvement (2 miliary TB). Of 7 patients with upper lobe opacity, 5 had CD4 count more than 200 cell per cumm. Out of 13 patients with lower lobe involvement 12 had CD4 count less than 200 cells per cumm. In study by Mahesha Padyana et al in 200 HIV patients found that Non homogenous opacities (Infiltration) (39%) followed by consolidation (30%), cavity (11%), and lymphadenopathy (9%) seen with CD4 less than 200 cells per cumm. Also reported that infiltration (37.5%) followed by cavity (25%) and miliary (25%) is more common in HIV reactive patients with CD4 above 200cells per cumm.

In this study, among the respiratory pathogens, Mycobacterium tuberculosis constituted the maximum number (40.50%) followed by other bacterial infections (30.38%) and fungi (17.72%). The high incidence of AFB in our study was unexpected but not surprising. Mycobacterium tuberculosis is endemic in India thus, is the commonest opportunistic infection in India.A study conducted in 2007 by Lazaro Veleza et al on 101 immunosuppressed patients at Colombia, reported that mycobacteria TB (26.7%) is most common cause of pulmonary infection followed by bacteria (18.8%) and Pneumocystis jirovecii (17.8%). Predominant aetiology varied according to immunosuppression.

In this study, sputum examination including staining and culture yielded diagnosis in 25 out of 61 patients with yield of 40.98%. Most of patients presented in advanced stage with extensive nature of disease that had resulted in good diagnostic yield from simple sputum examinations. In study by Rano et al,sputum analysis was performed in 96 patients but only 88 samples were accepted for microbial analysis, 27 of which (22 spontaneous, five induced) resulted in a positive culture (31%). When only the group of infectious aetiology was considered, this percentage increased to 46%. Induced sputum was performed in 57 patients out of which 11 patients (19.29%) yielded the final bacteriological diagnosis. Rosemeri Maurici Da Silva et al studied roles of induced sputum for the diagnosis of lung disease in HIV-positive patients shown that sputum induction presented 57.5% sensitivity, 42.9% specificity, 87.1% predictive positive value, 13% predictive negative value and 55.6% overall accuracy. Thus, induced sputum had less diagnostic yield in Non-HIV immunocompromised patients and also it is time consuming. Though in suspected patient of Pulmonary tuberculosis in HIV reactive patients it could have good diagnostic yield. The reason low sensitivity of induced sputum result may be paucibacillary nature of disease. Some studies have reported that sputum smears are frequently negative for AFB in patients with advanced HIV disease.

Bronchoscopy with BAL was performed in 35 patients, out of which 32 patients had yield of 91.42% final diagnosis. Diagnostic yield of Bronchoscopy with BAL was 100% for nosocomial causes of pneumonia in one prospective review of hospitalized renal transplant recipients.The overall yield of diagnostic FOB is variable, ranging from 30 to 73% in SOT recipients, with the highest yield for infection during the first 6 months after transplantation[9].In study by S Shawgi et al in haematological malignancy reported that BAL fluid examination and culture grew microbial isolates in 21 of 25patients (84%). Because of the importance of obtaining a diagnosis, BAL should always be performed especially when sputum and induced sputum is non-contributory for microbiological diagnosis. Although the diagnostic yield of surgical biopsy is high, associated mortality limits its use as a first-line diagnostic modality in transplant patients.

CONCLUSION

Pulmonary infections remain a vexing problem in the care of the immunosuppressed patient like HIV-AIDS, chemotherapy, transplant recipients and patients on immunosuppressive drug therapy. The differential diagnosis of pulmonary infections in this setting is broad. It is important to search for both infectious and non-infectious aetiologies. No one pattern of symptoms or radiographic findings conclusively points to a diagnostic possibility. Low CD4 count less than 300 cells per cumm suggests decreased immune status and higher chances of opportunistic infections and high mortality.Mycobacterium Tuberculosis is the commonest opportunistic infection in immunocompromised patients in the tertiary care hospital, Pune. HIV AIDS with advanced immunosuppression more often have extra-pulmonary and disseminated TB and also risk factor for development

of drug resistant tuberculosis. Atypical radiological presentations of pulmonary tuberculosis are more common as CD4 count goes below 200 cells per cumm. High index of suspicion kept for diagnosis of tuberculosis in such patients.Induced sputum had less diagnostic yield in immunocompromised patients and also it is time consuming.Early bronchoscopy with BAL remains crucial to establish the diagnosis in immunocompromised patients with pulmonary infection when the cause is infectious in nature. Overall Bronchoscopy is minimally invasive and safe procedure in experienced hands.Influenza A infection H1N1 type (swine Flu) had highest mortality in immunocompromised patients.

Limitations of the Study

1. The sample size was small and there was limited prospective follow up. Statistical analyses therefore have limited power.
2. Among infectious causes viral aetiology was not diagnosed except H1N1 swine flu infection due to unavailability of its diagnostic facility.
3. As there was no diagnostic facility for paediatric population less than 12 years and almost every patient was treated based upon empirical and clinical background. So paediatric population less than 12 years of age not included in the study.

REFERENCES

1. Rubin RH, Peterson PK. Overview of pneumonia in the compromised host. Semin Respir Infect 1986; 1:131–132.
2. Benito N, Moreno A, Miro JM et al. Pulmonary infection in HIV infected patients: an update in the 21 st century. European Respiratory Journal 2012; 39:730-745.
3. Andrew FS, Gregory MS, Naomi P. Pulmonary infiltrates in the non-HIV infected immunocompromised patient, etiologies, diagnostic strategies, and outcomes. Chest 2004; 125:260-271.
4. Yu Whan Oh, EL Effmann, JD Godwin. Pulmonary infections in immunocompromised hosts: the importance of correlating the conventional radiologic appearance with the clinical setting. Radiology 2000; 217:647–656.
5. Jitesh Ahuja, Jeffrey P. Kanne. Thoracic infections in immunocompromised patients. Radiology Clinics North America 2014; 52:121–136.
6. Hohenadel IA, Kiwarr M, Genitsariotis R et al. Role of bronchoalveolar lavage in immunocompromised patients with pneumonia treated with a broad spectrum antibiotic and antifungal regimen. Thorax 2001; 56:115–120.
7. Crocket JA, Chaput MR, Lien DC. Fibre optic bronchoscopy in the diagnosis of pulmonary disease in the immunocompromised host in northern Alberta. Can J Infect Dis 1995;6(6):286- 290.
8. Sampio M, Sampio J, Haguihara T et al. Clinical and laboratory Profile of HIV-positive patients at the moment of diagnosis in Bahia, Brazil. Brazilian JI infectious Diseases 2007;11:395-8.
9. Kothari K, Goyal S. Clinical presentation, spectrum of systemic involvement and opportunistic infections in AIDS patients. J Assoc Physicians India 2001;49:435-8.
10. Shreevidya K, Dias M. Pulmonary bacterial and fungal infections in human immunodeficiency virus patients: A study from India. Annals of Tropical Medicine & Public Health 2012; 5:80-84.
11. Prasad U, Nand V. A hospital based study on opportunistic pulmonary infections in human immunodeficiency virus (HIV) positive patient in relation to cd4 count and its therapeutic outcome. Natl J Med Res. 2014; 4(1): 44-47.
12. Patel AK, Thakrar SJ, Ghanchi FD. Clinical and laboratory profile of patients with TB/HIV coinfection: A case series of 50 patients. Lung India2011; 28 :93-6.
13. Kumarasamy N, Vallabhaneni S, Flanigan TP et al. Clinical profile of HIV in India. Indian J Med Res 2005;121:377-94.
14. Ajay Jaryal, Rajeev Raina, Malay Sarkar et al. Manifestations of tuberculosis in HIV/AIDS patients and its relationship with CD4 count. Lung India 2011; 28 (4):263-266.
15. Figen Başaran Demirkazık, Aylin Akın, omrum Uzun et al .CT findings in immunocompromised patients with pulmonary infections. Diagn Interv Radiol 2008;14:75-82.
16. Padyana, et al. HIV-tuberculosis: A study of chest X-ray patterns in relation to CD4 count. N Am J Med Sci 2012; 4(5):221–225.
17. NACO:Guidelines for prevention and management of opportunistic infections/malignancies amoog HIV-infected adults and adolescents. 2010.
18. Lazaro Velezad, LuzTeresita Corread, Maria Angelica Maya et al. Diagnostic accuracy of bronchoalveolar lavage samples in immunosuppressed patients with suspected pneumonia: Analysis of a protocol. Respiratory Medicine 2007;101:2160–2167.
19. A. Rano, C. Agusti, P. Jimenez et al. Pulmonary infiltrates in Non-HIV immunocompromised patients: a diagnostic approach using non-invasive and bronchoscopic procedures. Thorax 2001;56:379–387.
20. Rosemeri Maurici Da silva, Paulo Jose Zimermann Teixeira et al. Induced sputum for the diagnosis of lung disease in HIV -positive patients. Brazilian Journal of Pulmonology (J Bras Pneumol).2004;30(5): 452-8.
21. World Health Organization (2004) TB/HIV: a clinical manual, 2004.
22. Sharma SK, Mohan A, Kadhiravan T. HIV-TB co-infection: epidemiology, diagnosis & management. Indian J Med Res 2005:121(4): 550–67.
23. Hoyo I, Linares L, Cervera C et al. Epidemiology of pneumonia in kidney transplantation. Transplant Proc 2010;42:2938–2940.
24. Atasever A, Bacakoglu F, Uysal FE et al. Pulmonary complications in heart transplant recipients. Transplant Proc 2006;38:1530–1534.
25. Lemer R, Padilla ML, Teirstein AS et al. Pulmonary complications in cardiac transplantation. Chest 2001;120:508–513.
26. Starobin D, Fink G, Shitrit D et al. The role of fiberoptic bronchoscopy evaluating transplant recipients with suspected pulmonary infections: analysis of 168 cases in a multi-organ transplantation center. Transplant Proc 2003;35:659–660.
27. Lehto JT, Koskinene PK, Anttila VJ et al. Bronchoscopy in the diagnosis
28. and surveillance of respiratory infections in lung and heart-lung transplant recipients. Transpl Int 2005;18:562–571.
29. Kapeli E, Akcay S, Ulubay G, et al. Diagnostic utility of flexible bronchoscopy in recipients of solid organ transplants. Transplant Proc 2011;43:543–546.
30. S Shawgi, Lalit Kumar, V. Kochupillai et al. Evaluation of pulmonary infiltrates in patients with haematological malignancies using fibreoptic bronchoscopy and bronchoalveolar lavage. Indian journal of medical & paediatric oncology 2004; 25 (4): 10-21.

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STUDY OF CLINICAL PROFILE, RADIOLOGICAL PRESENTATION, AND PROGNOSTIC PREDICTORS OF COVID 19 POSITIVE PATIENTS IN A TERTIARY CARE HOSPITAL

Respiratory Medicine

Dr Sachin Gaikwad MBBS, DTCD, Pulmonologist, Sahyaadrie Multispecialty Hospitals, Osmanabad

Dr. Pravin B. Dumne* MBBS, DTCD, DNB- Respiratory Medicine, EDARM, Osmanabad. *Corresponding Author

Dr Diggajh Ramesh Dapke-Deshmukh MBBS, DCH, Senior Paediatrician, Sahyaadrie Multispecialty Hospitals, Osmanabad

ABSTRACT

BACKGROUND The first case of Covid-19 was identified in Wuhan city, China in December 2019. The symptoms of Covid-19 are variable that include fever, cough, fatigue, breathing problem, loss of smell and taste. The virus is spreading through human touch and small droplets and aerosols. The numbers of deaths due to the virus is increasing day by day and it causing various issues for the government and people to maintain the business and employment.

AIM To study clinical profile, radiological presentation, and prognostic predictors of COVID-19 positive patients in a Tertiary Care Hospital

METHODS It was a retrospective observational study conducted on 103 patients diagnosed with COVID-19. Clinical characteristics and outcomes of consecutive adult patients admitted to Sahyaadrie Multi-specialty hospitals, dedicated covid health care (DCHC), Osmanabad, (Maharashtra) from 1st October 2020 to 31 Dec 2020 were studied. The diagnosis of SARS-CoV-2 infection was confirmed by Rapid antigen test and real-time reverse transcriptase-polymerase chain reaction (RT-PCR) on the throat and/or nasopharyngeal swabs.

RESULTS There were 49 patients (47.6%) belonging to the rural area and 54 patients (52.4%) belonging to the urban area. The majority of the patients (n = 77) had an abnormal respiratory rate of more than 20 breaths per minute. Chest X-Ray showed that 26 patients (25.24%) had a normal chest x-ray and 77 patients (74.75%) had an abnormal chest x-ray. The average HRTCT score was 10.92 with 12 patients (11.7%) having upper HRCT level, 63 patients (61.2%) having middle HRCT level and 89 patients (86.4%) with lower HRCT level.

CONCLUSION Male patients over the age of 55 years are most prone to Covid-19. The virus is hurting the respiratory system of human and affecting the living condition as patients with cancer, diabetes and other critical illnesses are having a strong impact on the body and internal system.

KEYWORDS

Corona, Covid-19, clinical predictors, critical condition and fever and cough

INTRODUCTION

Coronavirus disease 2019 (Covid-19) is considered a contiguous disease caused by the Server Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). The first case of Covid-19 was identified in Wuhan city, China in December 2019. According to the analysis of the study of the virus, the symptoms are variable that include fever, cough, fatigue, breathing problem, loss of smell and taste. The virus is spreading through human touch and small droplets and aerosols. The virus may also spread via contaminated surface and transmit to the human. There are different types of testing methods used to diagnose the disease but there are many people found with no symptoms which make it difficult for the care workers to find the infected people in society. However, the governments of nations and leading health care organizations have found some preventive measures to protect the people from this disease and creating awareness among the people. The preventive measures are involving physical and social distancing and hand washing as well as the use of masks that minimize the risk of transmission. Although different drugs have been developed for the prevention of the people from the virus and offering the primary treatment but lack of awareness and follow-up of regulations is increasing the numbers of infected people worldwide.

The leading health organization WHO is working on the development of vaccines for the full treatment of the people and protecting the patients from the attack of virus. However, the numbers of deaths due to the virus is increasing day by day and it causing various issues for the government and people to maintain the business and employment. The clinical trials of vaccines are under process and many medical organizations have developed the drugs for minimizing the impact. SARS-CoV-2 is a novel severe acute respiratory and influencing the immune system of the human. Novel coronavirus disease (COVID-19) has wide parameters of clinical manifestations ranging from asymptomatic carriers of the disease to manifestations with respiratory failure requiring mechanical ventilation to ICU (intensive care unit) supports, multi-organ and systemic symptoms ranging from sepsis, septic shock and multiple organ dysfunction syndromes (MODS). The objective of this paper is to describe the clinical profiles, clinical symptoms, laboratory evaluation, and radiological characteristics of COVID-19 patients. The virus is having a more negative impact on the people who are having a disease like diabetes, cancer or other respiratory issues. The patients over the age of 60 were most affected by the virus and facing various complications. Radiographic abnormality was frequently associated irrespectively with clinical presentation and its severity. In addition to this, a poor prognosis was noted in elderly people.

AIM

To study clinical profile, radiological presentation, and prognostic predictors of COVID-19 positive patients in a Tertiary Care Hospital

METHODS

It was a retrospective observational study conducted on 103 patients diagnosed with COVID-19. Clinical characteristics and outcomes of consecutive adult patients admitted to Sahyaadrie Multi-specialty hospitals, dedicated covid health care (DCHC), Osmanabad, (Maharashtra) from 1st October 2020 to 31 Dec 2020 were studied. The diagnosis of SARS-CoV-2 infection was confirmed by Rapid antigen test and real-time reverse transcriptase-polymerase chain reaction (RT-PCR) on the throat and/or nasopharyngeal swabs. All patients were managed according to the State COVID Consensus protocol and following Indian Council of Medical Research guidelines.

Epidemiological, clinical, laboratory and radiological characteristics and treatment and outcomes data were obtained with data collection forms from electronic medical records and history given by patients. All data were reviewed by internal medicine specialists. The information recorded included demographic data, medical history, exposure history, underlying comorbidities, symptoms, signs, laboratory findings; chest computed tomographic (CT) scans, and treatment measures (Antiviral Therapy, Anti-retroviral Therapy, Anti-malarial Therapy, Respiratory Support).

RESULTS

The study included 103 patients with an average age of 51.26 years (SD = 14.34). Out of 103 patients, 35.9% (n = 37) were female and 64.1% (n = 66) were male. There were 49 patients (47.6%) belonging to the rural area and 54 patients (52.4%) belonging to the urban area.

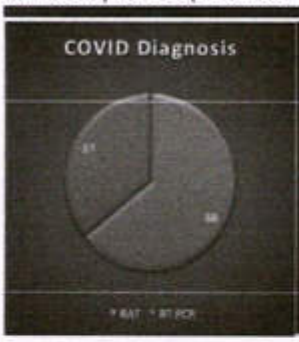

Figure 1: COVID Diagnosis

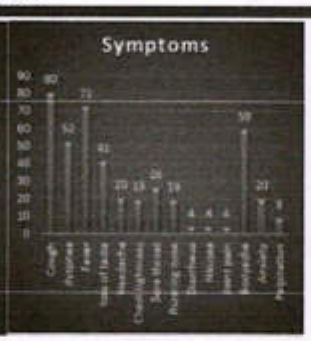

Figure 2: Symptoms

As per Figure 1, 66 out of 103 patients were tested through Rapid Antigen Tests (RAT) and 37 out of 103 patients were tested through RT-PCR (Reverse transcription-polymerase chain reaction). Further, Figure 2 shows that majority of the patients (n = 80) had cough, followed by fever (n = 72) and body ache (n = 59).

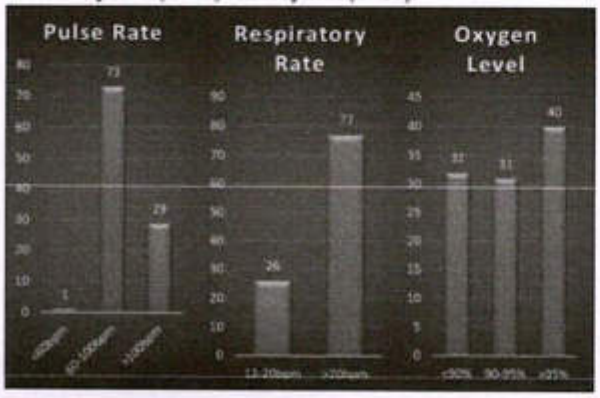

Figure 3: Pulse Rate

Figure 4: Respiratory Rate

Figure 5: Oxygen Level

As per Figure 3, the majority of the patients (n = 73) had normal pulse rate between 60-100 beats per minute. Further, Figure 4 shows that majority of the patients (n = 77) had an abnormal respiratory rate of more than 20 breaths per minute. Finally, Figure 5 represents that 32 patients had oxygen level of <90%, 31 patients had oxygen level between 90-95% and 40 patients had oxygen level of more than 95%.

Table 1: Distribution of Patients as per Comorbidities

Comorbidities	Number of Patients	Percentage (%)
Diabetes	23	22.3
Hypertension	20	19.4
IHD	5	4.9
COPD	3	2.9
Hypothyroidism	2	1.9
CA Oral	2	1.9
HIV	1	1
Asthma	1	1
Pregnancy	1	1
WPW	1	1

As per Table 1, highest number of patients (n = 23; 22.3%) had diabetes, followed by hypertension (n = 20; 19.4%) and IHD (n = 5; 4.9%). Further, 40 patients (38.8%) were in mild COVID staging, 27 patients (26.2%) were in moderate COVID staging and 36 patients (35.0%) were in severe COVID staging. Chest X-Ray showed that 26 patients (25.24%) had a normal chest x-ray and 77 patients (74.75%) had an abnormal chest x-ray. The average HRTCT score was 10.92 with 12 patients (11.7%) having upper HRCT level, 63 patients (61.2%) having middle HRCT level and 89 patients (86.4%) with lower HRCT level. CBC findings show that 1 patient was anaemic and 33 patients had lymphocytosis.

Table 2: Blood Investigation

Blood Investigation	Mean	Standard Deviation
CRP (mg/L)	43.314	30.1567
D Dimer (ng/mL)	883.82	1900.876
LDH (U/L)	342.92	226.651
Ferritin (µg/L)	247.51	199.846

The mean CRP for the patients was 43.31 mg/L (SD = 30.15), D Dimer was 883.82 ng/mL (SD = 1900.88), LDH was 342.92 U/L (SD = 226.65), and Ferritin was 247.51 µg/L (SD = 199.85).

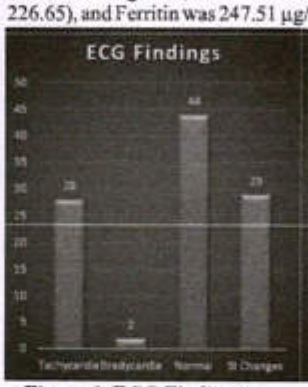

Figure 6: ECG Findings

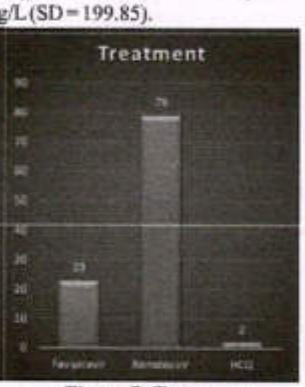

Figure 7: Treatment

As per Figure 6, 44 patients had normal ECG findings, 29 had St. changes and 28 had tachycardia. Further, Figure 7 shows that 79 patients were treated with Remdesivir, 23 with Favipiravir and remaining w with HCQ. Moreover, the average hospital stay of the patients was 9.11 days (SD = 5.24). Finally, 102 patients were discharged and 1 death was recorded.

DISCUSSION

There are different types of studies that have been conducted for analyzing the issues and developing drugs to protect people from the Covid-19 virus. As per the views of Bhandari et al., (2020) the most of the patient of Covid-19 were male (66.66%) and age 55 years and above. These patients are requiring oxygen support and more likely to have underlying comorbidities (75%) including either diabetes, hypertension, COPD and hypothyroid. In addition to this, the study has highlighted that the Covid-19 infected people were having a travelling history of foreign. The common symptoms of patients according to the study involve fever (75%) lung infection (68%) and (33.33%) were asymptomatic. According to a study by Saluja et al., (2020) Thrombocytopenia, Lymphocytosis, raised LDH was common (>35%, $p<0.05$). The patients were over the age of 60 years and ones having severe illness and more complications. Increased risk of cardiac involvement needs to be looked into. As per the study of Single et al., (2021) the 65.6% of the Covid-19 patients were male and the mean age was 37.4 years. The patients of covid-19 were having some disease before such as hypertension, cardiac, sugar and respiratory problems. The study shows a highly significant correlation with the patient with diabetes as more than 47% of the patients were facing issues of high sugar. In addition to this, 29% of patients were having respiratory issues. Apart from this, in the study of Asghar et al., (2020), the mean age of the most number of patients of Covid-19 was 53.58 with the most frequent symptoms are fever and dry cough. In addition to this, the most comorbidities are diabetes and hypertension. The bilateral lower zone patchy infiltrates are frequent chest pain radiography findings and admitted to ICU. The TLC count of patients ($P=0.001$), neutrophils and lymphocytes ($P=<0.001$) and monocytes ($P=0.027$). These are some major issues diagnose in the patients of Covid-19.

According to a study by Soni et al., (2020), SARS-CoV-2 is one of the most virulent pathogens causing severe respiratory illness along with the MERS and swine flu in human at the initial stage. The research has found that 81% of patients were found with respiratory distress and critical illness in five per cent with a case of fatality rate around 2.4%. The demographic and clinical pattern have been observed between countries and found that the profile of Covid-19 patients was all most same and numbers of male patients were higher than female. The study of patients is showing that 66% of patients were symptomatic and 33% were asymptomatic which were hard to find in society. In addition to this, 16.6% of patients were having a chronic disease and 14.9% were having diabetes. Similar findings were reported in studies across the world.

CONCLUSION

From the study, it can be considered that Radiological Presentation and Prognostic Predictors of Covid 19 Positive Patients in a Tertiary Care Hospital have highlighted the similar impact and the issues that influence the health of the patients. Most of the studies have highlighted the large numbers of male patients over the age of 55 years and above. The virus is hurting the respiratory system of human and

affecting the living condition as patients with cancer, diabetes and other critical illnesses are having a strong impact on the body and internal system. Therefore, consideration of protective measures and precautions defined by the government and leading health care organizations can help minimize the numbers of death across the world.

REFERENCES

1. Fauci, A.S., Lane, H.C. and Redfield, R.R., 2020. Covid-19—navigating the uncharted.
2. Cao, X., 2020. COVID-19: immunopathology and its implications for therapy. *Nature reviews immunology*, *20*(5), pp.269-270.
3. Le, T.T., Andreadakis, Z., Kumar, A., Román, R.G., Tollefsen, S., Saville, M. and Mayhew, S., 2020. The COVID-19 vaccine development landscape. *Nat Rev Drug Discov*, *19*(5), pp.305-306.
4. Beigel, J.H., Tomashek, K.M., Dodd, L.E., Mehta, A.K., Zingman, B.S., Kalil, A.C., Hohmann, E., Chu, H.Y., Luetkemeyer, A., Kline, S. and Lopez de Castilla, D., 2020. Remdesivir for the treatment of Covid-19. *New England Journal of Medicine*, *383*(19), pp.1813-1826.
5. Bhandari, S. Bhargava, A. Sharma, S. Keshwani, P. Sharma, R. and Banerjee, S. 2020. Clinical Profile of Covid-19 Infected Patients Admitted in a Tertiary Care Hospital in North India. Department of Medicine, SMS Medical College, Jaipur, Rajasthan
6. Saluja, M. Pillai, D. Jeliya, S. Bradath, N. and Chandel, R. 2020. Covid-19- Clinical profile, radiological presentation, prognostic predictors, complications and outcome: A perspective from the Indian subcontinent. Department of Medicine, SMS Medical College, Jaipur, Rajasthan, vol, 68.
7. Singla, N. Gowda, R Mohindra, R. Suri, V. Dhibar, P. D and Sharma, N. 2021. Clinical spectrum and outcome of patients visiting coronavirus screening centre in North India and clinical predictors for COVID-19. Vol. 10, Issue: 1, p. 454-461
8. Asghar M, Haider Kazmi S J, Khan N A, et al. (June 20, 2020) Clinical Profiles, Characteristics, and Outcomes of the First 100 Admitted COVID-19 Patients in Pakistan: A Single-Center Retrospective Study in a Tertiary Care Hospital of Karachi. Cureus 12(6): e8712. doi:10.7759/cureus.8712
9. Soni, L.S. Kajal, K. Yaddanapudi, N. L. and Mihotra, P. 2020. Demographic & clinical profile of patients with COVID-19 at a tertiary care hospital in north India.

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A CORRELATION OF CORONARY-HEART DISEASE, C-REACTIVE PROTEIN AND INFLUENCING FACTORS: A CASE-CONTROL STUDY IN KARNATAKA

Internal Medicine

Dr. Patil Saurabh Suhas* Assistant Professor, Dept Of Gen Medicine, Gmc Dharashiv*Corresponding Author

Dr. Jamadar Shubham Ramrao Assistant Professor, Dept Of Gen Medicine, Gmc Dharashiv

Dr. Dumne Pravin Balasaheb Assistant Professor, Dept Of Chest Medicine, Gmc Dharashiv.

ABSTRACT

Recent studies have redirected the assessment of Coronary-Heart-Disease (CHD) fromcoronaryangiographytowardsthecharacteristicsoftheath eroscleroticlesionandfactorsinfluencingitsvulnerabilityto rupture like inflammation. Amongst the markers for vascular inflammation C-Reactive Protein (CRP) hasbeen found to be the most credible. Our study was undertaken to assess the inflammatory and atherosclerotic burden in patients of CHD using serum CRP levels. Methods: The study was conducted on 30 patientsdiagnosed as having CHD with Coronary Angiography (CAG) along with 30 number of age & sex matchedcontrols admitted at SNMC and HSK Hospital, Bagalkot during 2020-2021. The patients were interviewed atadmission for history and physical examination. Relevant investigations were done, to establish diagnosis.Serum CRP was done and results were analyzed using appropriate statistical methods. Results: Estimation ofCRP reveals ≥7 mg/lit in 24 (80%) subjects out of 30, compared to 3 (10%) control subjects out of 30 which isstatistically significant (p value<0.0001) (OR=6.7). In subject group 22 (73%) were male and 8 (27%) werefemales out of 30. Out of 30 subjects, 11 (37%) were smokers, 15 (50%) were alcoholics, 6 (20%) were obese.Conclusion: CRP was significantly elevated in subjects of CHD and thus supported adequately the hypothesisof an activation of inflammatory cascade for coronary atheromatous plaque formation and causation of CHD.Elevated CRP levels represent inflammatory burden so it also acted as an independent risk factor especially inpatientswithmyocardialinfarction.

KEYWORDS

C-Reactive Protein (CRP); Coronary Angiography (CAG);Coronary-Heart-Disease (CHD).

INTRODUCTION

Coronary heart disease (CHD) is one of the leading causes of death and disease burden throughout the world. (1) In India the disease burden is rapidly shifting from communicable to non-communicable diseases. CHD poses a major health concernandare upcoming epidemic. It is apprehended that death toll will be mounted to 33.6millionby2030.Indiansubcontinentwillhavetobearmorethanhalfo ftheburdenofriskandeventuality of CHD in the coming days. (2,3) During the past decades much knowledge has been achievedregardingtheriskfactorsandpathophysiologyofCHDbutexact mechanismsunderlyingdevelopmentof CHD still remains to be fully evaluated. Multiple risk factors such as hypertension, diabetes mellitus (TypeIIDM), dyslipidemia, tobacco smoking, obesity and physical inactivity have been identified. However, despite identification of risk factors,abouthalfofalleventsofCHDreportedtooccurinapparentlyhealt hyindividualswhohaveafewornone of the traditional risk factors. Now attention has been increasingly turned to the roll of other factors such asinflammation,inthedevelopmentofatherosclerosisandCHD.(4,5)Co ronaryatherosclerotic plaque formationistheunderlyingpathologyrespo nsible for CHD whichis consideredas an inflammatory disease. Recent studies suggestedthattheatherosclerotic processischaracterizedbylow grade inflammation altering the endothelium ofcoronary arteries and is manifested with an increasedlevel of marker of inflammationsuch as CRP andother cytokines. CRP reduces the expression of nitricoxide(NO)synthetaseandprostacyclinsynthetaseandbindslowde nsityLipoprotein(LDL-C)andpromotes its uptake by macrophages, a key process inthegenesis ofatherosclerosis.Italsoregulates theexpression of adhesion molecule on endothelial cells.All these phenomena are associated with athermanousplaqueformation.

Theatheromatousplaquefissuringandrupturetheprimaryeventof AMI .(5)Plaquedisruptionexposestheunderlyingsubendothelialmatrixtofor medelementsofcirculatingbloodleading to activation of platelets, thrombin generationandclotformation.Thisprocessofblockageof coronary artery deprives the heart muscle of oxygenand nutrients subsequently AMI. (5) During the last 15years compelling experimental and clinical evidencehavedemonstratedthatbothsy stemicandlocalinflammationmightplayaprominentroleinthepathogen esisofatherosclerosisanditsclinicalconsequence.(6)Amongtheinflam matorybiomarkers,CRPisanimportantbiomarkerofinflammatory process which has been considered as acausal factor and predictor of CHD in many studies.CRP levels are stable over long periods and have nodiurnal variation and can be measured accurately. Hs-CRPhasbeenadvocatedasbiomarkerinCHDaccordingtoAHAguidelin es.Butduetounavailability of the test in most of the health carecentersandhighercostweintendtoevaluateassociationofCRPwithI HDwhichisreadilyavailableandeconomicaltestinmostofhealthcenters. (3) To assess the relation between CRP levelsand CHD with respective to the physical status,lifestyleandsocioeconomicfactors ;thiscomparativestudy was conducted in CHD patients with matchedcontrols.

MATERIALANDMETHODS

Itwasanobservational(Case-Control)studyconducted in medicine and cardiology department atSNMC and HSK hospital. The patients coming to themedicineandcardiologydepartmentduringtheperiod of 2020-21 were selected as study population.Total 60 study participants including 30 Cases and30Controlswereselectedafterper formingmatching.Studysubjectirrespective of ageand sexdiagnosedas CHD by CAG were categorized as cases. Whereas,those who underwent CAG with no evidence of CHDmatched with age, gender and socio-economic wereselected as controls. Study population with conditionsfalselyaffectingtheCRPlevelswereexcludedbeforehand.Als o,patientshavingrheumatoidarthritis,dyslipidemia,asthma,acuteinfect ions,comorbiddiseasesandmalignancywereexcludedfrom thestudy.

After obtaining approval andclearancefromtheinstitutional ethics committee, the patients fulfillingthe inclusion criteria was enrolled for the studyafterobtaininginformedconsent.Aquestionnairewasusedtoco llectimportantdataincludingage,wayoflife style, habits, history of previous illness as historyof diabetes, hypertension,familialhyperchol esterolemiaoranyinflammatoryconditions,socioeconomicstatus,andfa mily history.

In the investigations venous blood sample ofeverystudyparticipantwas collectedonthedayofadmission for analysis of CRP. Total of 5 ml venousbloodsamplewascollectedfromantecubitalveinunder all aseptic precautions in plain bulb. Itthenallowedtoclotandthencentrifugedfors erumseparation. Serum was used for the analysis of CRP.Thetestswe redoneonsamedayafterserumseparation. Level greater than or equal to 7 mg/lit wasconsideredsignificant.RoutineInvestigationsincluding CBC, ESR, Blood Urea, SerumcreatinineUrineroutineandmicroscopy andSpecialInvestigationslikeCardiacenzymes,Angiograph,ECG,Ech owere performed tosupportthediagnosis.

AssociationbetweenCoronaryHeartDiseaseandCRPwasdeterminedusingChi-squaretest.Meanlevels of CRP instudy populationwas determinedusing student t-test. Association between the numberofvesselsandCRPlevelswasanalyzedusinganalysisof variance(ANOVA)test.

RESULTS

Thecurrentstudywasconductedon30patientsdiagnosed as having CHD with CAG along with 30number of age & sex matched controls admitted atSNMCandHSKHospital,Bagalkotduring2020-2021. The patients were interviewed at admissionforhistoryandphysicalexamination.Relevantinvestigationsweredone,toestablishdiagnosis.Serum CRP was then done. Coronary Angiographywasdoneassoonas possible.Theresultswereanalyzedusing appropriate statistical methods.Thecollected data as per the actual parameters have beenstatistically analyzed and presented in tabular form.For interpreting and explaining the results,supportiveliteraturean dphotographshavebeenaddedintheresultswhereverrequired.Table1 representsthegenderandagewisedistributionofthecasesandcontrols. The case group comprised of 23 (76.66%)males and 7 (23.33%) females. The control group had16 (53.33%) males and 14 (46.66%) females. WhenChisquaretestwasappliedtostudythedependence of gender on occurrence of coronary disease,itwasfoundthatthechanceofoccurr enceofcoronarydiseaseisindependentof gender.

Table1:Gender&Age wise distributionof controlsand cases

Group	ControlN(%)	CaseN(%)	pvalue
Male	16(53.33)	23(76.66)	<0.107
Female	14(46.66)	7 (23.33)	
Total	30 (100)	30 (100)	
Ageinyears			
31-40	6(20)	7 (23.33)	<0.07
41-50	8 (26.66)	1 (3.33)	
51-60	9(30)	15 (50)	
60>	7 (23.33)	7 (23.33)	
Total	30 (100)	30 (100)	

Note:thefrequencyandpercentagesarecalculatedcolumnwise.

Out of 30 subjects in control group 6 (20%) subjectswere in the age group of 31-40 years, 8 (26.66%)subjects in the age group of 41-50 years, 9 (30%) intheagegroupof51-60and7(23.33)patientswerein 60andabovegroup.Amongthecasegroup7(23.33%)subjects wereintheage groupof31-40years, 1 (3.33%) subject in the age group of 41-50years,15(50%)intheagegroupof51-60and7subjects were in 60 and above group. No significantdifference was observed between cases and controlswithrespecttothedistributionaccordingtoagegroup.

The CRP levels were assessed through bold samplesand results were compared among cases and controls.TheTable2showsthecom parisonCRPlevelsamong the casesandcontrols.

Table2: Comparison of CRPLevelinStudy Subjects CRP

CRP	ControlN(%)	CasesN(%)
≥7mg/L	3(10)	24 (80)
<7 mg/L	27(90)	6(20)
Total	30 (100)	30 (100)

Note:thefrequencyandpercentagesarecalculatedcolumnwise.Inourstudy,outof30casesCRPlevelswereelevated>7mg/Lin24caseswhereas,ou tof30controls CRP levels were elevated in only 3 patients.In this study the Mean ± SD value of CRP in controlgroupwas4.61±2.1 2andincasegroupitwas25.03 ± 22.08. It was observed, that the Mean ± SD valuesofCRPwerestatisticallysignificantly($p<0.001$)higher incase group.

Table3:ComparisonofdifferenttypesofHabitsin Cases

Habits	AffectedCasesN (%)	pvalue
Alcoholic(A)	1 (3.33)	<0.107
Smoker(S)	1 (3.33)	
Tobacco(T)	3(10)	
Alcoholic+Smoker (A+S)	10(33.33)	
Alcoholic+Tobacco (A+T)	4 (13.33)	
Nil	11(36.66)	
Total	30 (100)	

Note:thefrequencyandpercentagesarecalculatedcolumnwise.

Outof30cases15(50%)werealcoholic,11 (36.66%) were smokers and 7 (23.33%) were tobaccochewers. When Chi square test was applied to studythedependenceofsmoking,alcoholicandtobaccochewing habits with chance of occurrence ofcoronarydisease,itwasfo undthatthechanceofoccurrenceofcoronarydiseaseisindependentofhab its.Inthe present study the Body Mass Index (BMI) was alsocompared for both cases and controls. Table 4 showsthe categorization of the participants with respect totheBMI.

Table4: ComparisonofdifferenttypesofBMI

BMI	Control N(%)	Cases N(%)	p value
Underweight	0	0	<0.006
Normal(18.50-24.99)	15 (50)	9(30)	
Pre-Obese(25.00-29.99)	15 (50)	15 (50)	
ObeseClass1 (30.00-34.99)	0	3(10)	
ObeseClass2 (35.00-39.99)	0	3(10)	
ObeseClass3(>40)	0	0	
Total	30	30	

Note:thefrequencyandpercentagesarecalculatedcolumnwise.

DISCUSSION

Coronaryheartdisease(CHD)isamultifactorialdisease.V ariousriskfact orssuchasage,gender,familyhistoryofheartdisease,smokinghabit,alco hol intake, Type 2 DM, sedentary habit,obesity,andhighbloodpressure playamajorroleinthepathogenesisofCHD.(7)However,despiteidentifi cationofmodifiableriskfactors,CHDremains the leading cause of death worldwide. Up tohalf of all events associated with CHD are reported tooccur in apparently healthy individuals who have fewor none of the traditional risk factors. As a result,attention has increasingly turned to the roll of otherfactors,suchasinflammation,inthedevelopmencoronar diseaseisindependentofhabits.Inthe present study the Body Mass Index (BMI) was alsocompared for both cases and controls. Table 4 showsthe categorization of the participants with respect totheBMI. atherosclerosisandCHD. (4,5)

Atherosclerosisisacomplexmultifactorialpathophysiology.Recentlyth erehasbeenawideacceptanceoftheroleofinflammationinthepathogenes is of atherosclerosis and destabilization ofcoronary artery plaque though the first description ofthe role of inflammation in coronary artery sclerosis200 years back. Russell Ross who described first thatatherosclerosisisaninflammatorydisease.(8,9)Inflammation in the vessel wall plays an essentialpartintheinitiation,progression, atheromatousplaqueformation,destabilizationandrupture.Atheromato usmaterial obtained at autopsy have demonstratedthepresenceo finflammmatorymononuclearcellsmonocytes macrophagesand T lymphocytesinthearterialwall.Endothelialdysfunctionandinjurytrigge racascadeofeventsthatmodulatestheinflammatory response leading to the recruitments ofwhite blood cell into the vessel wall formation, offoamcellandinitiatethedevelopmentofatherosclerotic lesion.(10)

In view of the importance of role of inflammatoryprocess in the plaque formation anddestabilizationrecentinteresthasbeenfocusedonwhet herbiomarker of inflammation may help to improve riskstratification and identification of patientswhomaybebenefittedfromparticulartreat mentstrategies.Amongtheinflammatorybiomarkers(CRP),aprototype marker of inflammatory process has drawnmuch attention both as a causal factor and in the pre-conditionofCHD.(6)Multipleprospecti vecohortstudies revealed increased CRP level with wide agerange, in both genders with increased CHD risksinprimaryaswellassecondarypr eventionsetting.Thesefindingshavebeenprevalentindifferentpopulatio nswithdiverseethnicbackgroundandindiverse clinical settings. They also predicted the riskof a variety of cardiovascular outcome such as acutemyocardialinfarction(AMI),suddencardiacdeathand peripheral arterial disease. CRP levels havealsobeenshowntopredictriskofrecurre ntischemia,acutecoronarysyndrome,deathandpercutaneousangioplast yamongthosewithstableandunstableangina. The role of inflammation in unstableanginaandMIisevaluatedbythehistologicalstudi esofatheromatousplaque.(5,6)Inourstudyestimationof CRPreveals≥7 mg/litin24 (80%) subjects out of 30, compared to 3 (10%)controls out of 30 with p-value <0.0001. Sarkar NCet al (11) found that estimation of CRP revealed ≥0.6mg/dl in 88 (58.7%) subjects out of 150, compared to26 (17.3%) control subjects out of 150. Syed Tanveeretal(12)studyfoundthatpatientswithSTEMIdetectedhigherCR Pvalues(≥0.5mg/dl)inolderpatients than young, study by Guruprasad

et al (13) hadhigher CRP in old age (1.8 ± 24mg/l) when comparedto young patient of (1.5 ± 1.1mg/l), Ramon Arroyo-Espliguero et al (14) study also support thiswheretheyconcludedthatCRPconcen trationsraisewith increasingage.

In our study CRP increased with age, where meanCRP was highest amongthose aged more than 50years (meanCRP 26.07±25.17mg/l) andlowestaged less than 40 years (mean CRP 22.08 ± 19.07mg/l) which is concordant with other studies. StudiesbySharadGuptaet al(15), McConnellJP etal(16),have shown that the levels of CRP are usually higherin womenthanmen.Inourstudy, women(meanCRP30.43 ± 21.06 mg/l) were found to have higher CRPlevels as compared to men (mean CRP 23.06 ± 22.59mg/l)whichisconcordantwith otherstudies.

Study conducted by L.K. Heilbronn et al (17) wherethey studied Energy Restriction and Weight Loss onVery-Low-ReactiveProteinConcentrationsinObeseHealthyWomen,and found CRP was reduced by 26% after moderateweight loss, study by McLaughlinT et al (18) showedCRPincreasedwithincreasing BMI.

In our study CRP was found to be higher in obeseindividual than normal BMI, which is inconcordantwithotherstudies. StudybyGuruprasadetal(13)(TVDmeanCRP:1.9± 2.4mg/l,SVDmeanCRP:1.4 ± 1.5mg/l) in which higher values of CRP were seenin TVD than SVD and normal coronaries, suggestinghigher CRP level with increase in number of vessels,also similar results were observed with SharadGuptaetal(15),MohammadAssadpour Piranfar(19)&NyandakTetal(20)

In our study we did not find significantcorrelationbetweentheextentof CADandCRPlevels[TVD:32.03±27.11mg/l,DVD:18.68±18.75mg/l, SVD:25.8 ± 19.56 mg/l]. Sarkar NC et al (11)foundthatfamilyhistoryo fCHDwasnotsignificantlyassociatedwithhighervaluesofCRP(pvalue= 0.734).

CONCLUSIONS

The current study found that CRP was significantlyelevatedinsubjectsofCHDandthussupportedadequatelyth ehypothesisofanactivationofinflammatorycascadeforcoronaryathero matousplaqueformationandcausationofCHD.ElevatedCRP levels represent inflammatory burdensoitalsoactedasanindependentriskfacto respeciallyinpatients with myocardial infaretion. CRP is a betterpredictorofcardiovascularevents(heartattacks,strokes,bypasssur gery,orangioplasty)thanothermarkerssuchasLDLcholesterol.CRPcan beincludedasoneoftheriskfactorsforCHDassessment. CRP can be used as screening in high-risk individual for CHD assessment, which helps inprimaryprevention.Itisusefultocarryoutthissimple and inexpensive test routinely in allpatientswithacutemyocardialinfarcstratifi cation and management of patientswith CHD. CRP is even increased in heart failure.Higherlevels are associatedwithfeatures ofmoresevere heart failure and are independently associatedwith mortality andmorbidity.

REFERENCES:

[1] Mozaffarian D, Benjamin EJ, Go AS, Arnett DK, BlahaMJ, Cushman M et al. Executive summary: heartdiseaseandstrokestatistics—2015update:areportfromthe AmericanHeartAssociation.Circulation.2015Jan27;131(4):434-41.

[2] Reddy KS. India waves up to threat of cardiovasculardisease.J AmCollCardiol2007;50:1370-72.

[3] GuptaR,JoshiP,MohanVReddyKS,YusufS.Epidemiologicalandcausationofcoronary heartdiseaseand strokeinIndia.Heart 2008;94:16-26.

[4] Kannel WB, Dawber TR, Kagan A. Factors of risk inthe development of coronary heart disease-Six-year follow-up experience, The Framingham Study.Ann Intern Med1961;55: 33-50.

[5] PearsonTA, MensahGA,Alexander RW,AndersonJL, Cannon RO III, Criqui M, et al. Centres for DiseasecontrolandPrevention;AmericanHeartAssociation.Circulation 2003;107:499-511.

[6] DaneshJ,WheelerJG,HirschfieldGM,EdaS,Eiriksdottir G, Rumley A, et al. C-reactive protein andotbercirculatingmarkersofinflammationinthepredic tionofcoronaryheartdisease.N EnglJMed2004;350:1387-97

[7] Kasper,D.,Fauci,A.,Hauser,S.,Longo,D.,Jameson,J. and Loscalzo, J.(2015). Harrison's principles of internalmedicine.UnitedStates:McGraw-HillCompanies,Inc.,p.1579

[8] Kushner I, Broder ML, Karp D. Control of the acutephase response. Serum Creactive protein kinetics after acutemyocardialinfarction.JClin Invest 1978;61:235-242.

[9] TerpyJM,BurkeAE,GlassRM.Coronaryheartdiseaseriskfactors. JAMA2009;302:2388.

[10] ClearfieldMB.C-reactivepeotein:anewriskassessment tool for cardiovascular disease. J Am OsteopathAssoc2005;105:409-16.

[11] Sarkar NC, Sarkar P, Das S. Association of CoronaryHeart Disease and CRP-asa Noble Marker of Inflammation-A Case Control Study. The Journal of the Association ofPhysiciansofIndia.2019Oct1;67(10):54-6.

[12] Syed Tanver et al: clinical and angiographiccorelationofhighsensitivitycreactiveprotein withacuteSTelevationmyocardialinfarction;experimentalandtherapeuticmedicine12:40 89-4098,201

[13] S.Guruprasad,D,Rajasekhar,G.Subramanyam,P.V. L. N. Srinivasa Rao, V. Vanajakshamma, K Latheef; Highsensitivityc-reactiveproteinlevelsacrossap ectrumandseverityofcoronaryarterydisease;JClinSciRes2012;3:126-30

[14] Ramon Arroyo-Espliguero, Pablo avanzas, juancosin-sales, Guillermo aldama, carmine pizza, juancarloskaski; C-reactive protein elevation and disease activity in patientswithcoronaryarterydisease;Europeanheartjournal(2004)25,401-408

[15] Sharad Gupta et al; Relationship of high-sensitive C -reactiveproteinwithcardiov ascularris kfactors,clinicalpresentation and angiographic profile in patients with acutecoronarysyndrome:AnIndianperspective;Indianheartjourn l65(2013)357c367

[16] JosephP.McConnell,EarlL.Branum,KarlaV.Ballman,SusanA.Lagerstedt,JerryA.Katz mannandAllan S.Jaffe;ClinChemLab Med 2002; 40(1):56–59

[17] L.K.Heilbronn,M.Noakes,P.M.Clifton;EnergyRestrictionandWeightLossonVery-Low-FatDietsReduceC-ReactiveProteinConcentrationsinObese,HealthyWomen; ArteriosclerThrombVascBiol.2001;21:968-970

[18] TraceyMcLaughlinetal;DifferentiationBetweenObesityandInsulinResistanceinthe AssociationWithC-ReactiveProtein;Circulation.2002;106:2908-2912

[19] MohammadAssadpourPiranfar;TheCorrelationbetweenHigh-Sensitivity CReactiveProtein(hsCRP)Serum Levels and Severity of Coronary Atherosclerosis; IntCardiovascRes J.2014;8(1):6-8.icrj.

[20] Tenzin Nyandak et al, high sensitive c-reactive proteinand its correlation with angiographic severity of coronarydisease;JIACM;8(3):21

Annexure – A – course faculty

Sr. No.	Particular	-	Information to be filled
01.	Name of Faculty/Teacher	:	Dr. Rajshekhar Mengule
02.	Date of Birth	:	14/05/1989
03.	Address	:	Staff Quarters , GMC ,Dharashiv.
04.	Tel. No./ Mob. No.	:	7066965553
05.	e-mail id	:	rmengule@gmail.com
06.	Nationality	:	Indian
07.	Qualificat in details : (attach on documentary proof)	:	MD- Medicine
08.	Teaching Medical: Profession experience/ experience /Consultant/Mentor (attached document proof with signature of Head)	:	Assistant Professor – 02 Years
09.	Present Appointment	:	Assistant Professor, GMC Dharashiv.
10.	Publications (List & Proof)	:	--
11.	Post Graduate Teaching experience (Attach documentary evidence)	:	02 Years
12.	Any other relevant information	:	--

Note:

1. ***Unit wise teaching / Resident staff should be shown separately for each Unit in the Proforma.***
2. ***Use only the Format provided. DO NOT devise your own format otherwise the information will notbe considered. Fill up all columns***
3. Publications: Give only full articles in indexed Journals published during the period of promotion and list them here only . No Annexure will be seen.
4. In case of DNB qualification name of the institution/hospital from where DNB training was done and year of passing must be provided. Simply saying National Board of Examinations, New Delhi is not enough. Without thesedetails DNB qualification holder will be summarily rejected.
5. Experience of Defense services must be supported by certificate from competent authority of the office ofDGAFM without which it will not be considered.

Date :- 22/10/26

Sign. of Teaching Staff

Countersigned & Stamp by Head of Institute

I have verified the eligibility of all faculty members for the post they are holding (**based on experience certificates issued by competent authority of the place of working**). Their experience details in different Designations and unitwise distribution is given the faculty table above.

Date :- 22 /10/26

Sign. of Head of Institute

Dean,
Government Medical College
Dharashiv

Annexure - B

Professional/Teaching Experience Certificate for Fellowship/CertificateCourses

~~Director~~ course faculty,

Title of the Course applied for :-

This is to Certify that **Dr. Rajshekhar Mengule** has worked in the Department of General Medicine, Government Medical college, Dharashiv College / Institutes as per following
details.

A) General Experience:-

Designation	From	To	Total period Year / Month	
Assistant professor	25/10/2024	Till Date	02 Years	
Associate professor				
Professor				
Professor & Head				

B) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor:-

Designation	From	To	Total period Year / Month	
Assistant professor	25/10/2024	Till Date	02 Years	

(It is mandatory to attach self-attested Photocopy of the Experience Certificate of each Mentorin the Subject of concerned Fellowship/Certificate Course)

C) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor: -

No. of Publications	National / International
---	---

Sign& Stamp
Head of the Department
Date22/10/26
Professor & Head of Department
Department of General Medicine
GMC Dharashiv

Sign & Stamp
Dean/Principal/Head of Institute
Date22/10/26
Dean,
Government Medical College
Dharashiv

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) ४१३ ५०१
e-mail: deangmcosmanabad@gmail.com

जा.क्र. शावैमधा/आस्था-२/ 3862 /२०२४ दि:-28 /१०/२०२४

कार्यालयीन आदेश :-

विषय :-१) नियमित उमेदवार रुजु होण्यास आल्यामुळे डॉ. स्वराज फुलचंद शेळके हयांची सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र पदावरील शासन सेवा समाप्त करणे बाबत.
२) डॉ. राजशेखर लक्ष्मणराव मेनगुले, सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र पदावर महाराष्ट्र लोकसेवा आयोगामार्फत निवड झाल्यामुळे रुजु होण्यास परवानगी देणे बाबत.

संदर्भ:- १) महाराष्ट्र शासन, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई शासन आदेश क्र. एलईसी-१४२४/प्र.क्र.२२७/वैसेवा-३ दि.२६ सप्टेंबर, २०२४.
२) डॉ. राजशेखर लक्ष्मणराव मेनगुले, एम. डी, औषधवैद्यकशास्त्र यांचा अर्ज दि. २५.१०.२०२४.
३) या कार्यालयाचे आदेश क्र. शावैमधा/आस्था-२/३५४७-५५/२०२४ दि. ०१.१०.२०२४.

वरील विषयाच्या अनुषंगाने कळविण्यात येत आहे की, संदर्भ क्र. १ अन्वये डॉ. राजशेखर लक्ष्मणराव मेनगुले हयांची महाराष्ट्र वैद्यकीय शिक्षण व संशोधन सेवा, गट-ब मधील सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र या पदावर शासकीय वैद्यकीय महाविद्यालय, धाराशिव येथे प्रवर्ग- अ.ज सर्वसाधारण मध्ये वेतनश्रेणी रु. ५७७००-१८२४०० (लेव्हल १०) या वेतनश्रेणीत नियुक्ती व पदस्थापना संदर्भ क्र.१ अन्वये करण्यात आलेली आहे. त्यानुसार संदर्भ क्र.२ अन्वये डॉ. मेनगुले हयांनी सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र या पदावर आज दि. २५.१०.२०२४ रोजी म.पु. रुजु करुन घेण्याबाबत विनंती अर्ज या कार्यालयास सादर केलेला आहे.

संदर्भ क्र.३ अन्वये तत्पुर्वी या संस्थेत सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र पदावर वि.नि.मं. मार्फत डॉ. स्वराज फुलचंद शेळके हयांना ३६४ दिवसाकरिता तात्पुरती नियुक्ती देण्यात आलेली होती. सदरील सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र या पदावर महाराष्ट्र लोकसेवा आयोगामार्फत नियमीत उमेदवार रुजु होण्यास आल्यामुळे डॉ. शेळके हयांची सदर सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र पदावरील शासनसेवा दि.२५.१०.२०२४ रोजी म.पु. समाप्त करण्यात येत आहे. सदरील रिक्त झालेल्या पदावर डॉ. राजशेखर लक्ष्मणराव मेनगुले हयांना सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र या पदावर प्रस्तुत आदेशान्वये दि. २५.१०.२०२४ रोजी म.पु. रुजु होण्यास परवानगी देण्यात येत आहे. डॉ. मेनगुले हयांनी विभागात रुजु होऊन अनुपालन अहवाल विभागप्रमुखामार्फत या कार्यालयास सादर करावा.

(डॉ. शिल्पा व. दोमकुंडवार,)
अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय, धाराशिव.

प्रति,
१) डॉ. स्वराज फुलचंद शेळके (विनिमं), सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र, शा.वै.म.धाराशिव
२) डॉ. राजशेखर लक्ष्मणराव मेनगुले, सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र ,शा.वै.म.धाराशिव.

प्रत विभागप्रमुख , औषधवैद्यकशास्त्र, शा.वै.म.धाराशिव.
प्रत प्रभारी लिपीक, लेखा-२, शा.वै.म.धाराशिव.
प्रत जिल्हा कोषागार अधिकारी, जिल्हा कोषागार कार्यालय, धाराशिव.
प्रत रोखपाल, शा.वै.म.धाराशिव.
प्रत मा. आयुक्त, वैद्यकीय शिक्षण व आयुष, संचालनालय, मुंबई.
प्रत मा.सचिव, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई.
प्रत मा. महालेखाकार, महाराष्ट्र राज्य-२, (ले व ह), नागपुर.

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-19 इमारत, जिल्हा रुग्णालय आवार, धाराशिव
(महाराष्ट्र) 413 501
e-mail: deangmcosmanabad@gmail.com



जा.क. शावैमधा/आस्था-2/ 2898 /2026 दि. 08/09/2026

EXPERIENCE CERTIFICATE

This is to certify that Dr. Rajshekhar Laxmanrao Mengule, is working as Assistant Professor in General Medicine dept. at this College. His total experience is as follows –

Sr. No	Post held	Name of College	Department	Nature of Appointment	Period	
					From	To
01	Assistant Professor	G.M.C Dharashiv	General Medicine	Permanent	25/10/2024	Till Date

His conduct is good & work in our organization is satisfactory.

(Dr. Shailendra D. Chauhan,)
DEAN,
Government Medical College,
Dharashiv

To,
Dr. Rajshekhar Laxmanrao Mengule,
Assistant Professor, Dept., of General Medicine,
Government Medical College, Dharashiv

20BA0007713

MAHARASHTRA UNIVERSITY OF HEALTH SCIENCES, NASHIK

महाराष्ट्र आरोग्य विज्ञान विद्यापीठ, नाशिक

We,
the Chancellor, Pro-Chancellor,
Vice-Chancellor
and
Members of the Management Council,
Academic Council
confer the Degree of

Bachelor of Medicine & Bachelor of Surgery

on

Mengule Rajshekhar Laxmanrao
(PRN0108113441)

of

Lokmanya Tilak Municipal Medical College, Sion, Mumbai

for the examination held in Summer-2012
at the Convocation
held on 04th October,2013



VICE-CHANCELLOR
कुलगुरू

आम्ही,
कुलपती, प्र.कुलपती,
कुलगुरु
आणि
व्यवस्थापन परिषद व
विद्यापरिषदेचे सदस्य
वैद्यक आणि शल्यचिकित्सा स्नातक

ही पदवी उन्हाळी-२०१२ मधील परीक्षेत उत्तीर्ण
झाल्याबद्दल

शीव, मुंबई येथील लोकमान्य टिळक महानगरपालिका
वैद्यकीय महाविद्यालया चे/च्या

मेनगुले राजशेखार लक्ष्मणराव

यांना
०४ ऑक्टोबर, २०१३ च्या
दीक्षांत समारंभात प्रदान करीत आहोत

0057325





KERALA UNIVERSITY OF HEALTH SCIENCES

THRISSUR, KERALA 680596

Faculty Of Medicine

The Governing Council,

Kerala University Of Health Sciences,

Hereby Makes It Known That

MENGULE RAJSHEKHAR LAXAMANRAO

Has Been Admitted To The Degree Of

DOCTOR OF MEDICINE IN GENERAL MEDICINE

She / He Having Been Certified By Duly Appointed

Examiners To Have Qualified To Receive The Same At

The Examination Held In April 2018

WITH SECOND CLASS

GIVEN UNDER THE SEAL OF THE UNIVERSITY

REG.NO: 152060052

DATE: 03-12-2018

VICE CHANCELLOR

Annexure – A

Course Faculty

Sr. No.	Particular	-	Information to be filled
01.	Name of Faculty/Teacher	:	Dr. Saurabh Patil
02.	Date of Birth	:	11/05/1993
03.	Address	:	S/O Sanjay Patil Barshi Naka, Tambari Vibhag, Dharashiv.
04.	Tel. No./ Mob. No.	:	8551909999
05.	e-mail id	:	saurabhmaratha@gmail.com
06.	Nationality	:	Indian
07.	Qualificat in details : (attach on documentary proof)	:	MBBS MD - Medicine
08.	Teaching Medical: Profession experience/ experience /Consultant/Mentor (attached document proof with signature of Head)	:	Assistant Professor – 04 Years 01 Month
09.	Present Appointment	:	Assistant Professor , GMC Dharashiv.
10.	Publications (List & Proof)	:	03
11.	Post Graduate Teaching experience (Attach documentary evidence)	:	Assistant Professor – 04 Years 01 Month
12.	Any other relevant information	:	--

Note:

1. ***Unit wise teaching / Resident staff should be shown separately for each Unit in the Proforma.***
2. ***Use only the Format provided. DO NOT devise your own format otherwise the information will notbe considered. Fill up all columns***
3. Publications: Give only full articles in indexed Journals published during the period of promotion and list them here only . No Annexure will be seen.
4. In case of DNB qualification name of the institution/hospital from where DNB training was done and year of passing must be provided. Simply saying National Board of Examinations, New Delhi is not enough. Without thesedetails DNB qualification holder will be summarily rejected.
5. Experience of Defense services must be supported by certificate from competent authority of the office ofDGAFM without which it will not be considered.

Date :- 26 **/10/26**

Sign. of Teaching Staff

Countersigned & Stamp by Head of Institute

I have verified the eligibility of all faculty members for the post they are holding (**based on experience certificates issued by competent authority of the place of working**). Their experience details in different Designations and unitwise distribution is given the faculty table above.

Date :- 26 **/10/26**

Sign. of Head of Institute

Dean,
Government Medical College
Dharashiv

Annexure - B

Professional/Teaching Experience Certificate for Fellowship/CertificateCourses – faculty.

Title of the Course applied for :- Fellowship in Critical Care

This is to Certify that **Dr. Saurabh Patil** has worked in the Department of General Medicine, Government Medical college, Dharashiv College / Institutes as per following
details.

A) General Experience:-

Designation	From	To	Total period Year / Month	
Assistant professor	19/09/2023	Till Date	03 Years	01 Month
Associate professor	NA	NA	NA	NA
Professor	NA	NA	NA	NA
Professor & Head	NA	NA	NA	NA

B) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor:-

Designation	From	To	Total period Year / Month	
Assistant professor	19/09/2023	Till Date	03 Years	01 Month
NP	—	—	—	—

(It is mandatory to attach self-attested Photocopy of the Experience Certificate of each Mentorin the Subject of concerned Fellowship/Certificate Course)

C) Actual Experience in the Subject of concerned Fellowship/Certificate Course appliedfor: -

No. of Publications	National / International
03	National

Sign& Stamp
Head of the Department
Date: 11/10/26

Sign & Stamp
Dean/Principal/Head of Institute
Date: 11/10/26

Dean
Government Medical College
Dharashiv

महाराष्ट्र शासन

शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद

GOVERNMENT MEDICAL COLLEGE, OSMANABAD

कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, उस्मानाबाद. (महाराष्ट्र)

४१३ ५०१

e-mail: deangmcosmanabad@gmail.com

जा.क्र. शावैमउ/आस्था-१/२/ ४३५-४३८ /२०२३ दि. १५/०९/२०२३

कार्यालयीन आदेश :-

विषय :- सहाय्यक प्राध्यापक,पदावर १२० दिवसांकरिता तात्पुरती नियुक्ती देणे बाबत.

संदर्भ :- १) महाराष्ट्र शासन, वै. शि. व औ. द्र.वि., मंत्रालय, मुंबई शा.नि.क्र. पदनि-२०२१/प्र.क्र. ४५/२०२१/डीसेवा-२ दि. २७.५.२०२१.

२) शा.नि.क्र. डीएसवी-१२०१/ प्र.क्र.२७६ /०१/वैसेवा-३ दि. १०.०८.२००१.

३) या कार्यालयाचे आदेश क्र. शावैमउ/आस्था-२/ जाहिरात/१८०९-१९/२०२३ दि. १८.०१.२०२३

४) वि.नि.मं. मार्फत मुलाखत इतिवृत्तात दि. ३१.१.२०२३.

५) दि.१५.०९.२०२३ रोजीची मंजुर कार्यालयीन टिप्पणीनुसार.

या वैद्यकीय महाविद्यालयात प्रथम व द्वितीय वर्षाचे राष्ट्रीय आयुर्विज्ञान परिषदेचे निरीक्षण होणार असल्यामुळे या संस्थेत संदर्भ क्र.१ च्या अनुषंगाने प्रथम व द्वितीय वर्षाप्रमाणे मंजुर पदांच्या अनुषंगाने संदर्भ क्र.२ मधील अधिष्ठाता यांना दिलेल्या प्राधिकाराच्ये संदर्भ क्र. ३ नुसार सहाय्यक प्राध्यापक,२६ विविध विषयातील रिक्त पदांची जाहिरात प्रसिध्द करण्यात आली होती. संदर्भ क्र.१ ते ५ च्या अधिन राहुन सदरील रिक्त पदावर खालील पात्र उमेदवारांना खटी व शर्तीच्या अधिन राहुन १२० दिवसासाठी तात्पुरती नियुक्ती देण्यात येत आहे. औषधवैद्यकशास्त्र विभागातील सहाय्यक प्राध्यापक पदावर संदर्भिय जाहिरातीनुसार उमेदवार प्राप्त आहेत. सध्यस्थितीत अ.क्र.१ नुसार विनंती अर्ज प्राप्त झालेला आहे. त्यानुसार खालील प्रमाणे तात्पुरती १२० दिवसांचे आदेश निर्गमित करण्यात येत आहे.

अ.क्र.	नांव	पदनाम	विभाग	पासुन	पर्यंत	दिवस
१	डॉ सौरभ सुहास पाटील	सहाय्यक प्राध्यापक	औषधवैद्यकशास्त्र	१६.०१.२०२३	१३-०१-२०२४,	१२० दिवस

१. सदर आदेशानुसार ७ दिवसात सहाय्यक प्राध्यापक पदावर रुजु होणे आवश्यक आहेत. जर आपण ७ दिवसात रुजु न झाल्यास सदरील आदेश आपोआप रद्द होतील.

२. सदरील नियुक्ती फक्त १२० दिवसांसाठी निव्वळ तात्पुरत्या स्वरुपात करण्यात आलेली आहे. सदरील नियुक्ती ही भविष्यात जाहिरातीद्वारे सहाय्यक प्राध्यापक, ही पदे पुढील विभागीय निवड मंडळामार्फत भरण्यासाठी जाहिरात प्रसिध्द करुन निवड केलेला अर्हता प्राप्त उमेदवार रुजु होईपर्यंत अथवा मलोआ मार्फत अथवा नियमित उमेदवार किंवा बंधपत्रित उमेदवार उपलब्ध झाल्यास आपले १२० दिवस नियुक्तीचे आदेश संपुष्टात येईपर्यंत अनुज्ञेय राहतील. सदरील आदेश संपुष्टात आल्यानंतर आपली नियुक्ती आपोआप संपुष्टात येईल त्याबाबत वेगळे आदेश निर्गमित होणार नाहीत. याची आपण नोंद घ्यावी.

३. आपली चारित्र्य पोलीस अहवाल जर अवैध असेल तर आपली सेवा समाप्त करुन आपणा विरुध्द कार्यवाही केली जाईल.

४. सदरील नियुक्तीनुसार आपले वेतन रु. १,००,०००/- दरमहा केंद्राटी स्वरुपाने अदा करण्यात येईल. आपणास महागाई भत्ता व इतर भत्ते अनुज्ञेय असणार नाहीत.

५. आपणास सदरील पदावर नियमित आदेश मिळण्यासाठी आपण न्यायाधिकरणात याचीका दाखल करणार नाहीत या बाबत हमीपत्र रु. १००/- च्या स्टॅम्प पेपरवर रुजु अहवालासोबत या कार्यालयास सादर करावे लागेल.

६. आपणास या पदावर कार्यरत असताना खाजगी व्यवसाय करता येणार नाही. तसे ७ दिवसात हमीपत्र रु.१००/- च्या बॉण्डवर देणे बंधनकारक राहील.

७. प्रशासकीय आवश्यकतेनुसार अथवा आपले काम समाधानकारक नसल्यास आपली सेवा १२० दिवस संपण्या अगोदर देखील कोणतीही पुर्वसुचना न देता किंवा कोणतेही कारण न दाखवता समाप्त करण्यात येईल.

८. जर नियुक्ती कालावधीतील १२० दिवसांच्या अगोदर आपण सदरील पदाचा तात्काळ राजीनामा दिल्यास आपणास शासन निर्णयाप्रमाणे एक महिन्याचे रु.१,००,०००/- पुर्ण वेतन शासन तिजोरीत नियमानुसार भरण्यासाठी रोखपाल यांच्याकडे रोखीने जमा करावे लागेल. त्या नंतरच आपला राजीनामा मंजुर करण्यात येईल.

९. आपण जर इतरत्र संस्थेत वरीष्ठ निवासी, सहाय्यक प्राध्यापक पदावर कार्यरत असाल तर रुजु होताना राजीनामा मंजुरीची प्रत सादर करणे अनिवार्य आहे.

(डॉ. शिल्पा वे. दामकुंडवार.)
अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद.

प्रति,

डॉ. सौरभ सुहास पाटील, सहाय्यक प्राध्यापक, औषधवैद्यकशास्त्र, शा.वै.म. उस्मानाबाद

प्रत आयुक्त, वैद्यकीय शिक्षण व संशोधन, मुंबई यांना माहितीस्तव व पुढील कार्यवाहीस्तव सविनय सादर

प्रत प्राध्यापक व विभागप्रमुख औषधवैद्यकशास्त्र अ.क्र. १ ते ३, व / वैद्यकीय अधिक्षक, शा.वै.म. उस्मानाबाद यांना माहितीस्तव.

प्रत प्रभारी लिपीक, लेखा-२ विभाग, शा.वै.म. उस्मानाबाद यांना माहिती व पुढील योग्य त्या कार्यवाहीस्तव अग्रेषित.

प्रत जिल्हा कोषागार अधिकारी, उस्मानाबाद यांना माहितीस्तव.

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-19 इमारत, जिल्हा रुग्णालय आवार, धाराशिव.
(महाराष्ट्र) 413 501
e-mail: deangmcosmanabad@gmail.com



जा.क. शावैमधा/आस्था-2/ 2838 /2026 दि.08/09/2026

EXPERIENCE CERTIFICATE

This is to certify that Dr. Saurabh Suhas Patil is working as Assistant Professor in General Medicine dept. at this College. His total experience is as follows –

Sr. No	Post held	Name of College	Department	Nature of Appointment	Period	
					From	To
01	Senior Resident	G.M.C.Dharashiv	Emergency Medicine	DSB	30/08/2022	27/12/2022
02	Senior Resident	G.M.C.Dharashiv	Emergency Medicine	DSB	29/12/2022	27/04/2023
03	Senior Resident	G.M.C.Dharashiv	General Medicine	DSB	29/04/2023	26/08/2023
04	Senior Resident	G.M.C.Dharashiv	General Medicine	DSB	29/08/2023	14/09/2023 (Resigned)
05	Assistant Professor	G.M.C.Dharashiv	General Medicine	DSB	16-09-2023	13-01-2024
06	Assistant Professor	G.M.C.Dharashiv	General Medicine	DSB	16-01-2024	14-05-2024
07	Assistant Professor	G.M.C.Dharashiv	General Medicine	DSB	16-05-2024	12-09-2024
08	Assistant Professor	G.M.C.Dharashiv	General Medicine	DSB	16-09-2024	29-09-2024
09	Assistant Professor	G.M.C.Dharashiv	Emergency Medicine	DSB	01-10-2024	03-03-2025
10	Assistant Professor	G.M.C.Dharashiv	General Medicine	MPSC Permanent	04-03-2025	Till date

His conduct is good & work in our organization is satisfactory

(Dr. Shilendra D. Chauhan,)
DEAN,
Government Medical College, Dharashiv

To,
Dr. Saurabh Suhas Patil,
Assistant Professor, Dept. of General Medicine,
Government Medical College, Dharashiv.



2016106536

MUHS

20AA0062716

महाराष्ट्र आरोग्य विज्ञान विद्यापीठ, नाशिक

Maharashtra University of Health Sciences, Nashik, India

(ISO 9001:2008)

आम्ही, कुलपती, प्रतिकुलपती, कुलगुरु
आणि व्यवस्थापन परिषद व विद्यापरिषदेचे सदस्य
वैद्यक आणि शल्यचिकित्सा स्नातक

ही पदवी हिवाळी–२०१४ मधील परीक्षेत उत्तीर्ण झाल्याबद्दल
नेरुळ, नवी मुंबई येथील तेरणा वैद्यकीय महाविद्यालय आणि रुग्णालया चे/च्या

पाटील सौरब सुहास

यांना
१७ मे २०१६ च्या दीक्षांत समारंभात प्रदान करीत आहोत

We, the Chancellor, Pro-Chancellor, Vice-Chancellor
and Members of the Management Council, Academic Council
confer the Degree of
Bachelor of Medicine & Bachelor of Surgery

on
Patil Saurab Suhas
(PRN 0111180808)
of
Terna Medical College & Hospital, Nerul, Navi Mumbai

for the examination held in Winter-2014
at the Convocation held on 17th May 2016

MUHS

VICE-CHANCELLOR
कुलगुरु

The authenticity of this certificate can be verified on our University website : http://www.muhs.ac.in

3c9c02a37c96c230f105365cc9898cd3

ಕ್ರ.ಸಂ. 084718

ರಾಜೀವ್ ಗಾಂಧಿ ಆರೋಗ್ಯ ವಿಜ್ಞಾನಗಳ ವಿಶ್ವವಿದ್ಯಾಲಯ

ಕರ್ನಾಟಕ

RAJIV GANDHI UNIVERSITY OF HEALTH SCIENCES
KARNATAKA

ಡಾ|| ಸೌರಭ ಸುಹಾಸ ಪಾಟೀಲ

ರವರು, ಸ್ನಾತಕೋತ್ತರ ಪದವಿಗೆ ಯಥಾ ಯೋಗ್ಯವಾದ ಅವಶ್ಯಕತೆಗಳನ್ನು

ಮೇ-2022 ರ ಪರೀಕ್ಷೆಯಲ್ಲಿ ಪೂರೈಸಿರುವರೆಂದು ದೃಢೀಕರಿಸುತ್ತಾ

ಡಾಕ್ಟರ್ ಆಫ್ ಮೆಡಿಸಿನ್ (ಜನರಲ್ ಮೆಡಿಸಿನ್)

ಸ್ನಾತಕೋತ್ತರ ಪದವಿಯಲ್ಲಿ ಕುಲಾಧಿಪತಿ,ಸಮಕುಲಾಧಿಪತಿ, ಕುಲಪತಿ ಹಾಗೂ ಸೆನೆಟ್ ಮತ್ತು ಸಿಂಡಿಕೇಟ್ ಸದಸ್ಯರುಗಳಾದ

ನಾವು 10ನೇ ಜೂನ್ 2023 ರಂದು ನಡೆದ 25 ನೇ ಘಟಿಕೋತ್ಸವದಲ್ಲಿ

ವಿಶ್ವವಿದ್ಯಾಲಯದ ಅಧಿಕಾರ ಮುದ್ರೆಯೊಡನೆ ಪ್ರದಾನ ಮಾಡಿದ್ದೇವೆ.

We, the Chancellor, the Pro-Chancellor, the Vice-Chancellor and the members of the Senate and Syndicate confer

DOCTOR OF MEDICINE (GENERAL MEDICINE)

on

DR.SAURAB SUHAS PATIL

in recognition of fulfilment of the requirements for the said Post Graduate Degree in the examination held during ***MAY-2022***

Given under the seal of the University, in the ***25th*** *Convocation held on* ***10th JUNE 2023***



Dr. M. K. Ramesh
Vice Chancellor

Bengaluru ***Date : 05/08/2023***

Registration Number: 19MG178

P84718

College : SRI B V V SANGHAS S NIJALINGAPPA MEDICAL COLLEGE ,BAGALKOT.

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद
GOVERNMENT MEDICAL COLLEGE, Osmanabad
OFFICE OF INSTITUTIONAL ETHICS COMMITTEE
(Dept.of Pharmacology)
कोविड-19 इमारत, जिल्हा रुग्णालय आवार, उस्मानाबाद. (महाराष्ट्र) 413 501
Contact No. 02472226924
e-mail: ecgmcdharashiv@gmail.com

ऑफिस/GMCD/4082 /2025 दि. 18 /11 /2025

To,

Joint Secretory,
Ministry of Health and family Welfare, Govt of India,
National Ethics Committee Registry of Biomedical & Health Research (NECRBHR) Department of Health Research.
2nd Floor, IRCS Building, Red Cross Road, New Delhi - 110001.

I hereby authorize the formation of the EC(Ethics Committee) and is constituted under my authority. The committee will function independently in decision making process and will function according to the New Drugs and Clinical trials rules 2019 and ICMR National Ethical Guidelines, 2017. The institute will provide infrastructure, administrative and financial support for the functioning of the Ethics Committee.

Studies with potential scope of commercialisation or belong to clinical trials, bioavailability or bio equivalence studies will not be reviewed by the DHR registered EC unless it is separately registered with CDSCO

Institutional Ethics committee For Biomedical & Health Research

Sr.No.	Name of Ethical Committee Member	Designation	Contact No	Affiliation with the institute
1	Dr. Arvind M.Deshmukh	Chairperson	9822079782	Non Affiliated
2	Dr. Mangal K. Choure	Member Secretary	8308344405	Affiliated
3	Dr. S.A.Mundewadi	Basic Medical Scientist	9860042522	Affiliated
4	Dr. Rohan S. Khairatkar	Basic Medical Scientist	7798335625	Affiliated
5	Dr.Sourabh Patil	Clinician	8551909999	Affiliated
6	Adv.Renuka Dnyaneshwar Shete	Legal Expert	8208516513	Non Affiliated
7	Dr. Trupati H Mande	Member	8329332946 9823358210	Affiliated
8	Dr.Lagdir Gaikwad	Member	8446965356	Affiliated
9	Mr.Khayyum Sayyed	Social Scientist	9309544638	Affiliated
10	Mr.Daulat Nipanikar	Lay Person	9273228138	Non Affiliated

Dean,
Government Medical College
Dharashiv

11	Dr.Milind Ramkrishna Pol	Clinician	7588918382	Non Affiliated
12	Mr. Choudhari Athar Parvez	Lay Person	9421875497	Non Affiliated
13	Mr. Rahul Vikram Bagal	Member	9420696707	Non Affiliated
14	Dr. Shushrut R.Dambal	Clinician	9822622148	Non Affiliated

(DR. SHAILENDRA D. CHAUHAN)
DEAN
GOVT. MEDICAL COLLEGE
HOSPITAL, OSMANABAD

Dr. Shailendra Dattusingh Chauhan,
Head of the Institute (Dean) GMC Osmanabad.

18.11.2025

IEC - member secretary

महाराष्ट्र शासन

सार्वजनिक आरोग्य विभाग

जिल्हा शल्य चिकित्सक, जिल्हा रुग्णालय, उस्मानाबाद

Annexure –III

FORM C

Certificate of Registration under Section 5 of the Bombay Nursing Home Registration Act. Amendment 2006

(Under Rule 5)

No:- 227

This is to certify that **Dr.Civil Surgeon** *has been registered under the Bombay Nursing Homes Registration Act Amendment 2006 in respect* **Gov.Civil Hospital** *situated at* **Marwadi Galli ,Osmanabad Tal :-Osmanabad Dist:- Osmanabad** *and has been authorized to carry on the said Nursing Home.*

Registration No.: 227

Date of issue of Certificate : 1-4-2021 ***Nursing patients*** ***Cots:- 236***

This Certificate shall be valid up to 31march 2024

CIVIL SURGEON OSMANABAD

Civil Surgeon
Civil Hospital, Osmanabad

Sachin Application for Registration

Page 93

Dean
Government Medical College
Dharashiv

Print

अहवाल दिनांक : 08/10/2025

महाराष्ट्र शासन

गाव नमुना सात (अधिकार अभिलेख पत्रक)

[महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३,५,६ आणि ७]

गाव :- **धाराशिव (561457)** तालुका :- **धाराशिव** जिल्हा :- **धाराशिव**

PU-ID : **14765568334** भूमापन क्रमांक व उपविभाग : **759**

14765568334

भू-धारणा पध्दती : **भोगवटादार वर्ग - 2** शेताचे स्थानिक नाव :

क्षेत्र, एकक व आकारणी	खाते क्र. भोगवटादाराचे नांव क्षेत्र आकार पो.ख. फे.फा.	कुळ, खंड व इतर अधिकार
क्षेत्राचे एकक हे.आर.चौ.मी अ) लागवड योग्य क्षेत्र जिरायत - बागायत - ब) पोट-खराब क्षेत्र (लागवड अयोग्य) वर्ग (अ) 3.49.00 वर्ग (ब) - एकण पो.ख 3.49.00 एकूण क्षेत्र (अ+ब) 3.49.00 आकारणी 0.00 जुडी किंवा विशेष आकारणी -	1672 सरकार 2.40.00 (31666) 37413 मा.संचालक वैद्यकीय शिक्षण व संशोधन 1.09.00 (31666)	कुळाचे नाव व खंड इतर अधिकार सक्षम प्राधिकार्‍यांच्या पूर्व परवानगी शिवाय हस्तांतरास बंदी - म.न.पा/न.पा/प्राधीकरण/ग्रा.पा.कडे वर्ग जमीन इतर **आबादी करिता गोरन (1)** प्रलंबित फेरफार : **नाही.** शेवटचा फेरफार क्रमांक : **31666** व दिनांक : **09/07/2021**
जुने फेरफार क्र. (1)(23928)(24939)		सीमा आणि भूमापन चिन्हे :

सदर ७/१२ हा नगर भूमापन हद्दीत आहे.

गाव नमुना बारा (पिकांची नोंदवही)

[महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम,१९७१ यातील नियम २९]

गाव :- **धाराशिव (561457)** तालुका :- **धाराशिव** जिल्हा :- **धाराशिव**

भूमापन क्रमांक व उपविभाग : **759**

			पिकाखालील क्षेत्राचा तपशील					लागवडीसाठी उपलब्ध नसलेली जमीन		शेरा
वर्ष	हंगाम	खाता क्रमाक	पिकाचा प्रकार	पिकाचे नाव	जल सिंचित	अजल सिंचित	जल सिंचनाचे साधन	स्वरूप	क्षेत्र	
(१)	(२)	(३)	(४)	(५)	(६)	(७)	(८)	(९)	(१०)	(११)
					हे.आर. चौ.मी	हे.आर. चौ.मी			हे.आर. चौ.मी	
2022-23	संपूर्ण वर्ष	-1*						गायरण पड	3.4900	

टीप : * सदरची नोंद मोबाइल ॲप द्वारें घेणेत आलेली आहे

"या प्रमाणित प्रतीसाठी फी म्हणून १५/- रुपये मिळाले."

दिनांक :- 08/10/2025

सांकेतिक क्रमांक :- 272900050362920000102025135 3

(**नाव :-** राजेश भागवत पडवळ)

ग्राम महसूल अधिकारी साझा :- धाराशिव-I

धाराशिव, ता. : धाराशिव

पडवळ आर.बी.
ग्राम महसूल अधिकारी
धाराशिव शहर-I

Dean, Dr.
Government Medical Co.
Dharashiv

10/8/2025

G.M.C.DHARASHIV
Inward No. 4060
Dt. 14/11/25

Name of Medical College & Address: - Government Medical College, Dharashiv
Name & contact Details of principal /Dean: - Dr. Shailendra Sulochana Dattusingh Chauhan
Name of the RC/NC allocated for FDP: M.R. Medical College, Kalburgi

DETAILS OF MEDICAL EDUCATION UNIT

Sr.No	Name	Designation Department	Mobile& email id	Attendance rBCW/BCME at NC/RC/MC (dates, centre)			Additional qualification as per NMC (ACME/FAIMER etc.)	Attended CISP/I/II/III	Knowledge /expertise in Medical Education
				Attended Y/N, from where	From	To	Dates/ Batch/Centre	Dates/Centre	Details
1	Dr. Shailendra Sulochana Dattusingh Chauhan	Dean	7588693032 deangmcosmanabad@gmail.com	VDGMC Latur under JNMC Wardha As Nodal Center	03/08/2021	05/08/2021	No	Yes 18/09/2020 to 19/09/2020 VDGMC Latur under JNMC Wardha As Nodal Center	-----
2	Dr Mundewadi S.A	Meu co-ordinator Professor, Physiology	9860042522 shafique.mundewadi@gmail.com	MUHS Regional center Pune	06/09/2016	09/09/2016	Yes Dec 2022 Batch-2019 B Centre-KEM Mumbai NMC Nodal centre	CISP-I Date-13/02/2019 to 15/02/2019 Centre-KEM Mumbai NMC Nodal centre	FCR
				Members					
1	Dr. Pushpa Agrawal	Members Professor, Anaesthesia	982333153 agrawalpushpa@yahoo.com	Yes MUHS Regional centre Pune	29/03/2016	31/03/2016	ACME Part I	Yes II Nodal Center KEM 13/03/2019 to 15/03/2019	-----
2	Dr. Yogita D. Sulaxane	Members Associate Professor, Physiology	9021528128 dryogita0485@gmail.com	MUHS Regional centre Pune	12/06/2019	14/06/2019	ACME Part I	CISP- Date-03/07/2019 to 05/07/2019 DUPMC, Jalgaon	-----
					RBCME + AETCOM				
					BCME				

Dean
Government Medical College
Dharashiv

3	Dr. Abdul Mubasshir Siddiqui	Members Associate, Professor Biochemistry	9890055896 Mubs10@yahoo.co.in	Yes RC JNMC Sawavgi Wardha	20/02/2014	22/02/2014	No	CISP-II 23/09/2023 to 24/09/2023 Dr.Shankarao Chavan Government Medical College Nanded	------
					BCME				
4	Dr. Vishwajeet Pawar	Members Professor, Anaesthesia Forensic Medicine Toxicology	9922086138 Pawar.vishwajieet@gmail.com	Yes, RC JNMC Sawangi Wardha	15/01/2019	17/01/2019	No	CISP-I 2/03/2019 to 29/03/2019 Nodal Center JNMC Sawangi Wardha	-------
5	Dr. Halgarkar Charushila	Members Associate, Professor Microbiology	9511219188 Dr.charushilahalgarkar@gmail.com	Yes, RC M.R Medical College, Kalburgi	03/09/2024	05/09/2024	No	CISP-II Date- 20/08/2020 to 21/08/2020 Center- SRTRGMC, Ambajogai	-------
6	Dr. Chetan Rajput	Members Assistant Professor Physiology	942318865 Drchetanrajput5@gmail.com	Yes, RC M.R. Medical College, Kalburgi	03/09/2024	05/09/2024	Yes ACME 2025 A Batch JNMC, Belagavi Karnataka	CISP III 10/02/2025 to 11/02/2025 MRMC Kalaburagi	------
					BCME				
7	Dr. Vijayalaxmi V. Gawre	Members Assistant Professor Physiology	7387739501 Vijay9126gawre@gmail.com	Yes, RC M.R. Medical College, Kalburgi	03/09/2024	05/09/2024	No	CISP-III Date- 15/01/2024 to 16/01/2024 Center- GMC, Nandurbar	-----
					rBCW				
8	Dr.Dayanand Dattatraya Choure	Assistant Professor General Surgery	7710081177 drdayac@gmail.com	Yes, GMC, Dharashiv	08/01/2025	10/01/2025	No	Not done	------
9	Dr.Sourabh Suhas Patil	Assistant Professor General Medicine	8551909999 saurabhmaratha@gmail.com	Yes, GMC, Dharashiv	08/01/2025	10/01/2025	No	No	------

Signature of Principal/Dean with date

Dean,
Government Medical College
Dharashiv

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) ४१३ ५०१
e-mail: deangmcosmanabad@gmail.com

जा.क्र.शावैमधा/स्वी.स/ ११३ /२०२५ दि.: ०९/०१/२०२५

प्रति,
मा.संचालक,
वैद्यकीय शिक्षण व संशोधन,
मुंबई.

विषय- सार्वजनिक आरोग्य विभागाच्या अखत्यारितील जिल्हा सामान्य रुग्णालय,स्त्री रुग्णालय आणि क्षय रुग्णालय यांच्यासमवेतचा शासकीय वैद्यकीय महाविद्यालय,धाराशिव या संस्थेशी करण्यात आलेला सुधारीत मसुदाच्या अनुषंगिक.

संदर्भ - १. शासन पत्र क्रमांक. एमईडी- २०१९ प्र.क्र. १८४(भाग-अ)/१९ शिक्षण-१, दि.१३/०६/२०२३
२. DMER-१२०११/१३/२०२२ EDU. दि.३०/०६/२०२३
३. जा.क्र.शावैमधा/स्वी.स/ ६३९१ /२०२३ दि.०१/१२/२०२३
४. DMER-१२०११/१३/२०२२/१०२९१, दि.३१/०५/२०२४
५. डॉ.उदयकुमार पाध्ये, प्रशासकीय अधिकारी, शावैमधा यांच्या समवेत दि.०९/०१/२०२५ रोजीची दुरध्वनी द्वारे झालेल्या चर्चेनुसार

मा.महोदय,

उपरोक्त संदर्भीय विषयानुसार तत्कालीन परिस्थित नव निर्मीत शासकीय महाविद्यालय सुरु झाले तेव्हा दिनांक २०/०५/२०२२ च्या सांमजस्य करारानुसार जिल्हा रुग्णालय व स्त्री रुग्णालय,धाराशिव महाविद्यालयाकडे हस्तांतरीत झाले होते. रुग्णालयीन सेवा व विद्यार्थीहित लक्षात घेता जिल्हा रुग्णालय व स्त्री रुग्णालयाचे मनुष्यबळ पुढील काही वर्ष महाविद्यालयाकडेच असावे अशी धारणा असल्याकारणाने या कार्यालयाकडून सांमजस्य करारामध्ये दुरुस्ती होणे आवश्यक असल्याचे विनंतीवजापत्र आपल्या कार्यालयास सादर करण्यात आले होते.

त्यानुसार शासकीय वैद्यकीय महाविद्यालय, धाराशिव आणि जिल्हा रुग्णालय व स्त्री रुग्णालय, धारशिव यांच्यासोबतचा सांमजस्य करारातील अट क्र. ५ व २२ मध्ये अंशत: बदल करुन सदरचा सांमजस्य करार सादर करण्याविषयी संदर्भ क्र.१ व २ नुसार कळविण्यात आले होते.

त्यास अनुसरुन सदरील सांमजस्य करारामध्ये अंशत: बदल करुन अधिष्ठाता ,शासकीय वैद्यकीय महाविद्यालय, धाराशिव व जिल्हा शल्यचिकीत्सक, जिल्हा रुग्णालय,धाराशिव यांच्या स्वाक्षरीने हा सामजंस्य करार संदर्भ क्र.३ नुसार आपल्या मंजूरीस्तव सादर करण्यात आला होता.

तदनंतर संदर्भ क्र.४ प्रमाणे मा.संचालक वैद्यकीय शिक्षण व संशोधन, मुंबई या कार्यालयामार्फत राष्ट्रीय आयुर्विज्ञान आयोगाच्या मानकांची पुर्तता होण्याच्या दृष्टिने शासकीय वैद्यकीय महाविद्यालय, धाराशिव या संस्थेत उक्त सामंजस्य कराराच्या अनुषंगाने अधिकारी व कर्मचारी असणे आवश्यक आहे. यास्तव संचालयाने दिनांक.०६/०२/२०२४ अन्वये सादर केलेल्या सामंजस्य कराराचा मसुदा स्वाक्षरी करुन संचालक आरोग्य सेवा संचालनालय, मुंबई येथे पाठविण्यात आले आहे.

परंतु सदरील सामंजस्य करार संचालक,वैद्यकीय शिक्षण व संशोधन,मुंबई यांच्या स्वाक्षरीनंतर संचालक, आरोग्य सेवा संचालनालय, मुंबई यांचेकडे स्वाक्षरीकरीता पाठविण्यात आले असून ते अद्याप प्रलबिंत असल्याचे कळते.

तरी आपणांस विनंती करण्यात येते की, संचालक,वैद्यकीय शिक्षण व संशोधन,मुंबई व संचालक, आरोग्य सेवा संचालनालय, मुंबई यांचेकडे स्वाक्षरीकरीता पाठविण्यात आलेली मूळ सामंजस्य कराराची प्रत स्वाक्षांकित करुन या कार्यालयास लवकर प्राप्त करुन द्यावी ही विनंती.

सोबत:- संदर्भ क्र ३ व ४ च्या सामंजस्य कराराची प्रत.

आपली विश्वासू,

डॉ. शिल्पा व. दोमकुंडवार,
अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय, धाराशिव.

Dean,
Government Medical College
Dharashiv

प्रत- १.मा.संचालक, आरोग्य सेवा संचालनालय, मुंबई.
२.मा.सचिव,वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग,मुंबई यांना संदर्भ क्र.२ च्या अनुषंगाने सविनय सादर
३. जिल्हा शल्यचिकीत्सक, जिल्हा रुग्णालय, धाराशिव.

Emp | 31 | 05 | 24
G.M.C.DHARASHIV
Inward No. 002
Date 01/06/24

महाराष्ट्र शासन

संचालनालय, वैद्यकीय शिक्षण व संशोधन, मुंबई

४ था मजला, शासकीय दंत महाविद्यालय व रुग्णालय इमारत, सेंट जॉर्जेस रुग्णालय आवार, फोर्ट, मुंबई -४०० ००१
दुरध्वनी - (०२२) - २२६२०३६३-६५ संकेतस्थळ - dmer-edu.in

File No: DMER-12011/13/2022-EDU. / 90289 दिनांक :१९/०५/२०२४

प्रति,
संचालक,
आरोग्य सेवा संचालनालय,
आरोग्य भवन, सेंट जॉर्जेस रुग्णालय आवार,
मुंबई- ४०० ००१.

विषय : आरोग्य सेवा संचालनालयाच्या अधिपत्याखालील जिल्हा सामान्य रुग्णालय, स्त्री रुग्णालय आणि क्षय रुग्णालय यांच्या सोबतच्या सुधारित सामंजस्य कराराची प्रत स्वाक्षरी करीता सादर.

संदर्भ : सहसंचालक, आरोग्य सेवा संचालनालय, मुंबई यांचे पत्र क्र. संआसे/कक्ष३/टे-७/जिरुउस्मानाबाद/एमओयु./नस्ती क्र../जा.क्र.९९४३/२३, दिनांक ३०/०४/२०२३

राष्ट्रिय आयुर्विज्ञान आयोगाच्या निकषांची पुर्तता करण्याकरीता आरोग्य विभागाच्या अधिपत्याखालील जिल्हा सामान्य रुग्णालय, स्त्री रुग्णालय आणि क्षयरुग्णालय, धाराशिव नियोजित शासकीय वैद्यकीय महाविद्यालय सुरु करण्यासाठी वैद्यकीय शिक्षण विभागाकडे तात्पुरत्या स्वरुपात हस्तांतरीत करण्याकरीता शासन पत्र दिनांक १२/०५/२०२२ च्या पत्रासोबत सार्वजनिक आरोग्य विभागाच्या दिनांक १०/०५/२०२२ च्या पत्रान्वये सामंजस्य करारास मंजूरी प्रदान करण्यात आलेली आहे. त्यानुसार संचालक, वैद्यकीय शिक्षण व संशोधन, मुंबई आणि संचालक, आरोग्य सेवा संचालनालय, मुंबई यांचेमध्ये सामंजस्य करार करण्यात आलेला आहे.

२. उक्त सामंजस्य करारातील मुद्दा क्र. ५ व २२ मध्ये अंशत: बदल करुन सदर अधिकारी व कर्मचारी यांची पदे मुदत संपुष्टात आलेल्या दिनांकापासून पुढील २ वर्षांकरीता शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद येथे कार्यरत ठेवण्यास सार्वजनिक आरोग्य विभागाने दर्शविलेल्या संहमतीच्या अनुषंगाने दिनांक १३/०६/२०२३ च्या शासन पत्रान्वये मंजूरी प्रदान करण्यात आली आहे. त्यानुसार संचालनालयाने दिनांक ०६/०२/२०२४ च्या पत्रान्वये संचालक, आरोग्य सेवा संचालनालय, मुंबई यांना सामंजस्य करार स्वाक्षरीसाठी सादर केला आहे.

३. विषयांकीत प्रकरणी दिनांक ३०/०४/२०२३ च्या पत्रान्वये सदर सामंजस्य करारावावत आपण उपस्थित केलेल्या मुद्यांची पूर्तता खालील प्रमाणे करण्यात येत आहे.

अ) दिनांक १३/०६/२०२३ च्या शासपत्रातील संदर्भ क्र. १ मध्ये नमुद दिनांक २७/०१/२०२१ च्या शासन निर्णयाची प्रत सोबत जोडली आहे.

ब) दिनांक १३/०६/२०२३ च्या शासपत्रातील संदर्भ क्र. २ मध्ये १७/०५/२०२३ असा समक्रमांकीत शासन पत्राचा दिनांक टंकलिखित करण्यात आला आहे. त्याबाबत नमुद करण्यात येते की, दिनांक १३/०६/२०२३ च्या शासन पत्रातील समक्रमांकीत पत्राचा दिनांक १७/०५/२०२३ असा नसून तो १२/०५/२०२२ असा आहे. सदर शासन पत्राची प्रत सोबत जोडली आहे.

क) दिनांक १३/०६/२०२३ च्या शासपत्रातील संदर्भ क्र. ३ मध्ये नमुद दिनांक ०४/०५/२०२३ अन्वये संचालनालयाने शासनास सादर केलेल्या प्रस्तावाची प्रत सोबत जोडली आहे.

ड) प्रस्तुत प्रकरणी सार्वजनिक आरोग्य विभाग, मंत्रालय, मुंबई यांनी मान्यता दिलेले सर्व कागदपत्रे आयुक्तालयास सादर करण्याबाबत आपल्या संदर्भिय पत्रान्वये कळविण्यात आले आहे. याबाबत असे नमुद करण्यात येते की, सदरची बाब हि शासनस्तरावरील बाब आहे. त्यामुळे सार्वजनिक आरोग्य विभाग, मंत्रालय, मुंबई यांनी मान्यता दिलेली कागदपत्रे संचालनालयाकडे उपलब्ध नाहीत.

Dean PA
Dean P.A.
3/6/24

राष्ट्रीय आयुर्विज्ञान आयोगाच्या मानकांची पूर्तता होण्याच्या दृष्टीने शासकीय वैद्यकीय महाविद्यालय, धाराशिव या संस्थेत उक्त सामंजस्य कराराच्या अनुषंगाने अधिकारी व कर्मचारी कार्यरत असणे आवश्यक आहे. यास्तव संचालनालयाने दिनांक ०६/०२/२०२४ अन्वये सादर केलेला सामंजस्य कराराचा मसुदा स्वाक्षरी करुन संचालनालयास पाठविण्यात यावा.

संचालक
वैद्यकीय शिक्षण व संशोधन, मुंबई

प्रत :

१) मा. अपर मुख्य सचिव, सार्वजनिक आरोग्य विभाग, (आ-३) गो. ते. रुग्णालय आवार, १० वा मजला, मंत्रालय, मुंबई-१

२) मा. प्रधान सचिव, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, गो. ते. रुग्णालय आवार, ९ वा मजला, मंत्रालय, मुंबई-१

३) अधिष्ठाता, शासकीय वैद्यकीय महाविद्यालय, धाराशिव

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, धाराशिव
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) ४१३ ५०१
e-mail: deangmcosmanabad@gmail.com

जा.क्र.शावैमधा/स्वी.स/ 6391 /२०२३ दि.: ७/१२/२०२३

प्रति,
मा.संचालक,
वैद्यकीय शिक्षण व संशोधन,
मुंबई.

विषय- सार्वजनिक आरोग्य विभागाच्या अखत्यारितील जिल्हा सामान्य रुग्णालय,स्त्री रुग्णालय आणि क्षय रुग्णालय यांच्यासमवेतचा शासकीय वैद्यकीय महाविद्यालय,धाराशिव या संस्थेशी करण्यात आलेला सुधारीत मसुदा स्वाक्षरीकरीता सादर करणेबाबत.

संदर्भ - १.या कार्यालयाचे पत्र क्र.शावैमउ/३३१७-२५/२३ दि.०२/०५/२०२३
२. शासन पत्र क्रमांक. एमईडी- २०१९ प्र.क्र. १८४(भाग-अ)/१९ शिक्षण-१, दि.१३/०६/२०२३
३. DMER-१२०११/१३/२०२२ EDU. दि.३०/०६/२०२३

मा.महोदय,

वरील संदर्भीय पत्रानुसार आपण आदेशीत केल्यानुसार तत्कालीन परिस्थित नव निर्मीत शासकीय महाविद्यालय सुरु झाले तेव्हा दिनांक २०/०५/२०२२ च्या सांमजस्य करारानुसार जिल्हा रुग्णालय व स्त्री रुग्णालय,धाराशिव महाविद्यालयाकडे हस्तांतरीत झाले होते. रुग्णालयीन सेवा व विद्यार्थीहित लक्षात घेता जिल्हा रुग्णालय व स्त्री रुग्णालयाचे मनुष्यबळ पुढील काही वर्ष महाविद्यालयाकडेच असावे अशी धारणा असल्याकारणाने या कार्यालयाकडून सांमजस्य करारामध्ये दुरुस्ती होणे आवश्यक असल्याचे विनंतीवजापत्र आपल्या कार्यालयास सादर करण्यात आले होते.

त्या अनुषंगाने शासकीय वैद्यकीय महाविद्यालय, धाराशिव आणि जिल्हा रुग्णालय व स्त्री रुग्णालय,धारशिव यांच्यासोबत आपल्या वरिल संदर्भीय आदेशानुसार सांमजस्य करारातील अट क्र. ५ व २२ मध्ये अंशत: बदल करुन सदरचा सांमजस्य करार आपल्या अवलोकनार्थ व पुढील मंजूरीस्तव सादर करण्यात येत आहे.

आपली विश्वासू,

डॉ. शिल्पा व. दोमकुंडवार,
अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय, धाराशिव.

प्रत-मा.सचिव,वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग,मुंबई यांना संदर्भ क्र.२ च्या अनुषंगाने सविनय सादर

8/12/23
लिपिक, चांदणी शाखा
वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग
मंत्रालय, मुंबई ४०० ०३२

8/12/23
आवक जावक लिपिक
संचालनालय, वैद्यकीय शिक्षण व संशोधन,
मुंबई

भारतीय गैर न्यायिक

एक सौ रुपये Rs. 100

रु. 100 ONE HUNDRED RUPEES

भारत INDIA

INDIA NON JUDICIAL

महाराष्ट्र MAHARASHTRA ◐ 2023 ◐ 72AA 215688

धाराशिव दि. 30/11/2023

श्री. अतिरिक्त जिल्हा शल्यचिकित्सक वैद्यकीय महाविद्यालय धाराशिव.

यांचे करितां रु. 100/- भारतीय रुपये

हा स्टॅम्प पेपर रु. 100/- मात्र

या स्टॅम्प दिला.

कारण. कार्य नामा

DISTRICT TREASURY OFFICE DHARASHIV
22 NOV 2023
Stamp Head Clerk / S.T.O. DHARASHIV

श्रीनिवास बोगड
मुद्रांक विक्रेता धाराशिव
प.क्र.३५०१०१८

अटी व शर्ती

१. शासकीय वैद्यकीय महाविद्यालयाची इमारत पूर्ण होण्यासाठी वैद्यकीय शिक्षण व औषधे द्रव्ये विभागाने आवश्यक ते नियोजन व निधीची तरतूद केली आहे. सदरच्या कामास प्रशासकीय मान्यता प्राप्त होऊन प्रत्यक्षात बांधकाम सुरू होण्यास काही अवधी लागणार आहे. याकरिता राष्ट्रीय आर्युविज्ञान आयोगाची मान्यता मिळण्यास अडचण येऊ नये म्हणून रुग्णालयाच्या इमारतींचा वापर वैद्यकीय महाविद्यालयाच्या मान्यता करिता करता येईल.

२. राष्ट्रीय आर्युविज्ञान आयोगाची मान्यता प्राप्त करण्याच्या दृष्टीने जिल्हा शल्यचिकित्सक पूर्ण सहकार्य करतील.

३. शासकीय वैद्यकीय महाविद्यालयात अतिरिक्त जिल्हा शल्य चिकित्सक हे रुग्णालयाचे वैद्यकीय अधीक्षक म्हणून कामकाज पाहतील.

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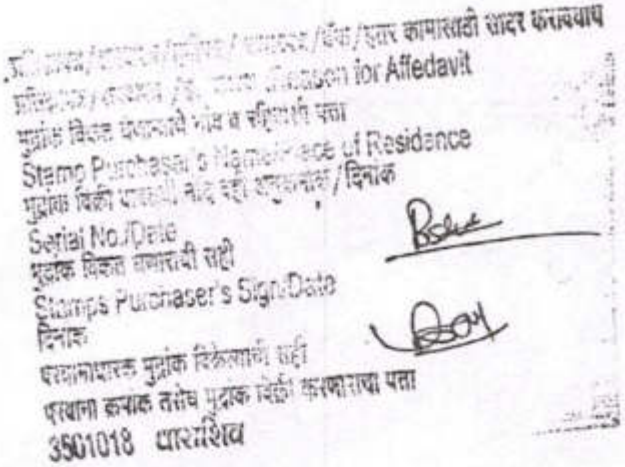
Cell No 9881085078

11 DEC 2023



करार नामा

मा. आधिष्ठाता शासकीय वैद्यकीय महा. -विद्यालय धाराशिव.

2024 | 30/11/2023

४. जिल्हा रुग्णालयातील सार्वजनिक आरोग्य विभागाअंतर्गत एम.बी.बी.एस. वैद्यकीय अधिकारी, आपतकालीन वैद्यकीय अधिकारी/ निवासी वैद्यकीय अधिकारी म्हणून कार्यरत राहतील.

५. आरोग्य सेवेतील इतर तज्ञ वैद्यकीय अधिकारी तसेच कर्मचारी वर्ग हे रुग्णालय हस्तांतरित झाल्यापासून फक्त एका वर्षासाठी वैद्यकीय महाविद्यालयात कार्यरत राहतील. त्यानंतर वैद्यकीय शिक्षण विभाग वरील सर्व पदांसाठी पदनिर्मिती करेल, सदर वैद्यकीय अधिकारी व कर्मचारी अधिष्ठाता आणि रुग्णालय अधीक्षक/ वैद्यकीय अधीक्षक यांच्या नियंत्रणाखाली कार्य करतील. कोणत्याही परिस्थितीत हे अधिकारी/ कर्मचारी प्रतिनियुक्तीने/ समावेशन इतर कोणत्याही पद्धतीने वैद्यकीय शिक्षण व औषधे द्रव्ये विभागाकडे हस्तांतरित करता येणार नाही. जर वैद्यकीय शिक्षण विभागास आपत्कालीन वैद्यकीय अधीक्षक (सी.एम.ओ) आवश्यक असतील तर तसा प्रस्ताव त्यांनी सार्वजनिक आरोग्य विभागात कडे देऊन मंजुरी घ्यावी.

तथापी दिनांक २०/०५/२०२२ रोजी झालेल्या सामंजस्य करारानुसार एक वर्षाची अटबाबत करार करण्यात आला होता. सदरचा कालावधी दिनांक १९/०५/२०२३ रोजी संपत असून मा. शासनाने दिनांक १३/०६/२०२३ च्या आदेशानुसार व मा.संचालक, वैद्यकीय शिक्षण व संशोधन, मुंबई यांच्या दिनांक ३०-०६-२०२३ च्या आदेशानुसार यापूर्वीचा सामंजस्य करारा मधील अट शिथिल करून दिनांक १९/०५/२०२३ पासून पुढे दोन वर्षासाठी सार्वजनिक आरोग्य विभाग विभागाने सहमती दर्शवली असल्याने दिनांक १९/०५/२०२३ ते दिनांक १८/०५/२०२५ पर्यंत सदर वैद्यकीय अधिकारी व कर्मचारी अधिष्ठता आणि रुग्णालय अधीक्षक वैद्यकीय अधीक्षक यांच्या नियंत्रणाखाली काम करतील. असा अंशत: बदल मा.शासनाच्या व मा.संचालनालयाच्या आदेशानुसार करण्यात येऊन सदरचा सुधारीत सांमजस्य करार (MOU) करण्यात आला आहे.

६. सार्वजनिक आरोग्य विभागाच्या विविध शासकीय योजनेअंतर्गत कंत्राटी तत्त्वावर नियुक्ती करण्यात आलेले अधिकारी व कर्मचारी यांची सर्व पदे पूर्वीप्रमाणे जिल्हा शल्य चिकित्सक यांचे नियंत्रणा खाली राहतील. रुग्णालय हस्तांतर झाल्यानंतर त्यांच्या सेवा आपोआप सार्वजनिक आरोग्यसेवा यंत्रणेकडे वर्ग होतील.

७.जिल्हा शल्य चिकित्सक कार्यालयातील सर्व पदे पूर्वीप्रमाणेच जिल्हास्तरावर कार्यरत राहतील. त्यांची वेतन तेथे जिल्हा शल्य चिकित्सक अदा करतील. सार्वजनिक आरोग्य विभागातील इतर सर्व कार्यरत अधिकारी/ कर्मचारी तसेच कंत्राटी कर्मचारी यांचे वेतन व देयके पूर्वीप्रमाणे जिल्हा शल्य चिकित्सक अदा करतील. मात्र वैद्यकीय महाविद्यालयातील कार्यरत सर्व अधिकारी/ कर्मचारी अधिष्ठता यांचे नियंत्रणाखा नियंत्रणाखाली राहतील.

८. सदरहू रुग्णालयातील उपलब्ध यंत्रसामुग्री व जड वस्तुसंग्रह आहे त्या स्थितीत वैद्यकीय महाविद्यालय व रुग्णालय यांना वर्ग करण्यात येईल. यापुढे त्यावरील दुरुस्ती व देखभालीचा खर्च संबंधित वैद्यकीय महाविद्यालय व रुग्णालय यांनी त्यांचे निधीतून भागवावा .या संदर्भात सार्वजनिक आरोग्य विभागाकडे निधीची मागणी मागणी करता येणार नाही. तसेच वैद्यकीय महाविद्यालय व रुग्णालयास जी यंत्रसामुग्री व जड वस्तू संग्रह वर्ग करण्यात आला आहे तो सांमजस्य करार संपुष्टात आल्यानंतर सुस्थितीत सार्वजनिक आरोग्य विभागास परत करण्यात यावा.

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Dist. Osmanabad (Maha)

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९. जिल्ह्यातील ग्रामीण रुग्णालय/ उपजिल्हा रुग्णालय /प्राथमिक आरोग्य केंद्र कडून संदर्भित केलेल्या रुग्णांना प्राधान्याने दाखल करून घेण्याची कार्यवाही करण्यात येईल. यासाठी अतिरिक्त जिल्हा शल्यचिकित्सक (वैद्यकीय अधीक्षक) हे समन्वय करून ग्रामीण भागातील संदर्भित झालेले रुग्ण दाखल दाखल होतील यावी दक्षता घेतील.

१०. राष्ट्रीय आरोग्य अभियानाचे सुरू असलेले कार्यक्रम विनाखंड व प्रभावीपणे वैद्यकीय शिक्षण व औषधी द्रव्ये विभागामार्फत राबविण्यात येतील तसेच, त्यासाठी उपलब्ध निधी खर्च करून राष्ट्रीय आरोग्य अभियान कार्यालयाकडे वेळेवर अहवाल सादर करण्यात येईल.

११. SNCU/DEIC/Dialsys यांचे कार्यान्वयन, वैद्यकीय महाविद्यालयाने केंद्र शासनाच्या आणि वेळोवेळी येणा-या राष्ट्रीय आरोग्य अभियानाच्या मार्गदर्शक सूचनेनुसार करणे आवश्यक राहील. सदर केंद्रातील कंत्राटी कर्मचारी/तज्ञ/ अधिकारी यांच्या सेवा वैद्यकीय महाविद्यालयात इतरत्र वापरता वापरता येणार नाही. या सर्व कंत्राटी कर्मचाऱ्यांचे मानधन जिल्हा शल्यचिकीत्सक अदा करतील. SNCU/DEIC/Dialsys या युनिट दैनदिन कार्यान्वयन संबंधित विभागाच्या विभाग प्रमुखाच्या (Unit Head) नियंत्रणाखाली चालेल कंत्राटी कर्मचारी व अधिकारी यांच्या व्यतिरिक्त त्या विभागासाठी आवश्यक तो कर्मचारी आणि अधिकारी वर्ग उपलब्ध करून देण्याची जबाबदारी अधिष्ठाता, वैद्यकीय शिक्षण व औषधे द्रव्ये विभागाची राहील.

१२.फिरते नेत्र पथक हे पूर्वीप्रमाणेच जिल्हा शल्यचिकित्सक,धाराशिव यांच्या अखत्यारित राहिल, त्यांचे हस्तांतरण करण्यात येऊ नये. राष्ट्रीय आयुर्विज्ञान आयोगाच्या मानकाप्रमाणे स्वतंत्र नेत्रचिकित्सा शास्त्र विभाग अधिष्ठाता, शासकीय वैद्यकीय महाविद्यालय यांच्या नियंत्रणाखाली राहील जिल्हा शल्यचिकीत्सक, धाराशिव यांच्याकडे नेत्र विभाग , फिरते नेत्र पथक करण्यात आणि अधिष्ठाता त्यांच्या नियंत्रणा खालील नेत्र शल्यचिकीत्सा शास्त्र विभाग व राष्ट्रीय अंधत्व निवारण कार्यक्रम हे समन्वयाने काम पाहतील. एनडीसी आणि वृद्धत्व रुग्णालय तसेच मानसिक आरोग्य कार्यक्रम यांचे मासिक अहवाल जिल्हा शल्यचिकित्सक सादर करतील.(फिरते मित्र पथक कार्यान्वित असल्यास)

१३. शाराकीय वैद्यकीय गहाविद्यालय व रुग्णालय, धाराशिव करिता अधिष्ठाता हे नियंत्रक व प्रशासकीय प्रमुख म्हणून रुग्णालय हस्तांतरणाच्या दिनांका पासून काम पाहतील.

१४. जिल्हा सामान्य रुग्णालय परिसरातील सर्व जागा रुग्णालयीन जिल्हा शल्यचिकीत्सक यांच्या नावावर राहील. रुग्णालय इमारतीचा वापर वैद्यकीय शिक्षण विभाग करेल तथापि क्षयरोग/ कुष्ठरोग कार्यालय जिल्हा शल्य चिकित्सक कार्यालय, नर्सिंग/ स्कूल कॉलेज इमारत जिल्हा शल्य चिकित्सक औषध भांडार पूर्वीप्रमाणेच जिल्हा शल्यचिकीत्सक यांच्या नावे राहील. जिल्हा अंध्यत्व व निवारण सोसायटीसाठी उपलब्ध असलेल्या शस्त्रक्रियापैकी एक शस्त्रक्रिया गृह (OT) मोतीबिंदू शस्त्रक्रिया साठी उपलब्ध करून द्यावे.

१५. रुग्णालय इमारतीमधील (आधीपासून अस्तित्वात नसलेली बांधकाम न केलेली, इमारत बांधकाम प्रस्तावित असेल इत्यादी वा तत्सम कारणास्तव वेगळी काढणे आवश्यक असेल तर अथवा जिल्हा शल्यचिकीत्सक यांना तशी जागा बांधकाम वगैरे कार्यासाठी आवश्यक असेल तर) सुमारे ५००० हजार चौरस फूट जागा जिल्हा शल्यचिकीत्सक कार्यालय, रुग्णालयीन प्रशासकीय कार्यालय इत्यादीसाठी व सुमारे ५००० हजार चौरस फूट जागा औषधी भांडार यासाठी व अशा कामासाठी एकूण सुमारे १०००० चौरस फुट जागेचे क्षेत्र सार्वजनिक आरोग्य विभाग कडेच ठेवण्यात येईल. या दोन्ही कारणाकरता जिल्हा शल्यचिकित्सक हे त्यांच्या सोयीनुसार व पसंतीने जागा निवडू शकतील.

अ . जिल्हा सर्वोपचार रुग्णालय, धाराशिव परिसरातील रुग्णालयाशी थेट संबंधित नसलेल्या इमारती, आस्थापना इत्यादी पूर्वीप्रमाणेच संबंधित विभागाच्या अधिनस्त राहतील राहील.

१६. जिल्हा शल्यचिकीत्साकांच्या कार्यालयातील आहारण व संवितरण अधिकारी यांची सद्यस्थितीतील पदस्थापना सार्वजनिक आरोग्य विभागांमध्येच जिल्हा शल्य चिकित्सक यांच्या अखत्यारितच अबाधित सुरू राहील.

अ. नवीन शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव या संस्थेसाठी वैद्यकीय शिक्षण व औषधे द्रव्ये विभागाने, संचालक, वैद्यकीय शिक्षण व संशोधन, मुंबई यांच्या विद्यमाने नवीन शासकीय वैद्यकीय महाविद्यालय, धाराशिव व शासकीय वैद्यकीय महाविद्यालय,धाराशिव या संस्थांसाठी स्वतंत्र आहरण व संवितरण अधिकारी यांची नियुक्ती करण्यात यावी.

ब. जिल्हा शल्य चिकित्सकांच्या कार्यालयातील आहरण व संवितरण अधिकारी हा जिल्हा शल्य चिकित्सकांच्या अखत्यारितच आहरण व संवितरण अधिकारी म्हणून काम करेल आणि शासकीय वैद्यकीय महाविद्यालय, धाराशिव व

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शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव संस्थांसाठी नियुक्त/प्रतिनियुक्त करण्यात आलेले स्वतंत्र आहारण व संवितरण अधिकारी हे अधिष्ठाता शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव यांच्या अखत्यारीत काम करतील.

१७. धाराशिव येथे नवीन शासकीय वैद्यकीय महाविद्यालय व रुग्णालय स्थापन करून कार्यान्वित करण्याकरिता वैद्यकीय शिक्षण व औषधी द्रव्ये विभागाकडून नव्याने विहित लेखाशीर्ष तयार करून देणे व सदर लेखा शिर्षांतर्गत निधी उपलब्ध होईपर्यंत वैद्यकीय शिक्षण व औषधी द्रव्ये विभागाकडून धाराशिव येथील प्रस्तावित शासकीय वैद्यकीय महाविद्यालयाने रुग्णालया दोन्ही संस्थांना स्वतंत्ररित्या वेगळा निधी उपलब्ध करून द्यावा.

१८. वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग महाराष्ट्र शासन यांनी प्रस्तावित शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव येथे महाविद्यालय व रुग्णालय या दोन्ही आस्थापनावर अध्यापन सेवा व रुग्णसेवा आणि तदअनुंषगीक बाबी समाधानकारकपणे पूर्ण होण्याच्या दृष्टीने विविध विषयातील विशेषज्ञ व वैद्यकीय आस्थापनाचा पुरेसा अनुभव असलेले वैद्यक तज्ञ यांचा सेवा आवश्यकतेनुसार त्यांच्या अख्यारितीतील वैद्यकीय महाविद्यालयातील वैद्यक तज्ञ यांना या महाविद्यालयात प्रतिनियुक्त करून अथवा त्यांच्या स्तरावर आवश्यक त्या विविध पद्धतीने कार्यवाही करून पदभरतीची कार्यवाही संपन्न करावी व नियोजित नवीन वैद्यकीय महाविद्यालयात विविक्षीत कामे व कार्यप्रणाली सुरळीत राहण्यासाठी आवश्यक पदे उपलब्ध करून द्यावीत. पदे भरेपर्यंत (नियमित, कंत्राटी, बाह्य स्रोत अथवा वैद्यकीय शिक्षण व औषध द्रव्ये विभाग, महाराष्ट्र शासन यांना सुयोग्य वाटेल अशा पद्धतीने भरून) (जे आधी घडेल तोपर्यंत) वैद्यकीय महाविद्यालय रुग्णालयाकडे कार्यरत राहतील.

१९. सार्वजनिक आरोग्य विभागाने विविध शासकीय योजना अंतर्गत कंत्राटी अथवा इतर तत्सम तत्वावर नियुक्त केलेले अधिकारी व कर्मचाऱ्यांची सर्व पदे आर्थिक बाबींची सार्वजनिक आरोग्य विभागाकडून पूर्तता होणे जमेस धरून पूर्वीप्रमाणे जिल्हा शल्यचिकित्सक यांचे अखत्यारीतीत राहतील.

२०. राष्ट्रीय आयुर्विज्ञान आयोगाच्या निकषांची पूर्तता करण्याकरिता रुग्णालयाच्या मूळ रचनेत बदल करण्याकरिता जिल्हा शल्य चिकित्सक यांच्या परवानगीची आवश्यकता राहील. अधिष्ठता यांना त्यात काही बदल करावयाचे झाल्यास शासनाची मान्यताप्राप्त करून ते आवश्यकतेनुसार करून घेण्याचा अधिकार राहील.

२१. जिल्हा शल्य चिकित्सक, धाराशिव यांच्याकडे जिल्हा सामान्य रुग्णालय, धाराशिव येथे कार्यरत असलेले वैद्यकीय अधिकारी हे त्यांच्या आर्हते नुसार शासकीय वैद्यकीय महाविद्यालय, धाराशिव येथे राष्ट्रीय आयुर्विज्ञान आयोगाच्या निरीक्षणावेळी ट्विटर, कनिष्ठ निवासी, वरिष्ठ व सहाय्यक प्राध्यापक कामकाज पाहतील.

२२. शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव येथील नियमित पदभरती होईपर्यंत सध्या कार्यरत असलेले वैद्यकीय अधीक्षक, वैद्यकीय अधिकारी, अधिसेविका अधिपरिचारिका, परिसेविका व इतर तांत्रिक व अतांत्रिक संवर्गातील वर्ग-३ व वर्ग-४ चे कर्मचारी त्यांना पूर्वी नेमणूक नेमून दिल्याप्रमाणे त्यांचे कार्यरत पदावर नियमितपणे कामकाज पाहतील. सदर कालावधीची मर्यादा कमाल एक वर्षाची राहील त्यानंतर सदर कर्मचाऱ्यांना इतर आरोग्य संस्थेत स्थलांतरित करण्यात येईल.

तथापी दिनांक २०/०५/२०२२ रोजी झालेल्या सामंजस्य करारानुसार एक वर्षाची अटवाबत करार करण्यात आला होता. सदरचा कालावधी दिनांक १९/०५/२०२३ रोजी संपत असून मा. शासनाने दिनांक १३/०६/२०२३ च्या आदेशानुसार व मा.संचालक, वैद्यकीय शिक्षण व संशोधन, मुंबई यांच्या दिनांक ३०-०६-२०२३ च्या आदेशानुसार यापूर्वीचा सामंजस्य करारा मधील अट शिथिल करून दिनांक १९/०५/२०२३ पासून पुढे दोन वर्षासाठी सार्वजनिक आरोग्य विभाग विभागाने सहमती दर्शवली असल्याने दिनांक १९/०५/२०२३ ते दिनांक १८/०५/२०२५ पर्यंत सदर वैद्यकीय अधिकारी व कर्मचारी अधिष्ठता आणि रुग्णालय अधीक्षक वैद्यकीय अधीक्षक यांच्या नियंत्रणाखाली काम करतील. असा अंशत: बदल मा.शासनाच्या व मा.संचालनालयाच्या आदेशानुसार करण्यात येऊन सदरचा सुधारीत सामंजस्य करार (MOU) करण्यात आला आहे.

२३. शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव या संस्थेकरीता मंजूर झालेल्या पदांना वेतनासाठी नियमितपणे अनुदान प्राप्त होईपर्यंत सद्यस्थितीत शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव या

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GOVT OF INDIA
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Aurangabad(Maha.)
Mob No. 9823103907

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संस्थेकरिता जिल्हा शल्य चिकित्सक यांच्याकडील कार्यरत असलेल्या अधिकारी व कर्मचारी यांचे वेतन जिल्हा शल्यचिकीतक,धाराशिव हे अदा करतील. सदर व्यवस्था हस्तांतरनापासून सहा महिन्यासाठी कार्यरत राहील.

२४. शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव या संस्थे करिता वापरण्यात येणारी यंत्रसामग्री, साधन सामग्री व उपकरणे तसेच शासकीय कामकाजाकरिता आवश्यक ती दूरध्वनी, वीज,पाणी, भाडेपट्टी कर यंत्र सामुग्री देखभाल व दुरुस्ती खर्च व तत्संबधीचे इतर देयके ही नियमित अनुदान प्राप्त होईपर्यंत जिल्हा शल्य चिकित्सक, धाराशिव हे अदा करतील. सदर व्यवस्था हस्तांतरापासून सहा महिन्यासाठी कार्यरत राहील.

२५. वैद्यकीय महाविद्यालया करिता स्वतंत्र स्वीय प्रपंच खाते निर्माण करण्याची कार्यवाही अधिष्ठाता, शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव यांचे मार्फत करण्यात येईल.

२६. सर्व कायदेशीर बाबीसाठी उदाहरणार्थ Pre-Conception and Pre-Natal,Diagnostic Technique (PCPNDT), Medical Negligence, Epidemic act व इतर तत्सम समित्यांसाठी जिल्हा समुचित प्राधिकारी हे जिल्हा शल्यचिकीत्सक राहतील.

२७. दिव्यांग तपासणी मंडळ, गट-अ आणि गट-ब अधिकाऱ्यासाठींची वैद्यकीय मंडळे, अधिष्ठता यांच्याकडे निर्माण करण्यात येते. यासाठी स्वालंबन प्रणालीचे नवीन लॉगिन आणि पासवर्ड मिळेपर्यंत दिव्यांग मंडळ जिल्हा शल्यचिकीत्सक यांचे नियंत्रणाखाली राहील. गट-क व गट-ड कर्मचाऱ्यांसाठी वैद्यकीय प्रमाणपत्रे पूर्वीप्रमाणे जिल्हा शल्यचिकीत्सक देतील. यासाठी तज्ञांचा अभिप्राय आवश्यकतेप्रमाणे वैद्यकीय महाविद्यालयातील तज्ञामार्फत उपलब्ध करून देण्यात येतील.

२८. वैद्यकीय महाविद्यालयातील अधिकारी व कर्मचारी यांचे वैद्यकीय प्रतिपुर्ती देयकाकरीता अधिष्ठता अथवा त्यांनी प्राधिकृत केलेले विभाग प्रमुख हे प्राधिकृत अधिकारी राहतील. जिल्ह्यातील इतर विभागाच्या वैद्यकीय परिपूर्तीसाठी प्रमाणपत्र देण्याचे अधिकार जिल्हा शल्यचिकीत्सक यांना पूर्वीप्रमाणे राहील.

२९. नवीन शासकीय वैद्यकीय महाविद्यालय व रुग्णालय कार्यान्वित करण्यासाठी वैद्यकीय शिक्षण व औषधी द्रव्ये विभागाने वैद्यकीय महाविद्यालय व रुग्णालयासाठी स्वतंत्र लेखाशीर्ष व निधी उपलब्ध करून द्यावा.

३०. सार्वजनिक आरोग्य विभाग व वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग यांच्यामध्ये आपसी सामंजस्य करारनामा झाल्यानंतर सुरक्षा, स्वच्छता, वस्त्र धुलाई, आहार व सुविधा वैद्यकीय महाविद्यालय मार्फत सुरू करण्यात यावेत. सध्या रुग्णालयात उपलब्ध असलेल्या अवैद्यकीय सेवा चालू ठेवण्याबाबत अधिष्ठाता निर्णय घेतील. सदरच्या सेवा पुढे चालू ठेवायच्या झाल्यास हस्तांतरणाच्या दिनांकापर्यंतची देयके सार्वजनिक आरोग्य सेवा यंत्रणेमार्फत अदा करण्यात येतील.

३१. हस्तांतरणाच्या दिवशी जिल्हा रुग्णालयामध्ये उपलब्ध असलेल्या औषधांचा साठा वैद्यकीय शिक्षण व औषधी द्रव्ये विभागाकडे हस्तांतरित करण्यात येईल. रुग्णालय हस्तांतरित झाल्यानंतर रुग्णालयातील औषधी व कंज्युमेबल उपलब्ध करून देण्याची जबाबदारी ही वैद्यकीय शिक्षण औषधी व द्रव्ये विभागाची राहील.

३२. या सांमजस्य कराराचा कालावधी दोन वर्ष इतका राहील

वरील सर्व अटी व शर्ती मान्य आहेत.

जिल्हा शल्यचिकित्सक,
जिल्हा रुग्णालय, धाराशिव

अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय, धाराशिव

संचालक,
आरोग्य सेवा संचालनालय,मुंबई

संचालक,
वैद्यकीय शिक्षण व संशोधन,मुंबई

Before Me

NOTARY
GOVT.OF INDIA
Adv.SURESH U.MULE
Dist.Osmanabad(Maha.)
Cell No.9881089078

1 DEC 2023

महाराष्ट्र शासन
शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद
GOVERNMENT MEDICAL COLLEGE, OSMANABAD
New Building, Civil Hospital Compound, Osmanabad. (Maharashtra) ४१३ ५०१
e-mail: deangmcosmanabad@gmail.com

जा.क्र.शावैमउ/ / 3317-25/२०२३ दि.: ०२/०५/२०२३

प्रति,

मा.आयुक्त
वैद्यकीय शिक्षण व संशोधन,
मुंबई.

विषय :- सामजंस्य करारानूसार मनुष्यबळ उपलब्ध करून देण्या बाबत ---

संदर्भ :- १) डॉ. आर.व्हि.गलांडे पाटील जिल्हा शल्यचिकित्सक जिल्हा रुग्णालय,उस्मानाबाद यांचे पत्र जा.क्र.जिरुउ/रुग्णालय,पाटपुरवा/४६७०-७६/२३ दिनांक २७/०२/२०२३

२) डॉ. स्मिता ए.सरोदे वैद्यकिय अधिक्षक वर्ग १ स्त्री रुग्णालय धाराशिव यांचे पत्र जा.क्र जिरुउ/नविन आ.संस्थ.का ९२६-३० दिनांक २५/०३/२०२३

३) मा. जिल्हा शल्यचिकित्सक, जिल्हा रुग्णालय उस्मानाबाद यांचे परिपत्रक जा.क्र.जिरुउ/नविन आ.संस्था का.७१३६-४६/२३ दिनांक २३/०३/२०२३

४) No: DMER-१२०११/१३/२०२२-EDU (MOU) दिनांक २७/०५/२०२२

५) या कार्यालयाचे पत्र जा.क्र. शावैमउ २९४४-५२ दिनांक ०६/०४/२०२३

६) वर्ग ४ कर्मचाऱ्यांचे समायोजन करणे बाबतचे या कार्यालयास प्राप्त झालेले पत्र आ.क्र४६१९ दिनांक १८/०४/२०२३

७) महाराष्ट्र राज्य गव्हर्न्मेन्ट नर्सस असोसिएशन, उस्मानाबाद यांचे या कार्यालयास प्राप्त झालेले पत्र आ.क्र ४८६१ दिनांक ०२/०५/२०२३

मा. महोदय,

उपरोक्त विषया नुसार शासकीय वैद्यकीय महाविद्यालय येथील सद्यपरिस्थीती आपल्या-अवलोकनार्थ व योग्य त्या आदेशीत कार्यवाहीसाठी निवेदित करीत आहे.

जिल्हा रुग्णालय व स्त्री रुग्णालय धाराशिव (उस्मानाबाद) हे संदर्भीय पत्र क्र.४ नुसार सामजंस्य करारानुसार शासकीय वैद्यकीय महाविद्यालय धाराशिव (उस्मानाबाद) यांच्याकडे वर्ग करण्यात आले आहे.

जिल्हा शल्यचिकित्सकांच्या संदर्भ क्र.१ मधील पत्रानुसार सामजंस्य कराराचा आधार घेवून वर्ग -१ ते वर्ग-४ संवर्गातील सर्व मनुष्यबळ दिनांक १५ जून २०२३ नंतर सार्वजनिक आरोग्य विभागातील इतर रुग्णालयाकडे वर्ग केले जाणार आहे.

नवीन शासकीय वैद्यकीय महाविद्यालय सुरू करावयास लागणारे संलग्नीत रुग्णालय उपलब्ध करून घेण्यासाठी सामजंस्य करार करण्यात आला होता. संदर्भ क्र. ४ नुसार सदरील कराराचा कालावधी हा तीन वर्षाइतका आहे असे सामजंस्य करारामधील मुद्दा क्र. ३२ मध्ये नमूद केले आहे, मात्र त्याच बरोबर सामजंस्य करारातील मुद्दा क्र. ०५ मध्ये असे नमूद आहे, की आरोग्य सेवेतील तज्ञ वैद्यकीय अधिकारी व कर्मचारी फक्त एक वर्षासाठी वैद्यकीय महाविद्यालयात कार्यरत राहतील.

शासकीय वैद्यकीय महाविद्यालय,धाराशिव (उस्मानाबाद) येथे झालेल्या राष्ट्रीय आयुर्विज्ञान आयोगाच्या फेब्रूवारी २०२३ मधील इन्सपेक्शनमध्ये त्रूटी काढल्या आहेत. अशा परिस्थितीत रुग्णालयातील त्रुटीत वाढ झाल्यास शासकीय वैद्यकीय महाविद्यालयाचे भविष्य धोक्यात येईल.

त्याशिवाय शासकीय वैद्यकीय महाविद्यालयाला उपलब्ध कर्मचारी वृंद हा खूप कमी आहे, व बहुतांश अध्यापक वर्ग Deputaion वर आहे, त्याचबरोबर रुग्णालयातील कर्मचारी अजून पूर्णपणे उपलब्ध झालेले नाहीत. अशा परिस्थितीत जर आरोग्य सेवेतील कर्मचारी जूनमध्ये संपूर्णपणे काढून घेतले तर संपुर्ण यंत्रणा विस्कळीत होऊ शकते. याचा विपरीत परिणाम शासकीय वैद्यकीय महाविद्यालयाच्या प्रतिभेवर तर होईलच व रुग्णसेवेवर अत्यंत विपरीत परिणाम होऊ शकतो

02/05/2023

[illegible]
वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग
मंत्रालय, मुंबई ४०० ०३२

तरी सदरील सर्व बाबींचा सारासार विचार करता रुग्णसेवेसाठी पुढील नियोजनाचे आदेश व्हावेत.

सामजंस्य करार हा तीन वर्षांकरीता केलेला असला तरी त्यातील मुद्दा क्र. ०५ मध्ये मनुष्यबळ केवळ एक वर्षासाठी शासकीय वैद्यकीय महाविद्यालय धाराशिव येथे देण्यात आले आहे. शासकीय वैद्यकीय महाविद्यालय व रुग्णालय येथे रुग्णालयासाठीची पदनिर्मिती शासन स्तरावर प्रलंबित आहे.जर करारातील कलमानुसार एक वर्षानंतर जिल्हा रुग्णालयातील वर्गवारी वृंद सार्वजनिक आरोग्य विभागातील इतर रुग्णालयात पाठवण्यात आली तर शासकीय वैद्यकीय महाविद्यालय व रुग्णालय या संस्थेकडे पुरेशे मनुष्यबळ अल्पमितीला उपलब्ध नसल्याने कठिण परिस्थीती निर्माण होऊ शकते.

शासकीय वैद्यकीय महाविद्यालयाचे व रुग्णालयाचे पूर्ण मनुष्यबळ उपलब्ध होईपर्यंत जिल्हा रुग्णालयातील कर्मचारी वृंद रुग्णहितासाठी व कोव्हिड परिस्थीती लक्षात घेता, सामजंस्य करारानुसार महाविद्यालयाकडे वर्ग रहावा असे वाटते (MOU मधील मुद्दा क्र. ०५ व ३२ मध्ये योग्य बदल करून)

शासकीय वैद्यकीय महाविद्यालयाचे व रुग्णालयाचे मनुष्यबळ जसे जसे प्राप्त होईल तसे तसे जिल्हा रुग्णालयातील कर्मचारी वर्ग क्रमाक्रमाने बदलावा जेणे करून रुग्णसेवेवर परिणाम होणार नाही आणि शासकीय वैद्यकीय महाविद्यालयाची पायाभूत बांधणीही योग्य त्या दृष्टीने होईल असे वाटते.

संदर्भ क्र. ५ नुसार जिल्हा रुग्णालय उस्मानाबाद व सी रुग्णालय उस्मानाबाद येथील कार्यरत वर्ग ४ कर्मचारी हे शासकीय वैद्यकीय महाविद्यालयाकडे समायोजन होण्यास इच्छुक आहेत, तसेच संदर्भ क्र. ६ नुसार अधिसेविका यांच्या मार्फत पत्राद्वारे जिल्हा रुग्णालयाकडील नर्सिंग स्टाफ देखील शासकीय वैद्यकीय महाविद्यालय उस्मानाबाद येथे समायोजन करून घेण्यास इच्छुक असलेबाबत कळविण्यात आले आहे. सदरील विनंती ही सामजंस्य करारास धरून नाही.सामजंस्य करारातील मुद्दा क्र. १८ मध्ये, पदे भरे पर्यंत वैद्यकीय महाविद्यालय रुग्णालयाकडे कार्यरत राहील असे नमूद केले आहे,याचा अर्थबोध होत नाही.

मात्र अशी परिस्थीती आहे की, १५जून २०२३ नतंर जर सार्वजनिक आरोग्य विभागाचे मनुष्यबळ काढण्यात आले व तो पर्यंत पर्यायी मनुष्यबळ उपलब्ध झाले नाही तर रुग्णसेवेसाठी गंभीर व विचीत्र परिस्थीती निर्माण होऊ शकते.

तरी रुग्णसेवेच्या दृष्टीकोनातून वरील सबबींचा सारासार विचार होऊन त्यासाठीच्या योग्य कार्यवाहीचे लवकरात लवकर निर्देश प्राप्त व्हावेत ही विनंती.

आपली विश्वासु

डॉ. शिल्पा व. दोनकुंडवार
अधिष्ठाता
शासकीय वैद्यकीय महाविद्यालय उस्मानाबाद

प्रत :- माहितीस्तव सविनय सादर.

१. मा. संचालक, वैद्यकीय शिक्षण व संशोधन, मुंबई (dbranchdmer@gmail.com) (fbranchdmer@gmail.com
२. मा. सचिव वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मंत्रालय, मुंबई. (vaiseva2.medd-mh@gov.in)
३. मा. संचालक आरोग्य सेवा, आयुक्तालय मुंबई-१ (dhs_२००५@rediffmail.com)
४. मा. संचालक, आरोग्य सेवा आयुक्तालय, पुणे-२ (sfwbcell@gmail.com)
५. मा. उपसंचालक,आरोग्य सेवा लातूर (ddhslatur२००८@yahoo.com)
६. मा. जिल्हाधिकारी, उस्मानाबाद (cs.osmanabad१@gmail.com)
७. मा. जिल्हा शल्य चिकित्सक जिल्हा रुग्णालय उस्मानाबाद (cs_osmanabad१@rediffmail.com)
८. मा. वैद्यकीय अधिक्षक सी रुग्णालय धाराशिव उस्मानाबाद (whosmanabad@rediffmail.com)

Email - 15-06-2023

तात्काळ

G. M. C., Osmanabad
Inward No. 5671
Date 15-06-2023

महाराष्ट्र शासन
क्र:- एमईडी-२०१९/प्र.क्र.१८४(भाग अ)/१९/शिक्षण-१
वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग,
गोकुलदास तेजपाल रुग्णालय आवार,
९ वा मजला, गो. ते. रुग्णालय संकुल,
लोकमान्य टिळक मार्ग,नवीन मंत्रालय,
मुंबई - ४०० ००१.
दिनांक:- १३.०६.२०२३.

प्रति,
आयुक्त,
वैद्यकीय शिक्षण,
मुंबई.

विषय:- सार्वजनिक आरोग्य विभागाच्या अखत्यारितील जिल्हा सामान्य रुग्णालय, स्त्री रुग्णालय आणि क्षय रुग्णालय येथील अधिकारी व कर्मचारी यांची पदे पुढील २ वर्षाकरिता शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद येथे कार्यरत ठेवण्यास मुदतवाढ देण्याबाबत.

संदर्भ:- १) शासन निर्णय, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, मुंबई, क्र.एमईडी२०१९/प्र.क्र.१८४/१९/शिक्षण-१, दि.२७.०१.२०२१.
२) समक्रमांकित शासन पत्र दि. १७.०५.२०२३
३) आपले पत्र क्र.DMER-१२०११/१३/२०२२- EDU/१०६९/४.५.२०२३

महोदय,

उपरोक्त विषयाच्या अनुषंगाने आपणास कळविण्यात येते की, सार्वजनिक आरोग्य विभागाच्या अखत्यारितील उस्मानाबाद येथील २३६ खाटांचे जिल्हा सामान्य रुग्णालय, ६० खाटांचे स्त्री रुग्णालय आणि २० खाटांचे क्षय रुग्णालय असे मिळून एकूण ३१६ खाटांची रुग्णालये स्थावर व जंगम मालमत्तेसह वैद्यकीय शिक्षण व औषधी द्रव्ये विभागास निःशुल्क वापरास उपलब्ध करुन देण्याकरिता संचालक, वैद्यकीय शिक्षण आणि संशोधन, मुंबई व संचालक, आरोग्य सेवा संचालनालय, मुंबई यांच्यामध्ये करावयाच्या सामंजस्य करारास संदर्भ क्र.२ येथील शासन पत्रान्वये मान्यता देण्यात आली होती.

२. संदर्भ क्र.३ येथील आपल्या पत्रान्वये सादर केलेल्या प्रस्तावाच्या अनुषंगाने सदर सामंजस्य करारातील अट क्र.५ व २२ मध्ये अंशत: बदल करून सदर अधिकारी व कर्मचारी यांची पदे मुदत संपुष्टात आलेल्या दिनांकापासून पुढील २ वर्षाकरिता शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद येथे कार्यरत ठेवण्यास सार्वजनिक आरोग्य विभागाने सहमती दर्शविली आहे.

३. त्यानुसार सदर मुदतवाढीस शासनाची मान्यता देण्यात येत असून यापुर्वी केलेल्या सामंजस्य करारामध्ये उपरोक्त नमूद केल्याप्रमाणे अट क्र.५ व २२ मध्ये अंशत: बदल करावा. सदर कराराची प्रत शासनास सादर करावी.

आपला,

(अजित सासुलकर)
उप सचिव, महाराष्ट्र शासन

MOU Please mail

प्रत माहितीस्तव-
१) संचालक, वैद्यकीय शिक्षण आणि संशोधन, मुंबई
२) संचालक, आरोग्य सेवा संचालनालय, मुंबई

DMER-12011/13/2022-EDU.

Email !- 30.06.2023

/73497/2023 MOU

संचालनालय, वैद्यकीय शिक्षण आणि संशोधन, मुंबई

http://www.med-edu.in & http://www.dmer.org

File No: DMER-12011/13/2022-EDU. दिनांक: /०६/२०२३

प्रति,
अधिष्ठाता,
शासकीय वैद्यकीय महाविद्यालय,
उस्मानाबाद.

G. M. C., Osmanabad
Inward No. 5943
Date 01-07-2023

विषय : सार्वजनिक आरोग्य विभागाच्या अखत्यारितील जिल्हा सामान्य रुग्णालय, स्त्री रुग्णालय आणि क्षय रुग्णालय येथील अधिकारी व कर्मचारी यांची पदे पुढील २ वर्षाकरीता शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद येथे कार्यरत ठेवण्यास मुदतवाढ देण्याबाबत.

संदर्भ : शासन पत्र क्र. एमईडी-२०१९/प्र.क्र.१८४(भाग अ)/१९/शिक्षण-१, दि. १३/०६/२०२३

उपरोक्त विषयी संचालनालयाच्या अधिनस्त शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद येथे १०० विद्यार्थी प्रवेश क्षमतेचे नवीन शासकीय वैद्यकीय महाविद्यालय व त्यास संलग्नीत ४३० रुग्णखाटांचे रुग्णालय सुरु करण्यास दिनांक २१/०१/२०२१ च्या शासन निर्णयान्वये मंजूरी प्रदान केली आहे.

शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद येथे शैक्षणिक वर्ष २०२२-२३ मध्ये १०० विद्यार्थी प्रवेशित करण्यास सुरुवात झाली आहे. सदर महाविद्यालयाचे बांधकाम अद्याप पूर्ण झालेले नाही. परंतु राष्ट्रिय आयुर्विज्ञान आयोगाच्या मानकांची पूर्तता करण्याच्या दृष्टीने सार्वजनिक आरोग्य विभागाच्या अधिनस्त उस्मानाबाद येथील २३६ खाटांचे जिल्हा सामान्य रुग्णालय, ६० खाटांचे स्त्री रुग्णालय आणि २० खाटांचे क्षयरोग रुग्णालय स्थावर जंगम मालमत्तेसह वैद्यकीय शिक्षण विभागाकडे तात्पुरत्या स्वरुपात हस्तांतरीत करण्याबाबत संचालक, वैद्यकीय शिक्षण व संशोधन, मुंबई आणि संचालक, आरोग्य सेवा संचालनालय, मुंबई यांचेमध्ये दिनांक १८/०५/२०२२ अन्वये तीन वर्षांच्या कालावधीसाठी सामंजस्य करार करण्यात आलेला आहे. सदर सामंजस्य करारातील अट क्र. ५ व २२ मध्ये नमुद केल्यानुसार जिल्हा रुग्णालयाकडील अधिकारी व कर्मचारी यांच्या पदांची मुदत संपुष्टात आलेली आहे.

यास्तव दिनांक १३/०६/२०२३ च्या शासन पत्रात नमुद केल्यानुसार सामंजस्य करारातील अट क्र. ५ व २२ मध्ये अंशत: बदल करुन सदर अधिकारी व कर्मचारी यांची पदे मुदत संपुष्टात आलेल्या दिनांकापासून पुढील २ वर्षांकरिता शासकीय वैद्यकीय महाविद्यालय, उस्मानाबाद येथे कार्यरत ठेवण्यास सार्वजनिक आरोग्य विभागाने सहमती दर्शविली आहे. त्यानुसार अट क्र. ५ व २२ मध्ये अंशत: बदल करण्यास मंजूरी प्रदान केली आहे. **सोबत शासन पत्राची प्रत जोडली आहे.**

सबब उक्त शासन पत्रात नमुद केल्यानुसार सामंजस्य करारातील अट क्र. ५ व २२ मध्ये अंशत: बदल करुन सामंजस्य कराराचा सुधारित मसुदा तयार करुन स्वाक्षरीकरीता सादर करण्यात यावा. जेणे करुन पुढील कार्यवाही करणे शक्य होईल.

Signed by Deelip Govindrao Mhaisekar
Date: 30-06-2023 11:13:39

संचालक,
वैद्यकीय शिक्षण व संशोधन,
मुंबई.

प्रत: मा. सचिव, वैद्यकीय शिक्षण व औषधी द्रव्ये विभाग, गो.ते.रुग्णालय संकुल इमारत, ९ वा मजला, लोकमान्य टिलक मार्ग,मुंबई -१.

मा. विशेष सचिव
वैद्यकीय शिक्षण
PA

संस्थेचे नाव:- शासकीय वैद्यकीय महाविद्यालय , धाराशिव . (DDO CODE- 3501002398)

सन 2022- 2023 कॉलेज

उद्दिष्ट	मंजुर अनुदान	प्रत्यक्षात रक्कमा
(०१) वेतन	48003	3852
(०२) मजूरी	1	0
(०३) अंतिकालीन भत्ता	1	0
(०६) दुरध्वनी बीज व पाणी	500	450
(१०) कंत्राटी सेवा	4456	26367
(११) देशांतर्गत प्रवास	1	51
(१३) कार्यालयीन खर्च	5000	8274
(१४) भाडेपट्टी व कर	1	0
(१६) प्रकाशने	1	0
(१७) संगणक खर्च	150	1580
(१९) आहार खर्च	1	0
(२२) सामुग्री व पुरवठा	5000	7372
(२३) पेट्रोल व तेल वंगण	1	0
(२६) जाहिराती व प्रसिध्दी	50	0
(२७) लहान बांधकामे	1	14242
(२८) व्यवसायिक सेवा	1	0
(३४) शिष्यवृत्ती व विद्यावेतन	21024	3905
(५०) इतर खर्च	1	0
(५१) मोटार वाहने	1	0
[illegible]	[illegible]	[illegible]
(७२) वैद्यकसामुग्री व उपकरणे यांची देखभाल व दुरुस्ती	1	0
एकूण	94195	81140

PLAN	
मंजुर अनुदान	प्रत्यक्षात रक्कमा
00000	004021

Administrative Officer
Government Medical College
Dharashiv

Dean,
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संस्थेचे नांव:- शासकीय वैद्यकीय महाविद्यालय , धाराशिव (DDO CODE- 3501002398)

सन २०२३ - २०२४ कॉलेज

उद्दिष्ट	मंजुर अनुदान	प्रत्यक्षात रक्कमा
(०१) वेतन	४८००३	९०८२१
(०२) मजूरी	१०	०
(०३) अंतिकालीन भत्ता	१०	०
(०६) दुरध्वनी वीज व पाणी	५००	३९२
(१०) कंत्राटी सेवा	२००००	४२२९४
(११) देशांतर्गत प्रवास	१०	०
(१३) कार्यालयीन खर्च	५२५०	१६१३९
(१४) भाडेपट्टी व कर	१५००	४५०
(१६) प्रकाशने	१	०
(१७) संगणक खर्च	३००	११८
(२) आहार खर्च	१००	७४
(२१) सामुग्री व पुरवठा	५०००	१००१६
(२४) पेट्रोल व तेल वंगण	२००	२८
(२६) जाहिराती व प्रसिध्दी	५०	०
(२७) लहान बांधकामे	१००	१९११६
(२८) व्यवसायिक सेवा	१०	०
(३४) शिष्यवृत्ती व विद्यावेतन	१११००	१७३२९
(५०) इतर खर्च	१	०
(५१) मोटार वाहने	१	०
(५२) यंत्रसामुग्री व साधन सामुग्री	१०५००	४१८८
(७२) यंत्रसामुग्री व उपकरणे यांची देखभाल व दुरुस्ती	१	०
एकूण	१०२६४७	२००९६५

	PLAN	
	मंजुर अनुदान	प्रत्यक्षात रक्कमा
Head 52	54528	36643

Administrative Officer
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कॉलेज

संस्थेचे नांव:- शासकीय वैद्यकीय महाविद्यालय , धाराशिव (DDO CODE- 3501002398)

सन २०२४ - २०२५

उद्दिष्ट	मंजुर अनुदान	प्रत्यक्षात रक्कम
(०१) वेतन	१३८००३	१११९३६
(०२) मजूरी	११	०
(०३) अंतिकालीन भत्ता	१०	०
(०६) दुरध्वनी वीज व पाणी	५००	४००
(१०) कंत्राटी सेवा	३५०००	१०३५२६
(११) देशांतर्गत प्रवास	११	२६३
(१३) कार्यालयीन खर्च	५५१३	७५८५
(१४) गाडेपट्टी व कर	१५००	०
(१५) प्रकाशने	१	०
(१७) संगणक खर्च	३१५	२५७९
(१९) आहार खर्च	१०७	३६
(२१) सामुग्री व पुरवठा	५०००	१४९३
(२४) पेट्रोल व तेल वंगण	२२४	७२
(२६) जाहिराती व प्रसिध्दी	५०	०
(२७) लहान बांधकामे	१०५	४२५३
(२८) व्यवसायिक सेवा	१०	०
(३४) शिष्यवृत्ती व विद्यावेतन	५०७९६	२२८५७
(५०) इतर खर्च	१	०
(५१) मोटार वाहने	१	०
(५२) यंत्रसामुग्री व साधन सामुग्री	११०२५	५५०२
(७३) यंत्रसामुग्री व उपकरणे यांची देखभाल व दुरुस्ती	१	०
एकूण	२४८१८४	२६१५०२

	PLAN	
	मंजुर अनुदान	प्रत्यक्षात रक्कम
Head 52	10000	10000

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कॉलेज

संस्थेचे नांव:- शासकीय वैद्यकीय महाविद्यालय , धाराशिव (DDO CODE- 3501002398)

सन २०२५ - २०२६

उद्दिष्ट	मंजुर अनुदान	प्रत्यक्षात रक्कमा
(०१) वेतन	१५३१८३	
(०२) मजूरी	१२	
(०३) अंतिकालीन भत्ता	१०	
(०६) दुरध्वनी वीज व पाणी	५००	
(१०) कंत्राटी सेवा	४२२९४	
(११) देशांतर्गत प्रवास	११	
(१३) कार्यालयीन खर्च	५६७८	
(१४) भाडेपट्टी व कर	१५००	
(१६) प्रकाशने	१	
(१७) संगणक खर्च	३२४	
(१९) आहार खर्च	१००	
(२१) सामुग्री व पुरवठा	५०००	
(२४) पेट्रोल व तेल वंगण	१००	
(२६) जाहिराती व प्रसिध्दी	५०	
(२७) लहान बांधकामे	११०	
(२८) व्यवसायिक सेवा	१०	
(३४) शिष्यवृत्ती व विद्यावेतन	५६३८४	
(५०) इतर खर्च	५०	
(५१) मोटार वाहने	५०	
(५२) यंत्रसामुग्री व साधन सामुग्री	११५७६	
(७२) यंत्रसामुग्री व उपकरणे यांची देखभाल व दुरुस्ती	१००	
एकूण	२७७०४३	०

	PLAN	
	मंजुर अनुदान	प्रत्यक्षात रक्कमा
Head 52		

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Dharashiv

College

Bill Entry For January 2026 (Budgeted) DDO:002398 -- ADMINISTRATIVE OFFICER GOVERNMENT MEDICAL COLLEGE OSMANABAD

Date:-22/01/2026 Time:-11:00Am

Grant No	Scheme-Object	Object Description	NP/P	January					from April to March			
				Grant	Bills	Exp	Carry'd -ve Bal	Balance	Grant	Bills	Exp	Balance
S-01	2210H098 -01	SALARIES	0	2211382	5	939517	0	1271865	122545080	86	121273215	1271865
S-01	2210H098 -02	WAGES	0	2040	0	0	0	2040	2040	0	0	2040
S-01	2210H098 -03	OVERTIME ALLOWANCES	0	1700	0	0	0	1700	1700	0	0	1700
S-01	2210H098 -06	TELEPHONE ELECTRICITY AND WATER CHARGES	0	227638	1	170980	0	56658	350000	6	293342	56658
S-01	2210H098 -10	CONTRACTUAL SERVICES	0	11429856	0	0	0	11429856	83088700	30	71658844	11429856
S-01	2210H098 -13	OFFICE EXPENSES	0	1895	0	0	0	1895	2268420	14	2266525	1895
S-01	2210H098 -14	RENT RATE AND TAXES	0	543879	0	0	0	543879	675000	1	131121	543879
S-01	2210H098 -17	COMPUTER EXPENSES	0	515	0	0	0	515	81000	1	80485	515
S-01	2210H098 -19	DIET CHARGES	0	52000	0	0	0	52000	52000	0	0	52000
S-01	2210H098 -21	SUPPLIES AND MATERIALS	0	686	0	0	0	686	1250000	6	1249314	686
S-01	2210H098 -24	P.O.L.	0	35000	1	32793	0	2207	35000	1	32793	2207
S-01	2210H098 -27	MINOR WORKS	0	25799	0	0	0	25799	25799	0	0	25799
S-01	2210H098 -34	SCHOLARSHIP /STIPEND	0	4556310	3	1468511	0	3087799	43413040	31	36379241	7033799
S-01	2210H098 -51	MOTOR VEHICLES	0	12500	0	0	0	12500	12500	0	0	12500
S-01	2210H098 -52	MACHINERY AND EQUIPMENT	0	5031690	4	4488869	0	542821	7894000	10	7351179	542821
S-01	2210H098 -72	Repairs and Maintenance of Machinery and Equipment	0	35000	0	0	0	35000	35000	0	0	35000

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Dharashiv

Hospital

Bill Entry For January 2026 (Budgeted) DDO:012398 -- ADMINISTRATIVE OFFICER GOVERNMENT MEDICAL COLLEGE AND HOSPITAL OSMANABAD

Date:-22/01/2026 Time:-11:05 Am

Grant No	Scheme-Object	Object Description	NP/P	January					from April to March			
				Grant	Bills	Exp	Carry'd -ve Bal	Balance	Grant	Bills	Exp	Balance
S-01	2210H122 -01	SALARIES	0	13264335	2	102302	0	13162033	64593440	56	51431407	13162033
S-01	2210H122 -03	OVERTIME ALLOWANCES	0	1770	0	0	0	1770	1770	0	0	1770
S-01	2210H122 -06	TELEPHONE ELECTRICITY AND WATER CHARGES	0	1893683	2	35171	0	1858512	16548500	14	14689988	1858512
S-01	2210H122 -10	CONTRACTUAL SERVICES	0	23967827	1	4987550	0	18980277	75581640	41	56601363	18980277
S-01	2210H122 -11	DOMESTIC TRAVEL EXPENSES	0	1770	0	0	0	1770	1770	0	0	1770
S-01	2210H122 -13	OFFICE EXPENSES	0	141586	2	64620	0	76966	5438040	35	5361074	76966
S-01	2210H122 -14	RENT RATE AND TAXES	0	1833193	0	0	0	1833193	3900000	1	1541807	2358193
S-01	2210H122 -17	COMPUTER EXPENSES	0	20200	0	0	0	20200	270500	2	250300	20200
S-01	2210H122 -19	DIET CHARGES	0	3056170	0	0	0	3056170	10789250	4	7733080	3056170
S-01	2210H122 -21	SUPPLIES AND MATERIALS	0	279	0	0	0	279	4375000	10	4374721	279
S-01	2210H122 -24	P.O.L.	0	0	0	0	0	0	560000	7	560000	0
S-01	2210H122 -27	MINOR WORKS	0	0	0	0	0	0	1679000	3	1679000	0
S-01	2210H122 -28	PROFESSIONAL SERVICES	0	57000	0	0	0	57000	105000	1	48000	57000
S-01	2210H122 -34	SCHOLARSHIP /STIPEND	0	210000	0	0	0	210000	231000	0	0	231000
S-01	2210H122 -51	MOTOR VEHICLES	0	93000	0	0	0	93000	125000	1	32000	93000
S-01	2210H122 -52	MACHINERY AND EQUIPMENT	0	0	0	0	0	0	2067250	3	2067250	0
S-01	2210H122 -72	Repairs and Maintenance of Machinery and Equipment	0	935	0	0	0	935	3858450	5	3857515	935

Generated

प्रशासकीय अधिकारी
शासकीय वैद्यकीय महाविद्यालय
व रुग्णालय, धाराशिव

College

Bill Entry For January 2026 (Budgeted) DDO:002398 -- ADMINISTRATIVE OFFICER GOVERNMENT MEDICAL COLLEGE OSMANABAD

Date:-22/01/2026 Time:-11:00Am

Grant No	Scheme-Object	Object Description	NP/P	January					from April to March			
				Grant	Bills	Exp	Carry'd -ve Bal	Balance	Grant	Bills	Exp	Balance
S-01	2210H098 -01	SALARIES	0	2211382	5	939517	0	1271865	122545080	86	121273215	1271865
S-01	2210H098 -02	WAGES	0	2040	0	0	0	2040	2040	0	0	2040
S-01	2210H098 -03	OVERTIME ALLOWANCES	0	1700	0	0	0	1700	1700	0	0	1700
S-01	2210H098 -06	TELEPHONE ELECTRICITY AND WATER CHARGES	0	227638	1	170980	0	56658	350000	6	293342	56658
S-01	2210H098 -10	CONTRACTUAL SERVICES	0	11429856	0	0	0	11429856	83088700	30	71658844	11429856
S-01	2210H098 -13	OFFICE EXPENSES	0	1895	0	0	0	1895	2268420	14	2266525	1895
S-01	2210H098 -14	RENT RATE AND TAXES	0	543879	0	0	0	543879	675000	1	131121	543879
S-01	2210H098 -17	COMPUTER EXPENSES	0	515	0	0	0	515	81000	1	80485	515
S-01	2210H098 -19	DIET CHARGES	0	52000	0	0	0	52000	52000	0	0	52000
S-01	2210H098 -21	SUPPLIES AND MATERIALS	0	686	0	0	0	686	1250000	6	1249314	686
S-01	2210H098 -24	P.O.L.	0	35000	1	32793	0	2207	35000	1	32793	2207
S-01	2210H098 -27	MINOR WORKS	0	25799	0	0	0	25799	25799	0	0	25799
S-01	2210H098 -34	SCHOLARSHIP /STIPEND	0	4556310	3	1468511	0	3087799	43413040	31	36379241	7033799
S-01	2210H098 -51	MOTOR VEHICLES	0	12500	0	0	0	12500	12500	0	0	12500
S-01	2210H098 -52	MACHINERY AND EQUIPMENT	0	5031690	4	4488869	0	542821	7894000	10	7351179	542821
S-01	2210H098 -72	Repairs and Maintenance of Machinery and Equipment	0	35000	0	0	0	35000	35000	0	0	35000

Dean,
Government Medical College
Dharashiv

Administrative Officer
Government Medical College
Dharashiv

MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010437/24020781
Fax: 24024068/24023515
Website: http://mpcb.gov.in
Email: pso@mpcb.gov.in

Kalpataru Point, 2nd, 3rd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

RED/S.S.I
No:- Format1.0/PSO/UAN No.MPCB-CONSENT-0000225813/CR/2502000974

Date: 12/02/2025

To
Champavati Waste Management Beed
Sr No 282/307 At Post Pali Tq Dist Beed,Sr No 282/307 At Post Pali ,.Taluka & Dist Beed-431122
Email:bmwbeed@gmail.com
Contact No.:9970147400

(Operator and Owner of facility)

Renewal of Combined Consent and BMW Authorization (CCA) under the provisions of Water (P & CP) Act, 1974, Air (P & CP) Act, 1981 and Bio-Medical Waste Management Rules, 2016 as amended and Hazardous Waste (M & TM) Rules, 2016.

Ref:
1. CCA granted by Board Vide No. Format1.0/PSO/UAN No.MPCBCONSENT-0000187918/CR/2402001833 dtd 23/02/2024
2. Your application for Combine Consent and Bio-Medical Waste Authorization dated 18/11/2024
3. This office email dated 08/01/2025
4. Information uploaded on 13/01/2025

After examining the proposal, The Maharashtra Pollution Control Board hereby Renew Combined Consent and BMW Authorization to CBWTF under Section 25/26 of the Water (P&CP) Act, 1974, Section 21 of the Air (P&CP) Act, 1981 and Bio-Medical Waste Management Rules, 2016, and Hazardous Wastes (Management & Transboundary Movement) Rules, 2016 respectively, under Environment (Protection) Act, 1986, subject to terms and conditions as specified below and in the **Schedule(I-IV) and Annexure (I-IV)** enclosed in this order.

1. This CCA shall be in force for a period From **31-12-2024** To **31-12-2027**
2. The capital investment of the Plant is **₹83.20** Lakhs
3. Plant AreaHCF Area : - Plot Area 2023.00 M^2 with Built-up area 250.00 M^2.
4. The Jurisdiction allocated for waste collection: A) All Talukas of Dist. Beed . B) Taluka Dharashiv (Osmanabad), Tuljapur, Bhoom, Paranda, Kalamb, Washi of Dist. Dharashiv (Osmanabad)
5. **Conditions under the Water (P&CP) Act, 1974:-**
   1. Quantity of total water consumption shall not exceed 3 M^3/day. You shall not use the ground water without obtaining prior permission of Central Ground Water Authority.

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Dharashiv

2. You shall provide adequate treatment & disposal facility for Sewage & Effluent generated as specified in **Annexure-I**
3. You shall provide water meter at water intake point & at sewage/Effluent disposal point and shall maintain monthly records thereof.

6. Conditions under the Air (P&CP) Act,1981:-

1. You shall use the fuel for DG set and incinerator and provide the adequate air pollution control devices as specified to maintain the emmissions from the stack attached to the incinerator and DG Set as specified in the **Annexure-II.**
2. You shall provide adequate emission control system to DG set and incinerator as specified in **Annexure-II.**
3. You shall strictly observe noise standards applicable for DG set stack emission and ambient noise level as per **Annexure-II.**

7. Conditions under Hazardous and Other Wastes(Management, Handling & Transboundry Movement) Rules, 2016 for treatment and disposal of hazardous waste:-

You shall have valid membership of CHWTSDF and shall dispose the Hazardous waste generated in strict compliance with said rules and maintain record thereof.

Sr No	Type of Waste	HW Category no.	Quantity	UOM	Disposal
1	37.2 Ash from incinerator and flue gas cleaning residue	37.2	42	MT/A	At CHWTSDF
2	35.3 Chemical sludge from waste water treatment	35.3	1.5	MT/A	At CHWTSDF

8. Conditions under BMW Management rules 2016:-

You shall operate Treatment plant as below and shall comply with the operational conditions mentioned at Schedule-I.

Sr No	Treatment Technology	Installed Capacity	Operational Capacity/Day	Compliance of Standards
1	Incinerator	100 Kg/Hr	1800 Kg/Day	As per Annexure-II
2	Autoclave	200 Ltr/Cycle	3200 Lit/Day	As per Annexure-III
3	Shredder	50 Kg/Hr	900 Kg/Day	

Responsibility of M/s Champavati Waste Management (Operator and Owner of facility) :

I. The Board reserves the right to review, modify, suspend, revoke, or alter the jurisdiction of this consent at any time, and any such actions will be binding upon you.

II. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.

III. You shall operate OCEMS installed for source emission round 'O' clock and transmit data online to CPCB and MPCB server. You shall also monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in year and submit report to Sub Regional Officer.

IV. You shall ensure collection, and segregation of BMW regularly to treat and dispose Off within 48 hrs from generation.

V. You shall not Rent, Lend, Sell, Transfer or Close Down the facility or otherwise transport the Bio Medical waste for any other purpose without obtaining prior written permission of the MPC Board.

VI. You shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the facility premises.

VII. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.

VIII. You should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in every year and submit report to Sub Regional Officer.

IX. You shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

X. You shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).

XI. You shall create the Environmental Cell by appointing an Environmental Engineer and Chemist for looking after day-to-day activities related to compliance of CCA.

XII. You should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016 , Bio Medical Waste Management Rules,2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year in Form-IV by 30th June of every year.

XIII. You shall take all necessary steps to ensure that the bio-medical waste collected from the occupier is transported, handled, stored, treated and disposed of, without any adverse effect to the human health and the environment, in accordance with these rules and guidelines issued by the Central Government or, as the case may be, the central pollution control board from time to time.

9. You shall use only dedicated vehicles as detailed in Annexure-IV for collection and transportation of Bio-Medical waste within allocated Jurisdiction. Vehicles Authorized for BMW Collection shall strictly comply with this BMWM Rules 2016 and CPCB/MPCB guidelines and Motor Vehicles act, 1988 (59 of 1988).

10. You shall collect the BMW Strictly complying with the Provisions of Schedule-I and Treatment & Disposal as specified in Schedule-I of BMWM Rules,2016 as amended.

11. You shall not collect outdated, discarded, unused cytotoxic drugs/waste generated in the Cancer research centers and health care establishments unless they are specifically marked with the symbol of Bio Hazard & Cytotoxic Hazard.

12. You shall collect and dispose-off the Mercury Waste from HCE as per guidelines published by CPCB as detailed in document entitled "Environmentally Sound Management of Mercury Waste in Health Care Facilities" (www.cpcb.nic.in).

13. You shall not undertake Modifications/ Upgrdation in existing facility without obtaining prior Environment Clearance under the Provision of EIA notification, 2006 and Consent to Establish from the MPC Board.
14. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by you shall constitute a breach of this authorization.
15. This Board reserves the right to review, amend, suspend, revoke, or change any of the conditions applicable under this CCA and the same shall be binding upon you.
16. You shall maintain records of MPC board Officers visit and shall obey all the lawful instructions issued by the Board Officers from time to time.
17. Any violation of provisions of BMW Management Rules, 2016 as amended shall attract the penal provisions of Environment (Protection) Act, 1986 and Violations under the provisions of Water (P&CP) Act 1974, Air (P&CP) Act 1981 shall attract provisions of respective act including closure of the facility and prosecution.
18. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.
19. You shall submit the extended existing BG of Rs. 9.00 Lakh as specified in Schedule III to the Regional Officer, MPCB, Chhatrapti Sambhaji Nagar within 15 days. Nonsubmission of BG in a specified time shall attract revocation of this CCA without further notice.
20. The industry / HCE shall create an Environment Cell by appointing an Environmental Engineer / Expert for looking after day-to-day activities related to Environment / Pollution control.

This consent is issued on the basis of information/documents submitted by the Applicant/Project Proponent, if it has been observed that the information submitted by the Applicant/Project Proponent is false, misleading or fraudulent, the Board reserves its right to revoke the consent & further legal action will be initiated against the Applicant/Project Proponent.

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Signed by: Dr.Vishwajeet Ramesh Thakur
Principal Scientific Officer
For and on behalf of,
Maharashtra Pollution Control Board
pso@mpcb.gov.in
2025-02-12 11:31:23 IST

Received Consent/Authorization fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	300000.00	MPCB-DR-30242	18/11/2024	RTGS

Copy to:

1. Regional Officer, MPCB, Aurangabad and Sub-Regional Officer, MPCB, Jalna
- - Regional Officer, MPCB, Ch. Sambhaji Nagar directed to ensure receipt of Bank Guarantee by CTF as specified in Schedule III of CCA.

   Sub Regional Officer, Jalna directed to ensure the compliance of the CCA conditions. You shall initiate the BG forfeiture proposal for JVS exceedance mentioned at point No.19 as per enforcement policy through legal module.
2. Cheif Accounts Officer, MPCB,Sion, Mumbai
3. I/C EIC- for record & website updating purpose.

Annexure - I

Conditions under Water (P & CP), 1974 Act: (Refer Condition No. 5)

A. Water Consumption Details:-

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	0.00
2.	Domestic purpose	1.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	2.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Other such as agriculture, gardening, etc.	0.00

B. Conditions for Sewage & Effluent Generation, Treatment and Disposal:-

Sr. No.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	Disposal
1	Domestic Sewage	0.8	As per clause 'C'	100% Recycle
2	Trade effluent	1.5	As per clause 'C'	100% Recycle

C. You shall operate the combined waste water treatment plant of adequate design and capacity to treat the domestic sewage and trade effluent so as to achieve the following standards as prescribed below under E (P) Act, 1986 and Rules made there under and recycle treated effluent after achieving standard prescribed below.

Sr. No.	Parameters	Discharge Standards applicable
		Limiting Concentration in mg/except for pH
1	pH	6.5-9.0
2	Oil & Grease	10
3	BOD (3 days 27°C)	30
4	COD	250
5	Total Suspended Solids	100
6	Bio-Assay Test	90 % survival of fish after 96 hours in 100 % effluent

D. You shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

E. You shall provide Primary/ Secondary/ tertiary treatment system and disinfection facility.

F. The Applicant shall obtain prior consent of the Board to take steps for Expansion/Modification of any treatment and disposal system or an extension or addition thereto.

G. You shall provide Specific Water Pollution control system as per above conditions and conditions of Environmental Clearance, if applicable.

H. All Health Care Facilities irrespective of the bed capacity shall install scientifically designed disinfection facilities before discharging the effluent into sewer line or reuse in the permises as stipulated under Schedule II (6) of Biomedical waste Management Rules, 2016.

Annexure - II

Terms & conditions for Incinerator(s) and D.G. Set(s) under Air (P & CP) Act, 1981 and Bio Medical waste management Rule, 2016: (Refer Condition No.6)

1. You shall observe following fuel pattern and erect following stack (s):

Sr. No.	Stack Attached to	Fuel Type	Quantity	Stack Height (Mtr)
1	INCINERATOR	DIESEL	40.00 Ltr/Hr	30.00
2	DG set (11 KVA)	DIESEL	5.00 Ltr/Hr	3.00

2. You shall provide following Air pollution Control Devices (APCD) as stated at "C" below and shall observe the following operating conditions and emission standards:

a. Operating Standards:-

i. Combustion efficiency (CE) shall be at least 99.00%.

ii. The Combustion efficiency is computed as follows;

$$C.E. = \frac{\%\ CO2}{\%\ CO2 + \%\ CO} \times 100$$

iii. The temperature of the primary chamber shall be minimum 800°C, and of the secondary chamber shall be minimum 1050 ± 50°C.

iv. The secondary chamber gas residence time shall be at least 2 (Two) seconds at 1050 ± 50°C.

b. Emission Standards:-

Sr.No.	Parameters	Limiting Concentration in mg/Nm3 unless stated
1	Particulate matter	50
2	Nitrogen Oxides	400
3	HCL	50
4	Total Dioxin & Furans	0.1 ngTEQ/Nm3 (at 11% O2)
5	Hg & It's Compounds	0.05

c. Essential Components of Incinerator to Meet emission standards of BMW Management Rules 2016:-

i. Secondary chamber-2 No.s (for 2 second residence time)

ii. Individual burner for primary & secondary chamber.

iii. Venturi scrubber having min. 600mm WC pressure drop with Recirculation pump and recirculation Tank.

iv. Activated carbon dosing for Dioxin removal.

v. ID fan having 900-1000 mm WC pressure drop.

vi. Packed bed for scrubbing for gaseous pollutants with recirculation pump and recirculation tank.

vii. Minimum stack height shall be 30 meters above the ground and shall be attached with the necessary monitoring facilities as per requirement of monitoring of general parameters as notified under the E (P) Act, 1986 and in accordance with the CPCB Guidelines of Emission Regulation Part-III.

viii. Online OCEMS and Temperature recording for primary and secondary chamber with data logger and connectivity to MPCB and CPCB server.

d. General Requirements:-

i. Volatile Organic Compounds in the incineration ash shall not be more than 0.01%.

ii. The Operator shall provide ports in the chimney and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's staff. The chimneys shall be numbered as S-1, S-2 etc and these shall be painted / displayed to facilitate identification.

iii. The operator shall monitor the stack gaseous emissions (under optimum capacity of the incinerator) of above mentioned parameters at least quarterly from the laboratory recognized under the Environment (Protection) Act, 1986 & NABL accredited and record of such analysis results shall be maintained and submitted to the prescribed authority. In case of dioxins and furans, monitoring should be done once in a year.

Note:-

i. Wastes to be incinerated shall not be chemically treated with any chlorinated disinfectants.

ii. Only low Sulphur fuel like Light Diesel Oil or Low Sulphur Heavy Stock or Diesel, Compressed Natural Gas, Liquefied Natural Gas or Liquefied Petroleum Gas shall be used as fuel in the incinerator.

iii. You shall install continuous emission monitoring system for the parameters as stipulated by Central Pollution Control Board for CO2, CO and O2.

iv. All monitored values shall be corrected to 11% Oxygen on dry basis.

v. Incinerators (combustion chambers) shall be operated with such temperature, retention time and turbulence, as to achieve Total Organic Carbon content in the bottom ashes less than 3% or their loss on ignition shall be less than 5% of the dry weight.

vi. The occupier or operator of a common bio-medical waste incinerator shall use combustion gas analyzer to measure CO2, CO and O2.

3. Conditions for D.G. Set:-

a. Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically for control of noise.

b. Acoustic enclosure/acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB(A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.

c. You shall make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.

d. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.

e. A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.

f. D.G. Set shall be operated only in case of power failure.

g. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

h. The applicant shall comply with the notification of MoEFCC dated 17.05.2002 regarding noise limit for generator sets run with diesel.

i. Provide one stack of height above roof level.

4. You shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.

Annexure – III

Standards for Treatment and Disposal of "RED" Category (Autoclavable) Bio-Medical Waste

Standards for Waste Autoclave:

The autoclave should be dedicated for the purposes of disinfecting and treating bio-medical waste.

1. When operating a vacuum autoclave, medical waste shall be subjected to a minimum of three pre-vacuum pulse to purge the autoclave of all air. The waste shall be subjected to the following.

    i. A temperature of not less than 135º C and a pressure of 31 psi for an autoclave residence time of not less than 30 minutes.

2. Medical waste shall not be considered properly treated unless the time, temperature and pressure indicators indicate that the required time, temperature and pressure were reached during the autoclave process. If for any reasons, time temperature or pressure indicates that the required temperature, pressure or residence time was not reached, the entire load of medical waste must be autoclaved again until the proper temperature, pressure and residence time were achieved.

3. Recording of operational parameters: - Each autoclave shall have graphic or computer recording devices which will automatically and continuously monitor and record dates, time of day, load identification number and operating parameters throughout the entire length of the autoclave cycle.

4. Validation test: Spore Test: – The autoclave should completely and consistently kill the approved biological indicator at the maximum design capacity of each autoclave unit. Biological indicator for autoclave shall be Geobacillus stearothermophilus spores using vials or spore strips, with at least 1x 106 spores per milliliter. Under no circumstances will an autoclave have minimum operating parameters less than a residence time of 30 minutes, a temperature less than 121º C or a pressure, less than 15 psi. Test should be conducted at least once in every week & record in this regard shall be maintained.

5. Routine Test: A chemical indicator strip/tape that changes color when a certain temperature is reached can be used to verify that a specific temperature has been achieved. It may be necessary to use more than one strip over the waste package at different location to ensure that the inner content of the package has been adequately autoclaved. Test should be conducted during autoclaving of each batch & record in this regard shall be maintained.

Annexure - IV

BMW Collection and Transportation

1. You shall use following dedicated, GPS enabled vehicles having separate compartments for storage as per colour coding, for collection & transportation of BMW. You shall provide login details of Vehicle Tracking system to the respective SRO, MPCB. Vehicle tracking data shall be stored in archive data for minimum period of 3 months.
2. Use of unauthorized vehicles other than mentioned below shall attract penal action. You shall obtain amendment to Authorization for any new addition or Deletion of the vehicles during the period of this CCA.

Sr. No.	Vehicle No.	Make & Model	Capacity (MT)	VTS (ID/IMEI)	Barcode (Yes/No)
1	MH-23- 6864	TATA (ACE)	1.55	865933036461883	Yes
2	MH-23-W-2932	TATA (ACE)	1.55	865933036481394	Yes
3	MH-23-AU-2028	Mahindra & Mahindra (Jeeto OX 7.11 BS-IV)	0.80	865933036551014	Yes
4	MH-23-AU-0838	TATA (ACE)	1.55	865933036550388	Yes
5	MH-23-AU-2383	TATA (ACE)	1.55	865933036874218	Yes
6	MH-23-AU-2384	TATA (ACE)	1.55	865933037046527	Yes
7	MH-17-T-5267	TATA (ACE)	1.55	865933036544852	Yes
8	MH-23-AU-3550	TATA (ACE)	1.55	865933036544852	Yes
9	MH-23-AU-5613	Ashok Lelyand (AShok Lelyand)	1.48	865933036544855	Yes

3. Body of the Vehicles used for BMW Transportation must be painted from outside with coloured symbol of BIOHAZARD and CYTOTOXIC as shown below, Label shall be NONWASHABLE and be prominently visible on both side of the vehicle body.





4. Name of CTF, Emergency Contact details and warning for safe handling during accident/spillage must be prominently mentioned on both sides of the vehicle must be mentioned on vehicle and must prominently visible.
5. Driver must have valid Driving license and trained to handle emergency.

SCHEDULE-I

Authorization for Management of Bio-Medical Waste (Category and Quantity)

The authorization is granted for Collection, Transportation, Treatment and disposal of BioMedical Waste (BMW) in waste categories and quantities listed here in below:

Sr. No	Category	Type of Waste	Quantity not to exceed (Kg/Month)	Segregation Colour coding	Treatment & Disposal
1	Yellow	a) Human Anatomical waste	15000.00	Yellow coloured non- chlorinated plastic bags.	Incineration of Pretreated sterilized waste as per National AIDS Control Organisation or World Health Organization guidelines.
		b) Animal Anatomical Waste	0.00		
		c) Soiled Waste	20000.00		
		d) Expired or Discarded Medicines	1000.00		
		e) Chemical Waste	0.00		
		f) Chemical Liquid Waste	0.00	Separate collection system leading to effluent treatment system.	
		g) Discarded linen, mattresses, beddings contaminated with blood or body fluid.	10000.00	Yellow coloured non - chlorinated plastic bags or suitable packing material.	
		h) Microbiology Biotechnology and other clinical laboratory waste	5000.00	Autoclave safe plastic bags or containers.	Pre-treat to sterilize with nonchlorinated chemicals on-site as per National AIDS Control Organisation or World Health Organisation guidelines thereafter sent to BMW-CTF for Incineration.
2	Red	Contaminated waste (Recyclable)	20000.00	Red coloured non chlorinated plastic bags or containers.	Red coloured non chlorinated plastic bags or containers.
3	White (Translucent)	Waste sharps including Metals	5000.00	Puncture proof, Leak proof, tamper proof container.	Disinfected and mutilated sharps to be sent to MPCB authorized metal recycler.
4	Blue	a) Glassware	150.00	Puncture proof, Leak proof with Blue coloured marking.	Chemically treated disinfected Glass/Metal waste to be sent to MPCB authorized recycler.
		b) Metallic body implants	150.00		

SCHEDULE-II

Responsibilities of CBWTF

1. You shall upgrade /Operate Common BMW Treatment Facility, in accordance with BMW Management Rules, 2016 as amended 2018 and CPCB guidelines issued time to time.
2. You shall ensure that all Health Care Establishments and Institutions generating BMW in your jurisdiction shall obtain membership of the Common Facility and CCA from MPCB and each HCE authorised shall hand over the waste to the Facility. Also ensure that records of the members are maintained properly.
3. You shall establish and implement bar code for waste collections and global positioning system enabled for vehicle tracking of bio-medical waste transport vehicle
4. You shall ensure Receipt, Treatment and Disposal of only segregated Bio-Medical Waste in colour coded bags from the HCEs within 48 hours from the generation.
5. You shall Supply non-chlorinated plastic coloured bags to the occupier as per mutual agreement
6. You shall ensure mandatory colour coded bins are used for source segregation of BMW by the HCEs and Institutions generating BMW.
7. You shall fix the charges for providing services to HCEs in consultation with local Medical Association.Any dispute regarding charges shall be resolved at District Advisory Committe under the Chairmanship of District Collector
8. The treated Plastic / Metal Waste shall be handed over to the Recycler authorized by MPCB for recycling of treated Bio Medical Waste,record shall be maintained.
9. You shall provide training to all workers involved in handling of bio-medical waste at the time of induction and at least once a year thereafter and maintain record of effectiveness thereof.
10. You shall undertake appropriate medical examination at the time of induction and at least once in a year and immunize all workers involved in handling of bio medical waste for protection against diseases, including Hepatitis B and Tetanus, that are likely to be transmitted while handling bio medical waste and maintain the records for the same.
11. You shall provide PPE as per norms of Factory Act 1948 and ensure use of personal protective Equipment such as Heavy Duty Gloves (Workman's Gloves), Gum Boots or safety shoes for waste collectors, Face mask, Head Cap, Splash Proof Gowns or aprons etc.
12. You shall develop your own website. The website should be uploaded on periodically basis with all the information relating to Bio-Medical waste management including this CCA and other permission and report, as directed time to time.
13. You shall maintain a log book for each of its treatment equipment according to weight of batch; categories of waste treated; time, date and duration of treatment cycle and total hours of operation and daily fuel/energy consupmtion.
14. You shall maintain all record for operation of incineration, autoclaving, shredding, hazardous Waste disposed and recyclable disposed for a period of five years and produce whenever asked by MPCB authorities.
15. The owner and operator of a common bio medical waste treatment facility both shall be liable for all the damages caused to the environment or the public due to improper management of bio-medical wastes.
16. You shall ensure submission of Annual Report of BMW for the period Jan to Dec, including category and quantity of BMW collected and Disposed at Facility in Form IV for preceding year before 30th June of every year to the Sub-Regional Office, MPCB, and uploading the same to MPCB website(https://www.mpcb.gov.in/).

SCHEDULE-III

Bank Guarantees

1. Bank Guarantee imposed to ensure timely compliance, to be observed by operator.

Sr.No	Activity / Condition to be Complied	Compliance Timeline (Months)	Bank Guarantee Amount
1A	**Operation and Maintenance**		
1	To Segregate and Handle BMW as per Schedule I	Continuous	100,000.00
2	Towards Operation and Maintenance of STP/ETP to achieve prescribed discharge standards	Continuous	500,000.00
3	Towards Operation and Maintenance of APCD to achieve prescribed emission standards	Continuous	200,000.00
4	To conduct and meet sterilization validation test and temperature test for Autoclave	Continuous	50,000.00
1B	**Records**		
1	To maintain records of BMW and submission of online Annual Report before 30th June.	Continuous	25,000.00
2	To maintain records of recyclable waste handed over to MPCB/ CPCB authorized recycler and hazardous waste disposed at CHWTSDF.	Continuous	25,000.00
Total			9,00,000.00

Note: You shall extend the existing submitted Bank Guarantee for the Activity / Condition to be Complied mentioned in the above table valid upto the validity of this CCA + 4 months additional. Submit a fresh Bank Guarantee for the newly added Activity / Condition to be Complied mentioned in the above table valid upto the validity of this CCA + 4 months additional.

The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days from the date of issue of Consent.

If the above Bank Guarantee is not submitted within stipulated period, then 12% interest will be levied as a penalty as per circular dtd 29/02/2024 No. BO/MPCB/AS(T)/Circular/B-240229FTS0122

SCHEDULE-IV

General Conditions

The following general conditions shall apply:-

1. You shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
2. Whenever due to any accident or other unforeseen act or event, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith reported to Board, concerned Police Station, Executive Engineer MIDC and Local Body. In case of failure of pollution control equipment's, the process connected to it shall be stopped.
3. You shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control operation to abide by terms and conditions of this consent.
4. You shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 15 of the Environment (Protection) (Second Amendment) Rules, 1992.
5. You shall comply with the Hazardous Waste (M, H & TM) Rules, 2016 and submit the Annual Returns as per Rule 20(2) of Hazardous Waste (M, H & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year to Regional Office, Aurangabad.
6. You shall engage qualified staff/personnel/agency to see the day to day compliance of consent & authorization condition towards Environment Protection.
7. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the Terminal manholes. No effluent shall find its way other than in designed and provided collection system.
8. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the HCE.
9. You shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
10. You should not cause any nuisance in surrounding area. You shall maintain good housekeeping.
11. You shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted.
12. The non-hazardous solid waste arising in the HCE premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
13. You shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification Dated. 16/11/2009 as amended.
14. You shall submit an official e-mail address and any change will be duly informed to the MPCB.

15. You shall observe provisions of E-waste (Management) Rules 2016 & as amended time to time and Batteries (Management and Handling) Amendment Rules, 2010.
16. An inspection book shall be opened and made available to the Board's officers during their visit to the HCE.
17. In case you use/ handle/ generate the cytotoxic waste you shall strictly adhave to the standards/ SOPs applicable and waste shall be labelled specifically as "Cytotoxic Waste" with symbol on waste containers/ bags and shall handover to BMW CTFs.
18. You shall obtain required permissions from competent authority for radio active material user/ handling/ disposal of waste before commencement of such activity.
19. The Energy source for lighting purpose shall preferably be LED based.
20. You shall harvest rainwater from roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial applications within the plant
21. You shall provide personal protection equipment as per norms of Factory Act 1948
22. You are responsible to submit application for renewal of Combined Consent & Biomedical Waste authorization before 60 days of expiry.

This certificate is digitally & electronically signed.

महाराष्ट्र शासन

शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव

GOVERNMENT MEDICAL COLLEGE AND HOSPITAL, DHARASHIV

कोविड-१९ इमारत, जिल्हा रुग्णालय आवार, धाराशिव. (महाराष्ट्र) ४१३ ५०१

e-mail: deangmcosmanabad@gmail.com

स्वातंत्र्याचा अमृत महोत्सव

जा.क्र. शावैमवरुधा/ लेखा/वेस्ट मॅनेजमेंट/आदेश/ 606 /२०२५ दि२/ /०३/२०२५

प्रति,
चंपावती वेस्ट मॅनेजमेंट,
लक्ष्मण नगर, बार्शी रोड,
बीड.

विषय :- शासकीय वैद्यकीय महाविदयालय व रुग्णालय, धाराशिव व अधिनस्त असलेल्या जिल्हा रुग्णालय व स्त्री रुग्णालय येथील रुग्णालयीन व जैव वैद्यकीय घन कचरा वाहतूक व विल्हेवाट लावण्यास मंजुरी देणेबाबत.

संदर्भ :-१. जिल्हा शल्यचिकित्सक यांचे आदेश जा.क्र.जिरुउ/बा.वेस्ट.मॅ/सिटीडिएफ/६१४४-४६ दि.०९/०५/२०२२
२. मा. उपसंचालक, आरोग्य सेवा, लातुर यांचे पत्र क्रमांक उसं आसेला/ नियोजन/३५२८०-८१/१८ दि.१२/१२/२०१८.
३. या कार्यालयाचे आदेश क्र. शावैमधा/लेखा विभाग/चंपावती वेस्ट आदेश/५५१०-. १२/२०२३, दि.२६.०९.२०२३ रोजीचे आदेश.
४. या कार्यालयाचे आदेश क्र. शावैमधा/लेखा विभाग/चंपावती वेस्ट आदेश/१२५२/२०२४, दि.०९.०८.२०२४ रोजीचे आदेश.
५. महाराष्ट्र प्रदुषण नियंत्रण महामंडळ व चंपावती वेस्ट मॅनेजमेंट, बीड यांचे दि.१२.०२.२०२५ रोजीचे आदेश व प्रमाणपत्र.
५. या कार्यालयाची दिनांक १९.०३.२०२५ रोजीची मंजुर टिप्पणी.

उपरोक्त संदर्भीय विषयानुसार जिल्हा शल्यचिकित्सक, सामान्य रुग्णालय यांचे सदर कामाबाबतचे आदेश दि. ३१.१२.२०२४ रोजी संपुष्टात आले असुन सामंजस्य करारानुसार जिल्हा रुग्णालय व स्त्री रुग्णालय हे शासकीय वैदयकीय महाविदयालकडे हस्तांतरित झाले असल्यामुळे आपणांस सुचित करण्यात येते की, संदर्भ क्रमांक ३ व ४ च्या आदेशामधील दर या कार्यालयाने मान्य केलेले आहेत ते खालीलप्रमाणे :-

Dean,
Government Medical College
Dharashiv

तक्ता क्र.१

(जिल्हा रुग्णालय)

Sr. No	Type of Units	Category Of BMW	Collection Transportations
१	Indoor Beds	Human Anatomical Waste, Microbiology Waste, Waste Sharp, Discarded Medicine & Cytotoxic Drug, Solid Waste, Syringes, Glass Bottles, Plastic Bottles, IV Bottles. (१०.४५ Rs./day/bed x२५६ Beds x ३० Day)	८०२५६
२	OPD	Needles, Syringes, Blades, Scalpels, Glass, Discarded Medicine & Cytotoxic Drugs, Cotton Dressing Human Anatomical Waste, Microbiology Waste, Liquid Waste, Waste Generated During Post-mortem	१८८४
३	OT Rooms		१८८४
४	Pathology		१८८४
५	X-Ray, City Scan		१८८४
६	PM Room		१८८४
७	Art Centre		१८८४
८	Blood Bank		१८८४
९	Transportation	CBWTF Pall to Government Medical College and Hospital, Dharashiv Distance ११८ km. (१७ Rs./km x११८km x ३० days)	६०१८०
		Amount	१५३६२४
		CGST ६ %	९२१७.४४
		SGST६ %	९२१७.४४
	Total Amount (In word Rs. One Lakh Seventy Two Thousand and Fifty nine only)		१७२०५९

तक्ता क्र.२

(स्त्री रुग्णालय)

Sr. No	Type of Units	Category Of BMW	Collection Transportations
१	Indoor Beds	Human Anatomical Waste, Microbiology Waste, Waste Sharp, Discarded Medicine & Cytotoxic Drug, Solid Waste, Syringes, Glass Bottles, Plastic Bottles, IV Bottles. (१०.४५ Rs./day/bed x ६० Beds x ३० Day)	१८८१०
२	OPD	Needles, Syringes, Blades, Scalpels, Glass, Discarded Medicine & Cytotoxic Drugs, Cotton Dressing Human Anatomical Waste, Microbiology Waste, Liquid Waste, Waste Generated During Post-mortem	१८८४
३	OT Rooms & Labour Rooms		१८८४
४	Pathology		१८८४
५	Transportation	CBWTF Pall to Government Medical College and Hospital, Dharashiv Distance ११८ km. (१७ Rs/km x११८km x ३० days)	१५३०
		Amount	२५९९२
		CGST ६ %	१५५९.५२
		SGST ६ %	१५५९.५२
	Total Amount (In word Rs. Twenty Nine thousand one hundred and eleven only)		२९१११

वरील तक्यात नमुद मान्य केलेल्या दराप्रमाणे सन २०२४-२५ या वर्षासाठी दि.३१.१२.२०२४ ते दि.३१.१२.२०२७ या कालावधीसाठी जिल्हा अथवा संदर्भ क्रमांक ३ मधील महाराष्ट्र प्रदुषण नियंत्रण मंडळ यांचे आदेशानुसार या महाविदयालय व रुग्णालय अंतर्गत कार्यरत असलेल्या जिल्हा रुग्णालय व स्त्री रुग्णालयातील जैव वैदयकीय घनकचरा वाहतुक व विल्हावाट लावण्यास व या संदर्भात वरीष्ठा स्तरावरुन भविष्यात जो निर्णय घेतला जाईल, त्याच्या आधीन राहुन व खालील अटी शर्तीच्या अधीन राहुन या आदेशान्वये मंजुरी देण्यात येउन परवानगी देण्यात येत आहे.

१. या महाविद्यालय व रुग्णालयातील व अधिनस्त रुग्णालयातील, तसेच कोविड- १९ प्रादुर्भावाच्या अनुषंगाने समर्पित रुग्णालय सी.सी.सी. व कोविड लॅब येथील जैव वैद्यकीय घनकचरा ४८ तासांच्या आंत उचलुन घेउन जाणे आपणांस बंधनकारक राहील.

२. बायोमेडीकल वेस्ट मॅनेजमेंट रुल्स १९९८ मधील अटी व शर्तीचे तंतोतंत पालन केले जाईल, याची सदर संस्थेने दक्षता घ्यावी.

३. पत्रात नमुद केलेले दर हे दि.३१.१२.२०२४ ते दि.३१.१२.२०२७ या कालावधीसाठी अथवा महाराष्ट्र प्रदुषण नियंत्रण मंडळ यांच्या पुढील आदेशाच्या आधीन राहून बंधनकारक राहतील. कोणत्याही कारणास्तव झालेली वाढ सदर कालावधीतली ग्राहय धरली जाणार नाही.

४. सुरक्षा ठेव म्हणुन रक्कम रु. ३०,०००/- (अक्षरी रुपये तीस हजार फक्त) डिमांड ड्राप्ट किंवा आपल्या संस्थेचा करंट अकांउंटचा चेक या कार्यालयास जमा करावा लागेल.

५. आपली रुग्णालयीन जैव वैदयकीय घन कचरा व विल्हेवाट लावण्याची पध्दत ही महाराष्ट्र प्रदुषण नियंत्रण मंडळाच्या अनुषंगाने न आढळल्यास ती सेवा कोणत्याही क्षणी रद्द करण्याची कार्यवाही करण्यात येईल.

६. करारानामा रु.१००/- च्या बॉन्डवर वेगळा भरुन घ्यावा लागेल.

७. वरील दि.३१.१२.२०२४ ते दि.३१.१२.२०२७ हा कालावधी संपुष्टात येताच पुढील आदेशाबाबतची प्रमाणपत्राची व आवश्यक त्या कागदपत्रांची पुर्तता आपल्यास्तरावरुन त्वरित करुन घ्यावी . अन्यथा या रुग्णालयातील सेवा बंद करणेबाबात आपणांस वेगळे पत्र अथवा आदेश या कार्यालयामार्फत निर्गमित करण्यात येणार नाही.

८. शासनाकडुन निधी उपलब्ध होताच, आपली देयके अदा करण्यात येतील. आपली देयके तीन प्रतीत या कार्यालयास सादर करावी.

(डॉ.शैलेंद्र द. चौहान)
अधिष्ठाता
शासकीय वैद्यकीय महाविद्यालय व
रुग्णालय, धाराशिव

प्रत :-

१. वैद्यकीय अधिक्षक, शासकीय वैद्यकीय महाविद्यालय व रुग्णालय, धाराशिव/स्त्री रुग्णालय यांना सुचित करण्यात येते की, सादर करण्यात आलेली देयके तपासुन प्रमाणित करुन देण्यात यावीत.

२. मा.आयुक्त, वैद्यकीय शिक्षण व संशोधन, मुंबई यांना देवुन विनंती करण्यात येते की, अत्यावश्यक सेवा व रुग्णसेवा लक्षात घेता तसेच हे महाविद्यालय नवनिर्मित असल्यामुळे वरील आदेशास मंजुरी देण्यात यावी.

G.M.C.H.DHARASHIV
Inward No. 514
Date- 21/02/21

महाराष्ट्र शासन

F.D.A. Maharashtra सह आयुक्त,अन्न व औषध प्रशासन म. राज्य छ. संभाजीनगर Your Service is Our Duty

दुरध्वनी क्रमांक:- (०२४०)२९५२५०१		सह आयुक्त, अन्न व औषध प्रशासन म. राज्य, यांचे कार्यालय अन्न व औषध प्रशासन संकुल, २ रा मजला, गट क्र.११, पैठण रोड, कांचनवाडी, छत्रपती संभाजीनगर-४३१०११
डाक नोंद पोच दैय / हस्ते./ईमेल द्वारे		ई-मेल आय डी-jcdrugsabd@gmail.com
जा.क्र./औसौप्र / रक्तकेंद्र परवाना/ 140 /24/3		दिनांक - 08/02/2024

प्रति,
M/s. Dean, Government Medical College
and Hospital Blood Centre,
Marwadi Galli, Dharashiv (Osmanabad)

विषय :– औषधे व सौंदर्य प्रसाधने कायदा 1940 व त्याखालील नियम.
रक्तकेंद्र परवाना नुतनीकरण दाखला मंजुरीबाबत.

संदर्भ :–1) आपला रक्तकेंद्राचे नुतनीकरणाबाबतचा अर्ज दि. 12/12/2022.
2) या कार्यालयाचे पत्र क्र. D&C/ BC Lic Ren/1873/23/3 दि. 07/12/2023.
3) केंद्रीय परवाने प्राधिकारी यांचे पत्र क्र. CLAA/B&BP/MAHA/68/2012-D दि. 23/01/2024 या कार्यालयास प्राप्त दि. 05/02/2024.

महोदय,

सोबत खालील नमूद मूळ परवाना/नुतनीकरण दाखला आपणाकडे त्याखालील औषधाच्या पाठाच्या मान्य झालेल्या सूचीसह पाठवण्यात येत आहेत.

अ. क्र.	प्रपत्र	अनुज्ञप्ती कमांक/ नूतनीकरण दाखला कं	नुतनीकरण कालावधी
1.	FORM "26-G"	28-1026	01/01/2023 to 31/12/2027

सदर परवाना फक्त औषधे व सौंदर्य प्रसाधने नियम 1945 च्या अंतर्गत देण्यात आला आहे. याशिवाय या संबंधित असलेल्या इतर सर्व कायद्याच्या पूर्तता करण्याची जबाबदारी आपणावर राहील याची कृपया नोंद घ्यावी.

मा. सह आयुक्त (औषधे) यांचे मान्यतेने.

सहपत्रः– परवाना नुतनीकरण मुळप्रत.

आपला,

(शी. ना. साळे)
सहायक आयुक्त (औषधे) धारे १
अन्न व औषध प्रशासन, म. रा. छ. संभाजीनगर

प्रत ईमेलद्वारेः– सहायक आयुक्त (औषधे), अन्न व औषध प्रशासन, म. रा. धारशिव यांना अभिलेखास्तव रवाना.

Dean,
Government Medical College
Dharashiv

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FDA,Maharashtra

Drugs & Cosmetics Act, 1940 and Rules, 1945

FORM 26 – G

(See Rule 122-F)

CERTIFICATE OF RENEWAL OF LICENSE TO OPERATE A BLOOD CENTRE FOR PROCESSING OF WHOLE HUMAN BLOOD AND/OR FOR PREPARATION FOR SALE OR DISTRIBUTION OF ITS COMPONENTS

1. Certified that license number **28-1026** granted on - **07/09/1989** to M/s. **Dean, Government Medical College and Hospital Blood Centre Osmanabad** for the Operation of a Blood Centre for processing of Whole Human Blood and for preparation of its components at the premises situated at **Marwadi Galli, Osmanabad (Maharashtra)** is hereby renewed with effect from- **01/01/2023 to 31/12/2027.**

2. Name(s) of Items:

1) Whole Human Blood I. P. **2) Packed Red Blood Cells I.P.**
3) Fresh Frozen Plasma ~~B.P~~ (FFP) **4) Platelet Concentrate I.P.**
5) Cryoprecipitate I. P.

3. Names(s) of Competent Technical Staff

1) Dr. Ashvini. K. Gore — MBBS. D.P.B. — BTO.

4.Name (s) of Technical Supervisor

1) Mr. Vitthal N. Kamble — B.Sc. PG DMLT — Technical Supervisor

5.Name (s) of Blood Centre Technicians

1) Mr. M. T. Khadap — B.Sc. DMLT, — Technician.
2) Mr. Dinkar. R. Supekar — B.Sc. DMLT, — Technician.

6.Names of Registered Nurse :

1) Mrs. Sushma Ghodake — GNM, — Registered Staff Nurse.

Date: 07/12/2023

Signature

Central License Approving Authority

Joint Commissioner Food & Drug Admn. (M.S.) Aurangabad

Signature

(G.B. Huddare)
State Licensing Authority.
Joint Commissioner (Aurangabad Division)
Food and Drugs Administration.
Aurangabad

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Government Medical College
Dharashiv

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GOVT. OF MAHARASHTRA

Public Health Department

(PRE–NATAL DIAGNOSTIC TECHNIQUES (REGULATION AND PREVENTION OF MISUSE) RULES, 1996)

SCHEDULE III

CERTIFICATE OF REGISTRATION

1. In exercise of the powers conferred under Sec. 19 (1) of the Pre- natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act, 1994 (57 of 1994), the Appropriate Authority **Civil Surgeon Dist Hospital Dharashiv** hereby grants registration to the Genetic Counseling Centre/ Genetic laboratory*/ **Genetic clinic** *named below for purposes of carrying out Genetic Counseling Pre- natal Diagnostic Procedures* /Pre – natal Diagnostic Tests as defined in the aforesaid Act for a period of five years ending on **30/04/2028**

2. This registration is granted subject of the aforesaid Act and Rules there under and any contravention there of shall result in suspension of cancellation of this Certificate of Registration before the expiry of he said Period of five years.

A) Name and address of the Genetic Counseling Centre/ Genetic Laboratory/ Genetic Clinic **CIVIL HOSPITAL , DHARASHIV, TQ.- DHARASHIV , DIST. - DHARASHIV**

B) **Name of Applicant for registration Application :**

ADDITIONAL CIVILSURGEON ,CIVIL HOSPITAL , DHARASHIV

Operater : 1.DR.SHILPA VASANTRAO DOMKUNDWAR (MBBS MD RADIO.)

2.DR. SHRIPAD BALWANDE (MBBS DMRE)

3.DR. MEGHA DILIP KALE (MBBS MD RADIO.)

C) **Pre-natal diagnostic procedures approved for (Genetic Clinic)**

i) Ultrasound ~~ii) Amniocentesis~~

~~ii) Chorionic villa biopsy~~ ~~iv) Foestoscopy~~

~~v) Fetal skin or organ biopsy~~ ~~vi) Cordocentesis~~

vii) Any other (specify) CT SCAN

D) **Pre- natal diagnostic procedures approved of (for Genetic Laboratory)**

I ~~Chromosomal Studies~~ ii ~~Biochemical studiers~~

iii ~~Molecular studies~~

3. Registration No. allotted " **21**" **1.SAMSUNG MEDISON ,MODEL & SER NO- SOQQM3HF7000347, SONOACE R7 , (MRC NO.MH/OM/0079)**

2. ZONCARE ,MODEL NO- Q7 , SR.NO.- A3294361CTS01N0002

3. CT SCAN- CANON MEDICAL 16 SLICE, MODEL- TSX-035A AQUILION LIGHTING SR.NO.- 7CC18X2280 (MRC NO.MH/OM/0198)

4. **4.SAMSUNG , MODEL NO- V8 , SR.NO.- 52Z9M3HWB00004D (MRC NO.MH/OM/0201)**

For renewed Certificate of Registration only Period of validity of earlier Certificate From **01/05/2023 To 30/04/2028** or Registration

30/05/2024

Date :

Civil Surgeon Dharashiv Seal

Signature, Name and Designation of The Appropriate Authority

Civil Surgeon Dharashiv

Dean, Government Medical College Dharashiv

भारतीय गैर न्यायिक

भारत INDIA

रु. 500 FIVE HUNDRED RUPEES

पाँच सौ रुपये Rs. 500

सत्यमेव जयते

INDIA NON JUDICIAL

महाराष्ट्र MAHARASHTRA ◐ 2023 ◐ CH 150274

अनु.क्र 3044611 दि 23/2/2024 रु. किंमत 500/-

दस्ताचा प्रकार Agreement

दस्त नोंदणी करणार आहेत का? होय/नाही /

मिळकतीचे वर्णन /

मुद्रांक विकत घेणाऱ्याचे नांव Krsnaa Diagnostics Limited,

पत्ता Chinchwad Pune-19

दुसऱ्या पक्षकाराचे नांव Comm. Health services and Mission Director. National Health Mission Gov. of State of Mah.

हस्ते व्यक्तीचे नांव व पत्ता Avinash mane.

Avinash.

मुद्रांक विक्रेत घेणाऱ्याची सही

सौ.मालती वसंत मोकाशी
परवाना क्र २२०११४६
तालेरानगर, चिंचवड, पुणे.-१९

वरिष्ठ को. अधिकारी पुणे

21 FEB 2024

प्रथम मुद्रांक लिपीक कोषागार पुणे करिता

MRI Scan in PPP Mode Services Agreement

This agreement (hereinafter referred to as "Agreement") is made at Mumbai on this 29th day of April 2024, between the Commissioner, Health Services and Mission Director, National Health Mission, on behalf of Governor of State of Maharashtra, Mumbai, having registered office at Aarogya Bhavan, St. George Hospital's compound, P.D. Mello Road, Mumbai 400 001, (hereinafter referred to as **"Procurer"** which expression shall unless it be repugnant to the context mean and include its administrators and permitted assigns) of the First Part;

AND

Krsnaa Diagnostics Limited, having its registered office at S. No. 243/A, Hissa No. 6, CTS No. 4519, 4519/1, near Chinchwad Station, Chinchwad, Taluka – Haveli, Pune, 411019, represented through its authorized signatory **Mr. Anil Gulabrao Salunkhe, Executive Vice President-PPP & Govt. Affairs** (hereinafter referred to as **"Service Provider"** which

(Dr. NITIN AMBADEKAR)
DIRECTOR OF HEALTH SERVICES,
MAHARASHTRA STATE,
MUMBAI

Dean,
Government Medical College
Dharashiv

KRSNAA DIAGNOSTICS LTD Chinchwad Pune-19

expression shall unless it be repugnant to the context mean and include its administrators and permitted assigns) of the Second and Final Part;

Procurer and **Service Provider** shall hereinafter be individually referred to as a **"Party or party"** and collectively as the **"Parties or parties"**, as the context may require.

Recitals:

WHEREAS:

1. The Procurer had invited Bids for **Appointment of Service Provider for Outsourcing of 1.5 Tesla MRI Services in a PPP Mode and Operational Partner for Existing CT Scan Centers** through Tender Reference No: E Tender No.-E-02/CHS/NHM/MRI Services in PPP /P.C./2023-24, dated 18.09.2023 (**"Tender"**).

2. Service Provider is selected through the transparent competitive bidding process as it has met the eligibility criteria as mentioned in the Tender, for successfully completing the project under the Tender vide its work order **Mahatender Bid/CHS/PC/MRI & Existing CT Scan Services/ Work Order/ 14/2024 dated 24.01.2024** ("Work Order").

3. After evaluation of Technical and Financial proposals, Procurer vide approvals accepted the bid of Service Provider.

4. Based on the approach, representations and warranties of the Service Provider, the parties have entered into this Agreement as per the terms outlined herein.

NOW, THEREFORE, IT IS AGREED BETWEEN THE PARTIES HERETO AS FOLLOWS:

1. The following documents shall be deemed to form part of and be read and constructed as integral part of this Agreement, viz.:

   1.1. Tender Reference No: E Tender No.-E-02/CHS/NHM/MRI Services in PPP /P.C./2023-24, dated 18.09.2023;
   1.2. Financial Bid opening dated 01.01.2024;
   1.3. Negotiation meeting dated 10.01.2024;
   1.4. The Service Provider submitted its justification via letter No. KDL/PPP/DHS-MRI/Gen/2023-24/4, dated 10.01.2024, regarding the negotiation meeting dated 10.01.2023Central Purchase Committee minutes dated 11.01.2024;
   1.5. Commissionerate of Health Services, Maharashtra State issued work order No-Mahatender Bid/CHS/PC/MRI & Existing CT Scan Services/ Work Order/ 14/2024 dated 24.01.2024 to Service Provider;
   1.6. Service Provider"s acknowledgement for work order vide its email dated 25.01.2024;
   1.7. Locations and Description of Services ; and
   1.8. Rate List (Discounted CGHS/Non-CGHS rates (NON-NABH/NABH) for MRI Services in Maharashtra);

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DIRECTOR OF HEALTH SERVICES,
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1.9. Performance security in the form of BG No 1897/89, dated 20.02.2024, Amount INR 7876216/- (Amount confirmation received vid e-mail ID- procurenmentcell@gmail.com, dated 07.02.2024) and original copy submitted to Authority dated 23.02.2024

1.10. All correspondences exchanged between the parties till the execution of this Agreement.

2. DEFINITIONS AND INTERPRETATIONS:

DEFINITIONS: In this Agreement, the following capitalized terms shall have meanings as defined herein:

i. **"Agreement"** shall mean and include this Agreement and all other annexed schedules, appendixes, addendums and exhibits, attached hereto.

ii. **"Equipment"** shall mean machinery/ instruments / gadgets of any make used for providing diagnostic services, under this Agreement and under the applicable laws.

iii. **"Intellectual Property"** means all rights, title and interest in, under or in respect of the following arising under Applicable Law, whether or not filed, perfected, registered or recorded:

a. all copyrights, designs, and copyrightable works;
b. all trademarks, service mark, trade name, service name address, brand names, business and product names, logos, slogans;
c. all patents and inventions;
d. domain names;
e. all know-how, Confidential Information, database including patient, customer and supplier database, data collections, technology, technical data, trade secrets, manufacturing and service processes (SOP), systems and techniques, protocols, research and development information (including all research and development data, experimental and project plans and pipeline product information), formulas, business and marketing plans, sales network, service network, customer and suppliers lists, industrial models, technical drawings, statistical models, computer programs including all source code, object code, firmware, development tools, files, and other documentation, and other proprietary documentation and information of every kind;
f. all documents of any of the foregoing (in whatever form or medium);
g. all upgrades, adaptations (in any languages) and development of the foregoing;
h. all applications made for registration of any of the above; and
i. all common law rights relating to the above

iv. **"Procurer"** shall mean the Commissioner Health Services and the Mission Director, National Health Mission.

3. ENGAGEMENT OF SERVICE:

(Dr. NITIN AMBADEKAR)
DIRECTOR OF HEALTH SERVICES,
MAHARASHTRA STATE,
MUMBAI

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It is agreed that the Service Provider will carry following broad activities during the existence of this Agreement and extension period thereafter.

3.1. The Service Provider shall be responsible for finance, supply, installation and commissioning of 1.5 T Magnetic Resonance Imaging scan services of, implementation, offering services, supply of parts and maintain the project on supply, own and operate basis at 17 government district hospitals.

3.2. The Service Provider will be operational partner for 17 Government District Hospitals where Govt. owned existing CT scan machines are installed. The details of all Govt. Hospitals are provided in **Annexure-A** and specification of the MRI equipment is at **Annexure-B**.

3.3. Service Provider will scan government patients for MRI at 03% discount. Any new procedure is added during the contract period which is not in CGHS; the base rate will be decided in reference to MJPJAY or PMMJAY or in mutual consultation and will be binding on the Service Provider. There will be changes in the actual charges paid based on the variation in the CGHS rates prevailing but the percentage discount mention will remain fix for the entire tenure of contract.
The discount applicable rate for MRI Scan will be as follows:

Sr. No.	Description	Percentage % on CGHS Rate mentioned in the list in pt. no. 7.3(a) of tender documents	GST
1.	MRI Scan Services in PPP mode	3% discounted rates	As applicable (if any)

Rate for CT Scans on Government owned CT machines will be 50% of the discounted rates mentioned in the list in point no. 7.3 (b) of tender document (Charges Per CT –Scan Report).
The Rate List as mentioned above is attached herewith and marked as **Annexure-C**.
Private patients may be scanned on the government owned CT Scan and MRI equipment commissioned by the Service Provider on CGHS base rates. The Private patient may be scanned on service provider's own responsibility. There will be escalation of 3% every contract year over prevailing rate as approved by CHS. In case of any revision in CGHS rates, the lowest rate will be applicable among the escalated rate and revised CGHS rate.

3.4. New Installation & continuation: The Service provider shall commission the MRI facility within 180 days from date of handover of site to the service provider from hospital authority. In case of any structural repair, renovation has to be done shall be borne by the service provider. The MRI system should be New under current production; Refurbished / Reconditioned / Recycled or Re-Engineered, Gold Seal & Eco Units will not be accepted.

3.5. Before purchasing /Installing MRI Machine servicer provider need to take

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interacting approval from the department, which will approve the make and model of MRI Machine as per the specification given in the tender or higher specification.

4. OBLIGATIONS OF THE PARTIES & CONDITIONS OF THE AGREEMENT:

4.1. The Service Provider shall, at his own expense, take clear possession of the said built up structure which shall be leak-proof, immediately to set up the MRI Scan Centre subject to basic amenities like adequate electricity and water connection free of cost for establishment of the center.

4.2. The Service Provider shall bear the cost of maintenance, equipment facility, electricity bills, for electrical equipment and AC units etc. for MRI facilities.

4.3. The Department will provide the water supply to the Centre free of cost. Water supply & 3 phase electricity will be provided by Hospital from existing connections, if any up gradation of power is required, it is service provider's responsibility. The Authority will provide available electricity till the point of services but up gradation in power supply if required shall be arranged by the Service Provider. If adequate wattage Power supply as and when available in the hospital can be provided but final responsibility lies with service provider to obtain the adequate power supply to start the center. Separate sub-meter need to be installed by service provider. The institute will provide documentary support for upgradation of power supply.

4.4. The Service Provider will also pay for the usage of electricity by arranging a sub-meter connection to its facility. The monthly cost of electricity bill will also be borne by the Service Provider as per the sub-meter. The internal electrification as per requirement of the machine and associated Equipment and accessories will be the responsibility of the Service Provider.

4.5. LAN Connectivity (Internet facility) to be arranged by service provider, also it is the responsibility of service provider to ensure adequate internet bandwidth for smooth transmission of images. If any disruption in hospital internet services then service provider needs to make alternate net connection failure of net connectivity of hospital or lower bandwidth will not be entertained as reason for delayed transmission or reporting. Delay in transmission due to lack of internet connectivity is considered as disruption of service & penalty will be imposed as appropriate.

4.6. Calibrate & Maintain MRI & CT Equipment in optimum performance conditions by ensuring preventive maintenance.

4.7. The Procurer will provide the water supply and required electricity load requirement to the Centre free of cost. The Service Provider shall make complete arrangements to make MRI machine operational including procurement of MRI machine. The service provider shall be allotted leak-proof constructed space by the hospital authority. All types of minor structural civil modifications and all other requisites/requirements like room furnishing, cabling, lead lining, 3 phase supply and electricity distribution required for MRI machine commissioning shall be borne by the Service Provider.

4.8. Service Provider shall keep the centre premises in neat & tidy condition for patients.

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Any waste arising at the centre including, medical waste, garbage due to day to day operation of centre shall be removed by Service Provider on daily basis and will hand over to the district facility/hospital for further disposal.

4.9. The human resources including in-house Radiologist, or Tele-radiology system, Staff nurse and Radiographer for the MRI scan facility shall be the sole responsibility of the Service Provider. Anesthetist will be provided by Procurer for the procedures which required anesthetist. (MRI- max. 2films) (14x17 In).

4.10. The Service Provider shall employ skilled, semi-skilled and unskilled manpower in sufficient numbers to carry out its services at the required rate of progress and of quality to ensure workmanship, of the degree specified in the Agreement for timely fulfilling of the Service Provider's obligations under the Agreement and to the satisfaction of the Procurer.

4.11. The eligibility criteria & minimum manpower requirement shall be as follows:

i. Eligibility/Criteria for Radiologist/Tele-radiologist: - The radiologist should hold MD (Radiology) / DNB degree in Radiology with One year of experience in radiology field or the radiologist should hold /DMRE/DMRD /Diploma in Medical Radiology with Two years of radiology related experience. His degree should be MMC/NMC registered.

ii. Eligibility/Criteria for MRI Technician: - The technician should hold a Degree / diploma from an Institute recognized by Paramedical Board in India. Experience as MRI scan technician for two years is required. One per Shift.

iii. Eligibility/Criteria for CT Scan Technician: - The technician should hold a Degree / diploma from an Institute recognized by Paramedical Board in India. Experience as CT scan technician for two years is required.

iv. Eligibility Criteria for Nurses: - The nurse should hold an ANM/ GNM Diploma or B.Sc. Degree in Nursing from an Institute recognized by Indian Nursing Council, Experience as Nurse for at least one year is required. One per Shift.

v. Two attendants.

4.12. The Service Provider shall comply with all the provisions of Minimum Wages Act and other applicable labor laws. The Service Provider shall also comply with all relevant statutory provisions, including but not limited to provisions regarding criteria for the education and qualifications of personnel deployed by the Service Provider, biomedical waste management, radiological waste management, bio- safety, occupational safety and environmental safety.

4.13. The Service Provider will be required to provide the MRI service to patient, referred by the government hospital authority/doctor during the OPD hours of the hospital. If enough patients are not referred from hospitals during OPD hours, Service Provider may provide service to non-referred, private patients and collect the fees as decided.

After OPD hours or after all hospital referred patients are screened, the service provider can offer the services to the private patients/outside patients on strictly agreed rate (as per CGHS rates mentioned in Pt. No. 7.3(a). in Tender Document). However, despite of anything contained in any of these clauses of Agreement, during the emergency hours first priority shall be given to hospital referred patients. Service Provider will ensure that

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all such referred patients are given MRI/CT services on the same day or latest by 12 hours from referral. Priority during emergency hours will be decided in consultation with the Head of Institute of the hospital.

4.14. The Service Provider shall submit the hard/soft copies of the report to the patient and a copy of the signed report to the hospital along with film/images within the stipulated time mentioned below,

i. All head injuries, trauma cases and cases declared as urgent by their referring hospital /doctor within 1 hour.
ii. All routine scan from 8 AM to 6 PM within 6 hours from scan only.
iii. All routine scan from 6 PM to 8 AM before 12 Noon of next day.
iv. All patients referred by Govt. Hospital specialist should be completed /tested on the same day.

4.15. The Service Provider shall also ensure, at its own cost, IT enabled work station at the radiology department.

4.16. Service Provider shall provide online software driven dashboard (Software requirement will be given by the department) for monitoring of service delivery. The online software will be customized as per requirement of the department.

4.17. The Service Provider has to submit all data relating to tests performed during a year, on quarterly basis and submit it to the Procurer in a hard disk which should be retrievable at any time during requirement and as well as Agreement period.

4.18. The Service Provider will enter into Agreement with Procurer along-with terms and conditions. The Service Provider will have to bear the legal and stationary charges prevailing at the time of payment as well as the cost of stamp duty and registration.

4.19. The Procurer may increase/modify the number of MRI/CT scan facilities/centers on department decision & is binding on Servicer Provider.

4.20. The Service Provider will provide PACS and monitor will be of minimum 21/22 inches size.

4.21. Service Provider shall ensure best quality of tests and protocols. Procurer/Authority shall finalize a third-party auditor for the clinical audit of the radiological images as suggested by the service provider. The audit will be done on quarterly basis by an expert panel appointed by Procurer and it will form the basis of quality performance of the service provider. Moreover, it will lead to penalty or termination if the quality of report is found to be poor as mentioned in clause 6.6 For third party audit 1% of sample reports would be drawn from every month for previous quarter

4.22. The service provider will purchase & install MRI Scan Machine at his own cost and pay necessary all statutory taxes. All CT scan are under AMC/CMC, as the service provider takes handover of the government owned CT scan, the responsibility of maintenance (AMC/CMC) and operational of the CT scan will be the service provider. The service provider will update the hardware and software of MRI & CT Scan machine whenever required or as directed by Department. It shall be responsibility of the service provider to

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make all arrangement regarding mobilization transportation and storing, testing etc. of material and machinery required for smooth functioning of MRI & CT Scan Centre. Both MRI and CT scan machines shall be properly maintained and insured at the cost of service provider. The expenses required for the running of CT and MRI scan machines including the cost of film (one film report for CT & 2 film report for MRI and the film should be of 14X17 inches), chemical, insurance, labour, any other consumable etc. will be borne by the service provider.

4.23. In case of any interruption to the service due to any mal-function to the device (either MRI or CT scan) or due to any other reasons, the service provider will be required to arrange alternative mechanism immediately with-in 24 hours till the problem is solved. In case transport referral is not available due to non- availability of dial -108 ambulances, service provider will be required to provide for alternative transport also.

5. SPECIAL CONDITIONS:

5.1. Software /Technology updation. The machine shall be suitably updated by the Service Provider under following conditions:

i. Review by a board appointed by Nodal Authority upon assessing the need for a software updating (Software Audit) Such reviews should not be made in less than one year but should be made midway of the Agreement and before renewal of the Agreement. If the Service Provider understands the requirement of the technology up-gradation for the best interest of the Agreement, then the Procurer can request for such technology updating from the nodal authority and the Service Provider shall execute the updating of the technology at its cost and based upon mutual consent.

ii. Upon declaration of any national or international guideline accepted by the Government prohibiting the use of earlier (currently installed) technology.

iii. The necessary components should be replaced in due course of time as per technical manual prescribed by the manufacturer when found defective during the service period or during periodic calibration resulting in deterioration of image quality observed by the HOD Radiologist/Facility in charge of the hospital.

iv. Any updation should be at Service Provider's own cost.

5.2. Annual review of performance and observance of terms & conditions including quality of tests shall be carried out by a committee which shall include expert members nominated by the authority. The report of this annual review shall form the basis for extension of the contract

5.3. In case there is a requirement for contrast MRI/CT after plain MRI/CT has been performed, and this requirement has been confirmed by the radiology department at the concerned facility, the contrast MRI/CT will be treated as separate procedures and the Service Provider shall be paid for both the plain MRI/CT and the contrast test provided both the tests has been mandated as a clinical requirement by the referring medical professional.

5.4. Acknowledgement receipt shall be provided by the Service Provider to every patient. A copy of all such receipts duly signed by patient / relative shall be submitted on a

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monthly basis by the Service Provider to the hospital authority. This will form the basis of monthly payment by Procurer to the Service Provider for the said services. All receipts shall be subjected to a third party quarterly/annual audit and the audit report submitted as part of quarterly/annual work report of the Service Provider for that facility.

5.5. The following records shall be maintained daily by the Service Provider (on IT based solution/portal and should be visible to concerned facility in charge and specialist along with district / division / state level access):

i. Daily patients register for patients referred for MRI/CT.
ii. Logbook for record of any breakdown/shut down of the machine/facility.
iii. Detailed records of the patients & their reports should be maintained.
iv. One report copy of each & every patient should be available in the centre at any instance.
v. Monthly report should be submitted to Head of Institute.
vi. Monthly report should contain report of Government & Private patients separately.
vii. All reports or scans/films, which are not delivered, will be done so immediately and accounted for.
viii. Any dues towards non-replacement of missing reports, or unpaid dues towards penalties and fines during the Agreement will be deducted from the security deposit.

5.6. In case the reports or scan prints are not found to be legible, the examination shall have to be re- done by the operator without any additional charges. The decision as to whether the test report is legible or not shall be at the sole discretion of the Head of Institute / In Charge Medical Officers of the hospital and the same shall be final and binding on the operator.

5.7. The Service Provider will maintain the record of patients who have done the MRI/CT and shall submit monthly report to Head of Institute by 5th of every month. All the report shall be made available online. The report shall be provided to patients in hard/soft copy of electronically signed by concerned radiologist /Tele-radiologist. The Service Provider shall not sell or transfer any proprietary right or entrust to any other third party for running the MRI/CT facility. The Service Provider may however refer the test to another centre in case of breakdown / shutdown ensuring all other conditions pertaining to services, reports, records, patient transport and safety of processes and procedures in the referred centre.

5.8. Reporting: Service Provider should develop a portal and all the reports along with images to be made available on this portal and separate analytical dashboard for the region which will be linked to the state dashboard for all the regions (dashboard design and particulars will be decided in consensus with the Procurer/authority). The Service Provider will integrate this portal with the radiology module of the CDAC software after the operationalization of Hospital project in concerned facility. The dashboard will also display the number of government and private patients catered. For patients referred by Government specialist, in hospitals with online HMIS application then radiology dashboard will be linked to HMIS application and patient referral for imaging will be done

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online which should be reflected on dashboard/software and for hospitals where there is no HMIS application appointment entry for referred patient should be taken immediately by the Service Provider as per the case paper issued by the treating specialist and patient demography will be immediately visible on the dashboard/software and subsequently when the imaging is done, time taken from prescription to imaging should be seen on the dashboard. The appointment and imaging time of Private patients should also be visible on the dashboard/software. The software driven dashboard should be made operational within 30 days after commencement of the MRI facilities. IT Experts nominated by CHS, Maharashtra should be involved in the development of dashboard. CHS Maharashtra will get IT Audit of the dashboard done before its launch. The service provider will be responsible for paying the charges for the IT Audit once.

5.9. The service provider shall indemnify the CHS Mumbai from any mishap occurring during patient transport, inside the MRI facility and consequence arising due to reporting error, confirming to the provision of the consumer protection act, and any other legal matter (s) arising out of the same.

5.10. After closure of the Agreement between the Service Provider and the Procurer, the Service Provider shall un-install the MRI machine at his own cost and hand over the allotted space to the hospital authorities within 60 days, in good conditions at his own cost.

5.11. The Service Provider shall arrange for appropriate and adequate signage and IEC (information-education-communication) activities for the MRI machines as decided by the authority.

5.12. The Service Provider shall provide the following:

i. Hard copy and soft copy of the report duly signed /digitally signed by radiologist along with image film to the patient and hospital (as per direction given by CHS.)

ii. Service Provider needs to provide soft copy of patient's diagnosis image to the department on a hard drive.

5.13. The salary of the all medical, paramedical and other personnel working at the Centre will have to be borne by the Service Provider. Salary payment records will have to be furnished to CHS Maharashtra as and when demanded.

5.14. The technical staff required for operational performance of the machines as well as the reporting of the MRI by placement of competent qualified radiologist/tele- reporting round the clock 365 days will be responsibility of Service Provider. Presence of government radiologist/Sonologist is mandatory at the time of ANC patient and fetal MRI as per the provision of PCPNDT Act. It is the responsibility of the Service Provider to deal with medical emergencies arising during MRI/CT scans and immediately shift the patient to casualty with support of hospital staff.

5.15. The Procurer will not bear any cost towards the establishment of the said staff and the employees at the Centre will not get benefits of Government Service Regulations.

5.16. Service Provider will also adequately insure the equipment and the staff against theft,

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loss, damage till the Agreement period is valid. All the charges for insurance will have to be borne by the Service Provider.

5.17. Service Provider should employ suitable assistants to help in registering the patient reporting to hospital authorities etc.

5.18. Service Provider shall not employ in connection with the services any child who has not completed his/her fifteenth year of age. It shall also not employ an adolescent who has not completed his/her eighteenth year unless he/she is certified fit for carrying out Services as an adult as prescribed under clause (b) of sub-section (2) of Section 69 of the Factories Act, 1948.

5.19. The Service Provider will at all times duly observe the provisions of Employment of Children Act XXVI of 1938 and any other similar Acts and any re-enactment or modification of the same and will not employ or permit any person to do any work in contravention of the provisions of the said Acts.

5.20. The Service Provider shall ensure that his staff while carrying out the said work is in uniform approved by user department, need to hold the Photo identity card while on duty.

5.21. Image retention for Medico Legal Cases (MLC) would be the responsibility of the authority and the service provider shall handover the softcopy of the images to the authority as per agreement with the state. Legal responsibility of correct MRI and CT reporting of images lies with the service provider.

5.22. Private patients may be scanned on the government owned CT scan upto CGHS Rate. However for in-house (i.e. Govt. Referred Patients) CT scan, rates capping will remain same as 50% discount on CGHS rate. The private patient may be scanned on service providers own responsibility.

6. **Penalty Criteria**

6.1 The service provider will have to maintain an uptime of more than 95% for individual facility i.e. 95% and above. In case of downtime less than 95% for specific facility then 1% of monthly bill for that concerned facility would be deducted for every 5% reduction in uptime. (For example 1% deduction for more than 90% but less than 95% uptime, additional 1% i.e. total 2 % deduction for more than 85% but less than 90% uptime, additional 1% i.e. total 3 % deduction for more than 80% but less than 85% uptime). If uptime for any facility is less than 80% then whole monthly bill will be deducted for that concerned facility. For this purpose facility wise calculations will be done on monthly basis to prepare cumulative penalty for that specific month.

6.2 If down time is beyond 24 hours but less than three days for any facility without giving any alternative arrangement then 5% of monthly bill over the clause no.6.1 will be deducted for that particular facility.

6.3 If downtime is for three or more consecutive days for any facility without giving any alternative arrangement, then

1 3 to 6 days- 5%
2 7 to 13 days-10%
3 >=14 days – No payment for the month for that facility.

6.4 The service provider will be bound to establish the unit within the stipulated period as

(Dr. NITIN AMBADEKAR)
DIRECTOR OF HEALTH SERVICES,
MAHARASHTRA STATE,
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mentioned in clause no-3.4, failing which the following penalty will be levied on the agency: For Delayed setting up of Unit: A penalty of 0.1% of the performance security deposit per center for each week delay will be deducted from the first billing amount raised by the service provider(for example if there is delay two week for operationalization of 1 centre then 0.2% deduction and if there is delay of one week for operationalizing two centers then deduction will be 0.2%). Such matters are to be reported by the Authority of respective public health facility to the Tender Inviting Authority.

6.5 Report of MRI/CT scan should be provided by service provider to the hospital within the stipulated time mentioned above at clause no- 4.14. In delayed reporting penalty of 10% of Cost per MRI/CT scan per patient shall be imposed to the service provider.

6.6 The service provider must ensure the error less reporting. There will be no penalty if the error in reporting is $\leq 5\%$ as per the quarterly audit report submitted by third party or panel set up by department. Whereas if the error in reporting is reported greater than 5% and upto 10% then 1% payment of concerned month will be deducted from the monthly bill. If the error in reporting is more than 10% and up to 15% then 2% payment of concerned month will be deducted from the monthly bill. If the error in reporting is more than 15% then 5% payment of concerned month will be deducted from the monthly bill. The contract will be terminated if the error in reporting is more than 20% consecutively for 2 quarters. The agency for quarterly audit will be suggested by the service provider & finalized by the state and the payment of the said agency will be given by the service provider.

1 Panel will be of in-house radiologist/from govt medical colleges.
2 1% sample of reports and images will be collected randomly from the quarter.
3 This will be verified by panel of designated radiologist and identify the significant deviation.
4 Significant deviation as decided by experts will be considered as error in reporting.

6.7 If the Service provider collect charges from Govt. patient as per Market rates then a penalty of Rs.5000/- will be charged per instance of such violation.

6.8 If the Service provider claims for charges which he has already collected from private patient again by showing him as a government patient, then a penalty of Rs. 10,000/- will be charged per instance of such violation.

7. **PAYMENT:**

7.1. No advance payments towards cost for this project will be made to the Service Provider.
7.2. Procurer shall make payment to the Service Provider for its services on Monthly basis through ECS for all invoices raised for the previous month. The Procurer shall not pay the Service Provider any charges for any repeat tests resulting out of imaging errors.
7.3. The payment of 70% of monthly invoice will be paid after the submission of invoice along with the system generated facility wise scan report by the Service Provider and remaining 30% will be paid quarterly after detail scrutiny of the facility wise scan reports received on 10th of every month, from Hospital in-charge/medical superintendent and respective district surgeons.
7.4. All penalties will be deducted from 30% of the quarterly payment to service provider.

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DIRECTOR OF HEALTH SERVICES,
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15. The Service Provider will raise its invoice on completion of services during this period duly accompanied by evidence of services provided.

16. Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other taxes as applicable will be made from the bills payable to the Service Provider at rates as notified from time to time.

17. The service provider should submit demand draft amounting to 1.5% of order value for 1 year to meet administrative expenditure and other incidental expenditure.

8. **OPERATIONAL ROOMS:**

The following operational rooms need to be setup by the service provider inside the premises:

i. Reception/Registration/Report collection room;
ii. MRI magnet room (Design as per Guideline/Statutory body)
iii. MRI Equipment room
iv. Operator console room (With glass window & door with magnet room);
v. UPS (For whole MRI Console) and Stabilizer room.
vi. Store Room
vii. Wash room (Male/Female)
viii. Changing Room (Male/Female)
ix. Patient Recovery
x. Metal Scanning
xi. Waiting Area
xii. Doctor Room
xiii. Approximate total area required for establishing complete MRI site will be 2000 sq ft to 2500 sq. ft.

9. **[illegible] WORKS AND CERTIFICATIONS:**

9.1. It is the responsibility of the Procurer to obtain AERB registration from AERB, after possession by the Service Provider is taken and initiation of the services at Procurer's own cost. Where government owned CT Scan Machine operated by Service Provider as an Operational Partner).

10. **[illegible] ACTS:**

10.1. It is solely the responsibility of the Service Provider strictly follow all provisions as given in the Pre Conception and Pre Natal Diagnostic Techniques (Prevention of Sex Selection) Act 2003 (PCPNDT ACT). PCPNDT registration of CT Scan will be done only by respective DH authority as PCPNDT registration of MRI can be added in the existing registration certificate which will be the Service Provider's responsibility.

10.2. In case any the registrations are required to be completed by the Service Provider then the Procurer shall provide the documents including the letter for registration under PCPNDT.

10.3. It is the responsibility of the Service Provider to take all necessary medical reports for PCPNDT implementation from appropriate Authority. It is the responsibility of the Service Provider to maintain and store all necessary records and reports required under

[illegible]

the PCPNDT Act.

10.4. Any legal complication arising because of violation of the PCPNDT, Act, 2003 shall be the responsibility of the Service Provider. Department shall not be responsible for any legal complications in this matter. Action will be taken against the Service Provider for any irregularities observed under the Act.

11. INTELLECTUAL PROPERTY RIGHTS:

11.1. The Service Provider shall, at all times, indemnify and keep indemnified the Procurer, free of cost, against all claims which may arise in respect of goods & services to be provided by the Service Provider under the Agreement, for infringement of any intellectual property rights or any other right protected by patent, registration of designs or trademarks.

11.2. In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the Procurer, the Procurer shall notify the Service Provider of the same and the Service Provider shall, at his own expenses take care of the same for settlement without any liability to the Procurer.

11.3. The Service Provider/its Indian Agent/CMC Provider shall at all times, indemnify and keep indemnified the Procurer/ Government of India against all claims/ damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under Comprehensive Warranty/CMC/AMC.

12. REPRESENTATIONS AND WARRANTIES:

12.1. Each Party hereby represents and warrants to the other Party as follows:

i. It is validly existing under the Applicable Laws;

ii. It has the power and authority to execute and deliver this Agreement. The execution and delivery of this Agreement has been duly authorized and approved and does not require any further authorization from any Person;

iii. Upon execution, this Agreement will be its legal, valid and binding obligation, enforceable against it in accordance with its terms;

iv. The execution and delivery of this Agreement by it, and its promises, agreements or undertakings under this Agreement do not violate any Applicable Laws or violate its charter documents, or any Agreements, agreements or any other instruments to which it is a party or which are applicable to it;

v. It holds all licenses, approvals and permits required by Applicable Law for carrying out their work under this Agreement.

13. TENURE AND TERMINATION:

13.1. Contract Period will be for ten years, extendable for further three years as per government approval, subject to satisfactory performance appraisal.

13.2. Termination for default: - The Procurer/User Institution, without prejudice to any other rights and remedies available to it (the Procurer /User Institution), may, by written notice of default sent to the Service Provider, terminate the Agreement in whole or in part, if the Service Provider fails to commission any or fails to perform any other obligation(s) within the time period specified in the Agreement, or within any extension thereof granted by the Procurer/User Institution.

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13.3. In the event of the Procurer/User Institution terminates the Agreement in whole or in part, the Procurer/User Institution may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the Service Provider shall be liable to the Procurer/User Institution for the extra expenditure, if any, incurred by the Procurer/User Institution for arranging such procurement.

13.4. Unless otherwise instructed by the Procurer/User Institution, the Service Provider shall continue to perform the Agreement to the extent not terminated.

13.5. Termination for insolvency: If the Service Provider becomes bankrupt or otherwise insolvent, the Procurer reserves the right to terminate the Agreement at any time, by serving written notice to the Service Provider without any compensation, whatsoever, to the Service Provider, subject to further condition that such termination will not prejudice or affect the rights and remedies which have accrued and / or will accrue thereafter to the Procurer/User Institution.

14. FORCE MAJEURE:

14.1. Force Majeure means an event beyond the control of the Service Provider and not involving the Service Provider's fault or negligence and which is not foreseeable and not brought about at the instance of, the party claiming to be affected by such event and which has caused the non–performance or delay in performance. Such events may include, but are not restricted to, acts of the Procurer/User Institution either in its sovereign or Agreementual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes excluding by its employees, lockouts excluding by its management, and freight embargoes.

14.2. If a Force Majeure situation arises, the Service Provider shall promptly notify the Procurer/User Institution in writing of such conditions and the cause thereof within twenty-one days of occurrence of such event. Unless otherwise directed by the Procurer/User Institution in writing, the Service Provider shall continue to perform its obligations under the Agreement as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

14.3. If the performance in whole or in part or any obligation under this Agreement is prevented or delayed by any reason of Force Majeure for a period exceeding Ninety days, either party may at its option terminate the Agreement without any financial repercussion on either side.

14.4. In case due to a Force Majeure event the Procurer/User Institution is unable to fulfill its Agreementual commitment and responsibility, the Procurer/User Institution will notify the Service Provider accordingly and subsequent actions taken on similar lines described in above sub- paragraphs.

14.5. Upon occurrence of any force majeure event like site location change in between the tenure, the Procurer shall bear respective cost of relocating the machine or else if existing Hospital is upgraded to Medical College the existing services shall be continued as agreed terms & condition.

15. INDEMNITY:

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15.1. The Service Provider shall keep the Procurer, their officers and servants harmless and indemnified from and against all losses, suits, damages, costs, charges, claims and demands, whatsoever including claim under the workmen's compensation Act 1924, their officer or servants may sustain, incur or become liable to pay by reason in consequence of any injury to any person or to any property either belonging to the employer whether resulting directly through any accident or otherwise to life or property. The Indemnity Bond and the agreement regarding the works shall be in the form, which may be prescribed by the Procurer and shall be executed by the party within one week from the receipt of acceptance letter by it.

15.2. All claims regarding indemnity shall survive the termination or expiry of the Agreement.

15.3. The Procurer hereby agrees to protect the Service Provider for the tenure of the Agreement against any changes in the policy of government, false representation, pandemic etc.

16. DAMAGES FOR MISHAP/INJURY:

The Procurer shall not be responsible for damages of any kind or for any mishap/injury/accident caused to any personnel/property of the Service Provider while performing duty in the Procurer's premises. All liabilities, legal or monetary, arising in that eventuality shall be borne by the Service Provider.

17. SEVERABILITY:

If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision or part of such provision and the remaining part of such provision and all other provisions of this Agreement shall continue to remain in full force and effect.

18. WAIVER:

The failure of any Party to insist, in one or more instances, upon strict performance of the obligations of this Agreement, or to exercise any rights contained herein, shall not be construed as waiver, or relinquishment for the future, of such obligation or right, which shall remain and continue in full force and effect. Any waiver can only be made by a written instrument.

19. ANNEXURE:

All the Annexure specified in this agreement shall be an integral part of this Agreement.

20. AMENDMENT:

Any change or modification to this Agreement will necessarily require being in writing upon mutual understanding of both the parties to this Agreement.

21. NOTICES:

All notices and correspondences shall be made in writing and delivered at the addresses mentioned herein unless directed otherwise in writing by the Parties by any method that

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provides a proof of delivery. Notices and correspondences shall be deemed as received when delivered and shall be deemed as sent when put through a course of irreversible transmission. Notices may be served either by delivery to a party personally, pre-paid air mail, courier, registered post, e- mail or facsimile at aforesaid address.

22. COUNTERPARTS:

This Agreement may be executed simultaneously in counterparts each of which shall be deemed to be an original but all of which shall constitute the same instrument.

23. ENTIRE AGREEMENT:

The Agreement, including any annexures or documents attached hereto or hereinafter, all of which are hereby incorporated by reference, shall be deemed to form a part of this Agreement and constitutes the complete and exclusive statement of agreement between the Parties and supersedes all prior agreements, understandings and communication of any kind by and between the Parties, whether written or oral, with respect to the subject matter hereof.

24. CONFIDENTIALITY:

Either party shall not disclose the confidential information of the other party to any third party; or use the confidential information of the other party for any purpose. Either party must take all reasonably necessary steps to ensure that its officers, employees, agent and subcontractors do not make public or disclose any confidential information. Confidential information shall include all information whether written, oral or in any other form, intimated by one party hereto to the other as confidential, Government will disclose only that information which can be disclosed as per the Right to information Act.

25. DISPUTE RESOLUTION SYSTEM AND GOVERNING LAWS:

Any dispute arising out of or in connection with this contract, including any question regarding its existence, validity or termination, shall be referred to and finally resolved by arbitration in accordance with the Arbitration Rules of the Mumbai Centre for International Arbitration ("MCIA Rules"), which rules are deemed to be incorporated by reference in this clause.

The seat of the arbitration shall be Mumbai.

The Tribunal shall consist of (one) arbitrator(S).

The language of the arbitration shall be English.

The law of this arbitration agreement shall be the Arbitration and conciliation Act 1996

The Law Governing the contract shall be the law enforce in India."

26. Employees of the service provider:

The employees/staff working under service provider under this agreement are purely the employees of the service provider and will not be consider as employees of State

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Government or National Health Mission, and will not claim any benefit, permanency or absorption. During the term, service provider shall maintain all the applicable Laws relating to their employees. Recruit and manage all personnel and bear all responsibilities and liabilities as per applicable Laws in India.

IN WITNESS WHEREOF, The parties have entered into this agreement on the date and place specified above.

The Commissioner, Health Services and Mission Director, National Health Mission, on behalf of Governor of State of Maharashtra, Mumbai.	**For and on behalf of Krsnaa Diagnostics Limited**
(Dr. NITIN AMBADEKAR) DIRECTOR OF HEALTH SERVICES, MAHARASHTRA STATE, MUMBAI	KRSNAA DIAGNOSTICS LTD Chinchwad Pune-19
Name:	**Name: Mr. Anil Gulabrao Salunkhe**
Designation:	**Designation: Executive Vice President-PPP & Govt Affairs**
Date:	**Date:**
Witness: Dr. Madhuri Kale	**Witness:**
Name: ADHU CHSS)	**Name:** Mr Amol D. Garje, Manager-PPP,KDL.

Annexure-A

Sr. No.	Name of Circle	Name of District	Name of MRI Center	Number of MRI Machines	Need to operate Govt. Owned CT Scan machine
1.	Nashik	Nashik	DH Nashik	1	1
2.		Dhule	DH Dhule	1	1
3.		Nandurbar	DH Nandurbar	1	1
4.		Ahmednagar	DH Ahmednagar	1	1
5.	Aurangabad	Aurangabad	DH Aurangabad	1	1
6.		Jalna	DH Jalna	1	1
7.		Parbhani	DH Parbhani	1	1
8.		Hingoli	DH Hingoli	1	1
9.	Latur	Beed	DH Beed	1	1
10.		Osmanabad	DH Osmanabad	1	1
11.		Nanded	DH Nanded	1	1
12.	Nagpur	Wardha	DH Wardha	1	1
13.		Bhandara	DH Bhandara	1	1
14.		Gadchiroli	DH Gadchiroli	1	1
15.	Akola	Washim	DH Washim	1	1
16.		Amrawati	DH Amrawati	1	1
17.		Buldhana	DH Buldhana	1	1
	Total			17	17

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DIRECTOR OF HEALTH SERVICES,
MAHARASHTRA STATE,
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Annexure-B

The Service Provider will provide of MRI machine along with following specification/authority approved specifications

1) 1.5 Tesla active shielded super conductive magnet should be short bore and non- claustrophobic and should have noise reduction features.
2) Bore size - 60cm or more
3) Magnet Length - Less than 200 cm.
4) Specify homogeneity at 10, 20, 30, 40cm DSV.
5) Homogeneity of magnet should be less than 1.5 ppm over 40 cm DSV (Guaranteed homogeneity).
6) The quoted magnet system should have a gradient system with Peak amplitude of 33mT/m or more and gradient slew rate of 120T/m/s or more.
7) RF Power / RF Transmit - 10kW or more.
8) RF channels - 16 RF or more receiver channels or more.
9) The neurovascular (head neck) & flex coils should be of 16 channels or more to perform scans mentioned in point no. 14. Multi coil connection should be with 3 connectors.
10) Patient Table should be able to take at least 150 kg load or more.
11) Accessories : 1) MR compatible patient trolley (to transfer patient to the magnet table) – 2 numbers. 2) MR compatible wheel chairs – 2 numbers. 3) MR Compatible Multi-parameter Monitor (ECG, Spo2, NIBP, HR, RR)
12) The system should be European CE or US FDA approved (certificate to be submitted) and CDSCO Registration.
13) The MRI system should be under current production; Refurbished / Reconditioned / Recycled or Re-Engineered, Gold Seal & Eco Units will not be accepted.
14) The equipment should be able to perform following scans.
    a. MRI Head – With and Without Contrast
    b. MRI Orbits – With and Without Contrast
    c. MRI Nasopharynx and PNS – With and Without Contrast
    d. MR for Salivary Glands with Sialography
    e. MRI Neck - With and Without Contrast
    f. MRI Shoulder – With and without contrast
    g. MRI shoulder both Joints – With and Without contrast
    h. MRI Wrist Single joint – With and Without contrast
    i. MRI Wrist both joints – With and Without contrast
    j. MRI knee Single joint – With and Without contrast
    k. MRI knee both joints – With and Without contrast
    l. MRI Ankle Single joint – With and Without contrast
    m. MRI Ankle both joints - With and without contrast
    n. MRI Hip – With and without contrast
    o. MRI Pelvis – With and Without Contrast
    p. MRI Extremities – With and without contrast
    q. MRI Temporo mandibular – B/L – With and without contrast.

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r. MRI Temporal Bone/ Inner ear with and Without contrast
s. MRI Abdomen – With and Without Contrast
t. MRI Breast – With and Without Contrast
u. MRI Spine Screening - Without Contrast
v. MRI Chest – With and Without Contrast
w. MRI Cervical/Cervico Dorsal Spine – With and Without Contrast
x. MRI Dorsal/ Dorso Lumbar Spine – With and Without Contrast
y. MRI Lumbar/ Lumbo-Sacral Spine – With and Without Contrast
z. Whole body MRI (For oncological workup
aa. MRI cholecysto-pancreatography.
bb. MRI Angiography - with contrast
cc. MRI Enteroclysis.
dd. Any additional scan added by CGHS or such scans which can be performed on the equipment.

15) The equipment should be able to perform following scans

i. CT Head -Without contrast
ii. CT Head - with Contrast (+/- CT angiography)
iii. CT Chest - without contrast (for lungs)
iv. CT Chest - with contrast (+/- CT angiography)
v. CT Scan Upper Abdomen Without Contrast
vi. CT Scan Upper Abdomen With Contrast
vii. CT Scan Lower Abdomen Without Contrast
viii. CT Scan Lower Abdomen With Contrast
ix. CT Scan Whole Abdomen Without Contrast
x. CT Scan Whole Abdomen With Contrast
xi. CT angiography abdomen/chest
xii. Triple Phase CT abdomen
xiii. CT Enteroclysis
xiv. CT Scan Neck (Thyroid, parathyroid, Soft Tissues) – Without Contrast
xv. CT Scan Neck – With Contrast
xvi. CT Scan Orbits - Without Contrast
xvii. CT Scan Orbits - With Contrast
xviii. CT Scan of Paranasal Sinuses- Without Contrast
xix. CT Scan of Paranasal Sinuses - With Contrast
xx. CT Spine (Cervical, Dorsal, Lumbar, Sacral)– without contrast
xxi. CT Temporal bone – without contrast
xxii. CT - Dental
xxiii. CT Scan Limbs -Without Contrast
xxiv. CT Scan Limbs -With Contrast including CT angiography.

If Any new procedure is added during the contract period which is not in CGHS; the base rate will be decided in reference to MJPJAY or PMMJAY or in mutual consultation and will be binding on the Service Provider. There will be changes in the actual charges paid based on the variation in the CGHS rates prevailing but the percentage discount mention will remain fix for the entire tenure of contract.

(Dr. NITIN AMBADEKAR)
DIRECTOR OF HEALTH SERVICES,
MAHARASHTRA STATE,
MUMBAI

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Annexure-C

7.1 a) List of CGHS rates (Non NABH) for MRI in Maharashtra.

Sr. No.	Name of investigation / procedure	Lowest CGHS Rate in Maharashtra for Non-NABH Hospital	Discounted Rate
1	MRI Head – Without Contrast	Rs. 2125	2,061
2	MRI Head – With Contrast	Rs. 2848	2,763
3	MRI Orbits- Without Contrast	Rs. 1445	1,402
4	MRI Orbits – With Contrast	Rs. 2000	1,940
5	MRI Nasopharynx and PNS–Without Contrast	Rs. 2125	2,061
6	MRI Nasopharynx and PNS–With Contrast	Rs. 3500	3,395
7	MR for Salivary Glands with Sialography	Rs. 3000	2,910
8	MRI Neck - Without Contrast	Rs. 2040	1,979
9	MRI Neck- with contrast	Rs. 4250	4,123
10	MRI Shoulder – With contrast	Rs. 2340	2,270
11	MRI Shoulder – Without contrast	Rs. 2000	1,940
12	MRI Shoulder both joints -Without contrast	Rs. 2125	2,061
13	MRI Shoulder both joints –With contrast	Rs. 4000	3,880
14	MRI Wrist Single joint –Without contrast	Rs. 2550	2,474
15	MRI Wrist Single joint –With contrast	Rs. 4000	3,880
16	MRI Wrist both joints –Without contrast	Rs. 3400	3,298
17	MRI Wrist Both joints –With contrast	Rs. 4250	4,123
18	MRI knee Single joint –Without contrast	Rs. 2550	2,474
19	MRI knee Single joint –With contrast	Rs. 4250	4,123
20	MRI knee both joints –Without contrast	Rs. 3400	3,298
21	MRI knee both joints – With contrast	Rs. 4250	4,123
22	MRI Ankle Single joint -Without contrast	Rs. 2125	2,061
23	MRI Ankle single joint –With contrast	Rs. 4250	4,123
24	MRI Ankle both joints –With contrast	Rs. 5525	5,359
25	MRI Ankle both joints –Without contrast	Rs. 2125	2,061
26	MRI Hip - With contrast	Rs. 2500	2,425
27	MRI Hip – without contrast	Rs. 2125	2,061
28	MRI Pelvis – Without Contrast	Rs. 2125	2,061
29	MRI Pelvis – with contrast	Rs. 4250	4,123
30	MRI Extremities - With contrast	Rs. 4250	4,123
31	MRI Extremities – Without contrast	Rs. 2125	2,061
32	MRI Temporomandibular - Single Joint -With	Rs. 4250	4,123
33	MRI Temporomandibular - Single Joint -Without contrast	Rs. 2125	2,061
34	MRI Temporo mandibular – B/L – With contrast.	Rs. 3600	3,492
35	MRI Temporo mandibular – B/L –without	Rs. 2125	2,061

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DIRECTOR OF HEALTH SERVICES,
MAHARASHTRA STATE,
MUMBAI

KRSNAA DIAGNOSTICS LTD
Chinchwad Pune-19

36	MR Temporal Bone/ Inner ear with contrast	Rs. 3600	3,492
37	MR Temporal Bone/ Inner ear without contrast	Rs. 2500	2,425
38	MRI Abdomen – Without Contrast	Rs. 2125	2,061
39	MRI Abdomen – With Contrast	Rs. 4250	4,123
40	MRI Breast - With Contrast	Rs. 4250	4,123
41	MRI Breast - Without Contrast	Rs. 2125	2,061
42	MRI Spine Screening- Without Contrast	Rs. 1700	1,649
43	MRI Chest – Without Contrast	Rs. 2125	2,061
44	MRI Chest – With Contrast	Rs. 4000	3,880
45	MRI Cervical/Cervicodorsal Spine –Without Contrast	Rs. 2125	2,061
46	MRI Cervical/Cervicodorsal Spine –With Contrast	Rs. 4000	3,880
47	MRI Dorsal/Dorsolumbar Spine –Without Contrast	Rs. 2125	2,061
48	MRI Dorsal/Dorsolumbar Spine –With Contrast	Rs. 4000	3,880
49	MRI Lumbar/Lumbosacral(LS) Spine –Without Contrast	Rs. 2125	2,061
50	MRI Lumbar/Lumbosacral(LS) Spine –With Contrast	Rs. 4250	4,123
51	Whole body MRI (For oncological workup)	Rs. 5100	4,947
52	MRI Angiography –Without Contrast	Rs. 1020	989
53	MRI Angiography –With Contrast	Rs. 4250	4,123
54	Magnetic Resonance Cholecysto Pancreatography	Rs. 2125	2,061
55	MR Enteroclysis	Rs. 2125	2,061

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Pune-19

List of CGHS rates (Non NABH) for CT Scan in Maharashtra.

Sr. No.	Name of investigation / procedure	Lowest CGHS Rate in Maharashtra	Actual Rate
1	CT Head -Without contrast	Rs. 880	Rs. 440
2	CT Head - with Contrast (+/- CT angiography)	Rs. 1148	Rs. 574
3	CT Chest - without contrast (for lungs)	Rs. 1275	Rs. 637.5
4	CT Chest - with contrast (+/- CT angiography)	Rs. 2125	Rs. 1062.5
5	CT Scan Upper Abdomen Without Contrast	Rs. 1445	Rs. 722.5
6	CT Scan Upper Abdomen With Contrast	Rs. 2040	Rs. 1020
7	CT Scan Lower Abdomen Without Contrast	Rs. 1275	Rs. 637.5
8	CT Scan Lower Abdomen With Contrast	Rs. 1700	Rs. 850
9	CT Scan Whole Abdomen Without Contrast	Rs. 2550	Rs. 1275
10	CT Scan Whole Abdomen With Contrast	Rs. 3825	Rs. 1912.5
11	CT angiography abdomen/chest	Rs.4050	Rs.2025
12	Triple Phase CT abdomen	Rs. 4050	Rs. 2025
13	CT Enteroclysis	Rs. 5400	Rs. 2700
14	CT Scan Neck (Thyroid, parathyroid, Soft Tissues) – Without Contrast	Rs. 1275	Rs. 637.5
15	CT Scan Neck – With Contrast	Rs. 1870	Rs. 935
16	CT Scan Orbits - Without Contrast	Rs. 1190	Rs. 595
17	CT Scan Orbits - With Contrast	Rs. 1615	Rs. 807.5
18	CT Scan of Paranasal Sinuses-Without Contrast	Rs. 900	Rs. 450
19	CT Scan of Paranasal Sinuses –With Contrast	Rs. 1600	Rs. 800
20	CT Spine (Cervical, Dorsal, Lumbar, Sacral)– without contrast	Rs. 1275	Rs. 637.5
21	CT Temporal bone – without contrast	Rs. 893	Rs. 446.5
22	CT - Dental	Rs. 1147	Rs. 573.5
23	CT Scan Limbs -Without Contrast	Rs. 1275	Rs. 637.5
24	CT Scan Limbs -With Contrast including CT angiography	Rs. 2253	Rs. 1126.5

(Dr. NITIN AMBADEKAR)
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MUMBAI

KRSNAA DIAGNOSTICS LTD. Chinchwad Pune-19

2024-2025

मेडिविद्यालय
2210H098

Medical Education and Drugs Department / वैद्यकीय शिक्षण व औषधिद्रव्ये विभाग

Demand No. S-1 / मागणी क्रमांक एस -1

(Rs. in Thousands) / (रुपये हजारांत)

Description		प्रत्यक्ष रकमा 2022-2023 Actuals 2022-2023	अर्थसंकल्पीय अंदाज 2023-2024 Budget Estimates 2023-2024	सुधारित अंदाज 2023-2024 Revised Estimates 2023-2024	अर्थसंकल्पीय अंदाज 2024-2025 Budget Estimates 2024-2025	तपशील
(03)(36) Government Medical College,Dhareshiv(Committed)	(2210H098)					(03)(36) शासकीय वैद्यकीय महाविद्यालय,धाराशिव(अनिवार्य) (2210एच098)
01, Salaries		38,52	4,80,03	13,80,03	13,80,03	01, वेतन
02, Wages		..	10	9	11	02, मजुरी
03, Overtime Allowances		..	10	8	10	03, अतिकालिक भत्ता
06, Telephone, Electricity and Water Charges		4,50	5,00	77,04	5,00	06, दूरध्वनी, वीज व पाणी शुल्क
10, Contractual Services		2,63,67	2,00,00	4,78,85	3,50,00	10, कंत्राटी सेवा
11, Domestic Travel Expenses		51	10	7	11	11, देशांतर्गत प्रवास खर्च
13, Office Expenses		82,74	52,50	1,61,40	55,13	13, कार्यालयीन खर्च
14, Rent, Rates and Taxes		..	15,00	13,50	15,00	14, भाडेपट्टी व कर
16, Publications		..	1	1	1	16, प्रकाशने
17, Computer Expenses		15,80	3,00	57,13	3,15	17, संगणक खर्च
19, Diet Charges		..	1,00	75	1,07	19, आहार खर्च
21, Supplies and Materials		73,72	50,00	1,06,13	50,00	21, पुरवठा व सामग्री
24, Petrol, Oil and Lubricants		..	2,00	1,80	2,24	24, पेट्रोल, तेल व उगण
26, Advertising and Publicity		..	50	35	50	26, जाहिरात व प्रसिद्धी
27, Minor Works		1,43,42	1,00	2,66,73	1,05	27, लहान कामकामे
28, Professional Services		..	10	8	10	28, व्यावसायिक सेवा
34, Scholarships/Stipends		39,05	1,11,00	1,97,38	5,07,96	34, शिष्यवृत्त्या/विद्यावेतने
50, Other Charges		..	1	1	1	50, इतर खर्च
51, Motor Vehicles		..	1	6,01	1	51, मोटार वाहने
52, Machinery and Equipments		1,49,47	1,05,00	1,47,11	1,10,25	52, यंत्रसामग्री व साधनसामग्री
72, Repairs and Maintenance of Machinery and Equipment		..	1	50,01	1	72, यंत्रसामग्री व उपकरणे यांची देखभाल व दुरुस्ती
Total-(03)(36)		8,11,40	10,26,47	29,44,56	24,81,84	एकूण-(03)(36)
(03)(37) Government Nursing College(B.Sc), Nanded(Committed)	(2210H454)					(03)(37) शासकीय परिचर्या महाविद्यालय(बीएस्सी), नांदेड(अनिवार्य) (2210एच454)

Dean,
Government Medical College,
Dharashiv

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Medical Education and Drugs Department / वैद्यकीय शिक्षण व औषधिद्रव्ये विभाग

Demand No. S-1 / मागणी क्रमांक एस-1

(Rs. in Thousands) / (रुपये हजारांत)

Description		प्रत्यक्ष रकमा 2023-2024 Actuals 2023-2024	अर्थसंकल्पीय अंदाज 2024-2025 Budget Estimates 2024-2025	सुधारित अंदाज 2024-2025 Revised Estimates 2024-2025	अर्थसंकल्पीय अंदाज 2025-2026 Budget Estimates 2025-2026	तपशील
72, Repairs and Maintenance of Machinery and Equipment		22	2,21	1,77	2,32	72, यंत्रसामग्री व उपकरणे यांची देखभाल व दुरुस्ती
Total-(03)(35)		15,45,19	21,94,06	29,22,94	26,11,04	एकूण-(03)(35)
(03)(36) Government Medical College,Dharashiv(Committed)	(2210H098)					(03)(36) शासकीय वैद्यकीय महाविद्यालय,धाराशिव(अनिवार्य) (2210एच098)
01, Salaries		9,08,22	13,80,03	14,24,92	15,31,83	01, वेतन
02, Wages		..	11	10	12	02, मजुरी
03, Overtime Allowances		..	10	8	10	03, अतिकालिक भत्ता
06, Telephone, Electricity and Water Charges		3,91	5,00	4,00	5,00	06, दूरध्वनी, वीज व पाणी शुल्क
10, Contractual Services		4,22,94	3,50,00	10,67,17	4,22,94	10, कंत्राटी सेवा
11, Domestic Travel Expenses		..	11	2,63	11	11, देशांतर्गत प्रवास खर्च
13, Office Expenses		1,61,39	55,13	76,07	56,78	13, कार्यालयीन खर्च
14, Rent, Rates and Taxes		4,50	15,00	12,00	15,00	14, भाडेपट्टी व कर
16, Publications		..	1	1	1	16, प्रकाशने
17, Computer Expenses		1,18	3,15	29,00	3,24	17, संगणक खर्च
19, Diet Charges		74	1,07	75	1,00	19, आहार खर्च
21, Supplies and Materials		1,00,16	50,00	35,00	50,00	21, पुरवठा व सामग्री
24, Petrol, Oil and Lubricants		28	2,24	1,46	1,00	24, पेट्रोल, तेल व वंगण
26, Advertising and Publicity		..	50	35	50	26, जाहिरात व प्रसिद्धी
27, Minor Works		1,91,16	1,05	42,95	1,10	27, लहान बांधकामे
28, Professional Services		..	10	8	10	28, व्यावसायिक सेवा
34, Scholarships/Stipends		1,73,29	5,07,96	5,07,96	5,63,84	34, शिष्यवृत्त्या/विद्यावेतने
50, Other Charges		..	1	1	50	50, इतर खर्च
51, Motor Vehicles		..	1	1	50	51, मोटार वाहने
52, Machinery and Equipments		41,88	1,10,25	1,11,11	1,15,76	52, यंत्रसामग्री व साधनसामग्री
72, Repairs and Maintenance of Machinery and Equipment		..	1	1	1,00	72, यंत्रसामग्री व उपकरणे यांची देखभाल व दुरुस्ती
Total-(03)(36)		20,09,65	24,81,84	33,15,67	27,70,43	एकूण-(03)(36)

Government Medical College
Dean,
Dharashiv

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नवीन मंजूर अनुदान 2026-27
शिक्षा विद्यापीठ

Medical Education and Drugs Department / वैद्यकीय शिक्षण व औषधिद्रव्ये विभाग

Demand No. S-1 / मागणी क्रमांक एस-१

Description		प्रत्यक्ष रकमा 2024-2025 Actuals 2024-2025	अर्थसंकल्पीय अंदाज 2025-2026 Budget Estimates 2025-2026	सुधारित अंदाज 2025-2026 Revised Estimates 2025-2026	अर्थसंकल्पीय अंदाज 2026-2027 Budget Estimates 2026-2027	तपशील
(03)(36) Government Medical College,Dharashiv(Committed)	(2210H098)					(03) (36) शासकीय वैद्यकीय महाविद्यालय, धाराशिव (कार्यान्वित)
01, Salaries		11,29,37	15,31,83	16,31,83	24,16,41	01, वेतन
02, Wages		..	12	11	13	02, मजुरी
03, Overtime Allowances		..	10	8	10	03, अतिकालिक भत्ता
06, Telephone, Electricity and Water Charges		4,00	5,00	59,11	5,00	06, दूरध्वनी, वीज व पाणी शुल्क
10, Contractual Services		10,35,26	4,22,94	10,95,26	7,22,94	10, कंत्राटी सेवा
11, Domestic Travel Expenses		2,46	11	5,01	11	11, देशांतर्गत प्रवास खर्च
13, Office Expenses		75,85	56,78	1,09,59	56,78	13, कार्यालयीन खर्च
14, Rent, Rates and Taxes		..	15,00	12,00	15,00	14, भाडेपट्टी आकार
16, Publications		..	1	1	1	16, प्रकाशने
17, Computer Expenses		25,79	3,24	14,34	3,34	17, संगणक खर्च
19, Diet Charges		36	1,00	70	1,07	19, आहार खर्च
21, Supplies and Materials		14,93	50,00	67,35	50,00	21, पुरवठा व साधने
24, Petrol, Oil and Lubricants		72	1,00	80	1,10	24, पेट्रोल, तेल व वंगण
26, Advertising and Publicity		..	50	35	50	26, जाहिरात व प्रसिद्धी
27, Minor Works		42,53	1,10	73,95	1,16	27, लहान कामे
28, Professional Services		..	10	8	10	28, व्यावसायिक सेवा
		2,28,57	5,63,84	5,63,84	6,25,86	34, शैक्षणिक वेतनभत्ते
34, Scholarships/Stipends		..	50	35	50	50, इतर खर्च
50, Other Charges		..	50	35	50	51, मोटार वाहने
51, Motor Vehicles		55,02	1,15,76	1,18,25	1,21,55	52, यंत्रसामग्री व साधनसामग्री
52, Machinery and Equipments		..	1,00	13,00	1,05	72, यंत्रसामग्री व उपकरणे दुरुस्ती व देखभाल
72, Repairs and Maintenance of Machinery and Equipment						
Total-(03)(36)		26,14,86	27,70,43	37,66,36	40,23,21	

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कॉलेज

संस्थेचे नांव:- शासकीय वैद्यकीय महाविद्यालय , धाराशिव (DDO CODE- 3501002398)

सन २०२५ - २०२६

उद्दिष्ट	मंजुर अनुदान	प्रत्यक्षात रक्कमा
(०१) वेतन	१५३१८३	
(०२) मजूरी	१२	
(०३) अंतिकालीन भत्ता	१०	
(०६) दुरध्वनी वीज व पाणी	५००	
(१०) कंत्राटी सेवा	४२२९४	
(११) देशांतर्गत प्रवास	११	
(१३) कार्यालयीन खर्च	५६७८	
(१४) भाडेपट्टी व कर	१५००	
(१६) प्रकाशने	१	
(१७) संगणक खर्च	३२४	
(२०) आहार खर्च	१००	
(२१) सामुग्री व पुरवठा	५०००	
(२४) पेट्रोल व तेल वंगण	१००	
(२६) जाहिराती व प्रसिध्दी	५०	
(२७) लहान बांधकामे	११०	
(२८) व्यवसायिक सेवा	१०	
(३४) शिष्यवृत्ती व विद्यावेतन	५६३८४	
(५०) इतर खर्च	५०	
(५१) मोटार वाहने	५०	
(५२) यंत्रसामुग्री व साधन सामुग्री	११५७६	
(७२) यंत्रसामुग्री व उपकरणे यांची देखभाल व दुरुस्ती	१००	
एकूण	२७७०४३	०

	PLAN	
	मंजुर अनुदान	प्रत्यक्षात रक्कमा
Head 52		

Administrative Officer
Government Medical College
Dharashiv

Dean,
Government Medical College
Dharashiv

CENTRAL LIBRARY
GOVERNMENT MEDICAL COLLEGE, DHARASHIV
LIC INFORMATION

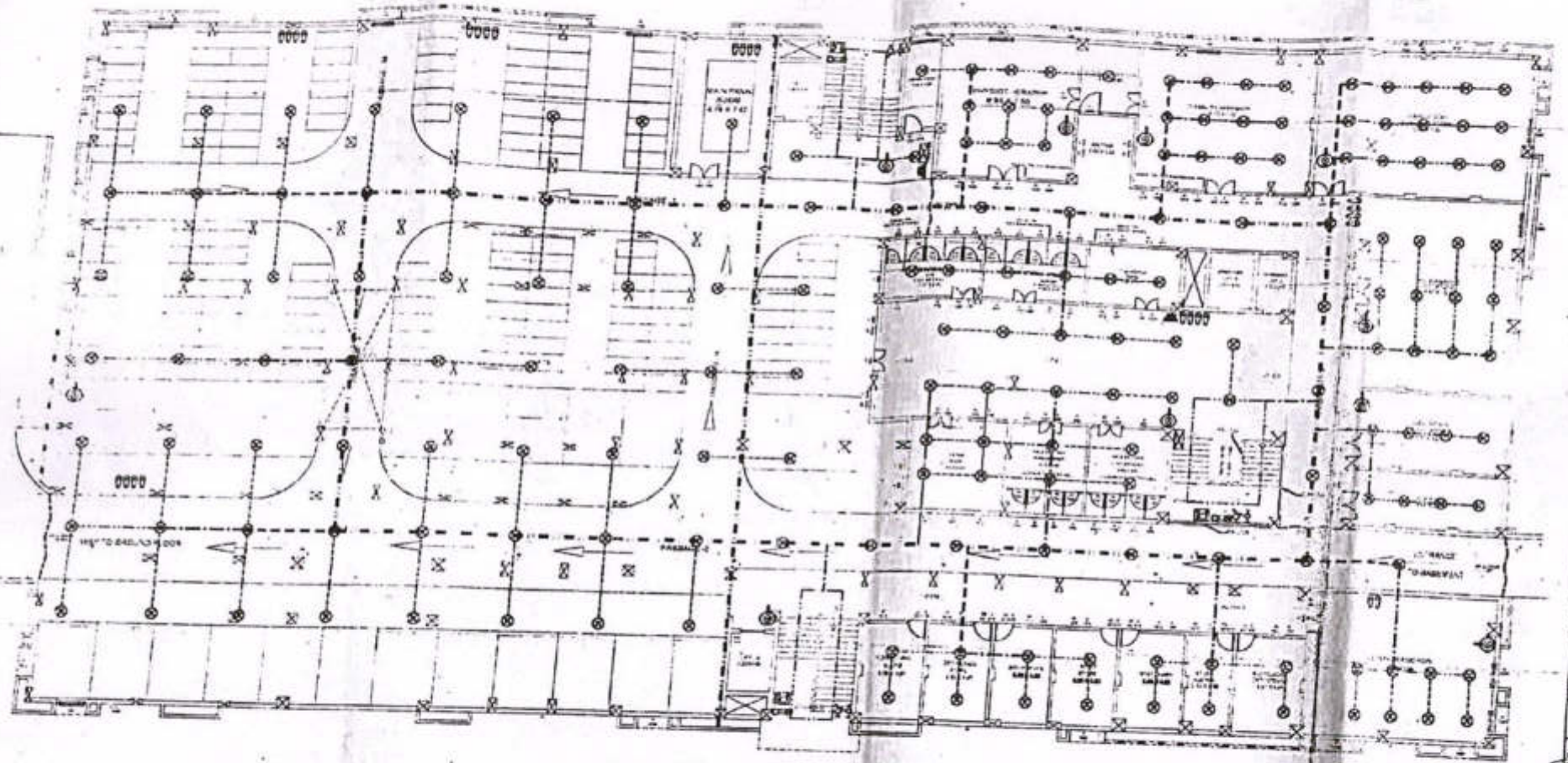
Sr. No.	Particulars	Available
1	Area	1000 sq.mt.
2	Reading Room for Student (No. of Rooms with Seating Capacity in Each	01 (seating capacity 100)
3	Staff Reading Room	Available
4	Space for Stocking and Display of Bo0oks and Journals	Available
5	Rooms for Librarian and Other Staff	Available
6	Journal Room	Available
7	No. of Computers	35
8	Internet facility/Wi-Fi	Available
9	Accession Register	Available
10	Total No. books	3114
11	Number of Journals	946 (E-Journals) National: 78 International: 868

Sr. No.	Subject	Total Books	No. of Journals (E-Journals)	National (E-Journals)	International (E-Journals)
1.	Anatomy	487	11	1	10
2.	Biochemistry	342	7	1	6
3.	Physiology	311	32	2	30
4.	Pathology	315	28	0	28
5.	Microbiology	181	26	3	23
6.	Pharmacology	103	17	1	16
7.	P.S.M.	137	8	1	7
8.	OBGY	90	18	3	15
9.	General Medicine	228	43	10	33
10.	Pediatrics	66	18	2	16
11.	Orthopaedics	66	31	2	29
12.	Surgery	172	34	4	30
13.	Anaesthesialogy	42	19	5	14
14.	Psychiatry	37	49	2	47
15.	ENT	89	6	1	5
16.	Radiology	145	15	1	14
17.	Ophthalmology	110	18	4	14
18.	FMT	146	5	0	5
19.	Dermatology	35	17	1	16
20.	MEU/General	12	544	34	510
	Total No. of Books	3114	946	78	868

Dean,
Government Medical College
Dharashiv

Librarian 22/01/26
Central Library
Government Medical College
Dharashiv

SHEET NO.:-10/20
(10A/20)



BASEMENT PLAN

LEGENDS

- FIRE HYDRANT POINT
- SINGLE HYDRANT VALVE
- FIRE HYDRANT POINT
- FIRE HOSE REEL BOX
- FIRE BRIGADE INLET
- FIRE EXTINGUISHER
- SAND BUCKET
- SPRINKLER
- SMOKE DETECTOR
- HOOTER
- MANUAL CALL POINT

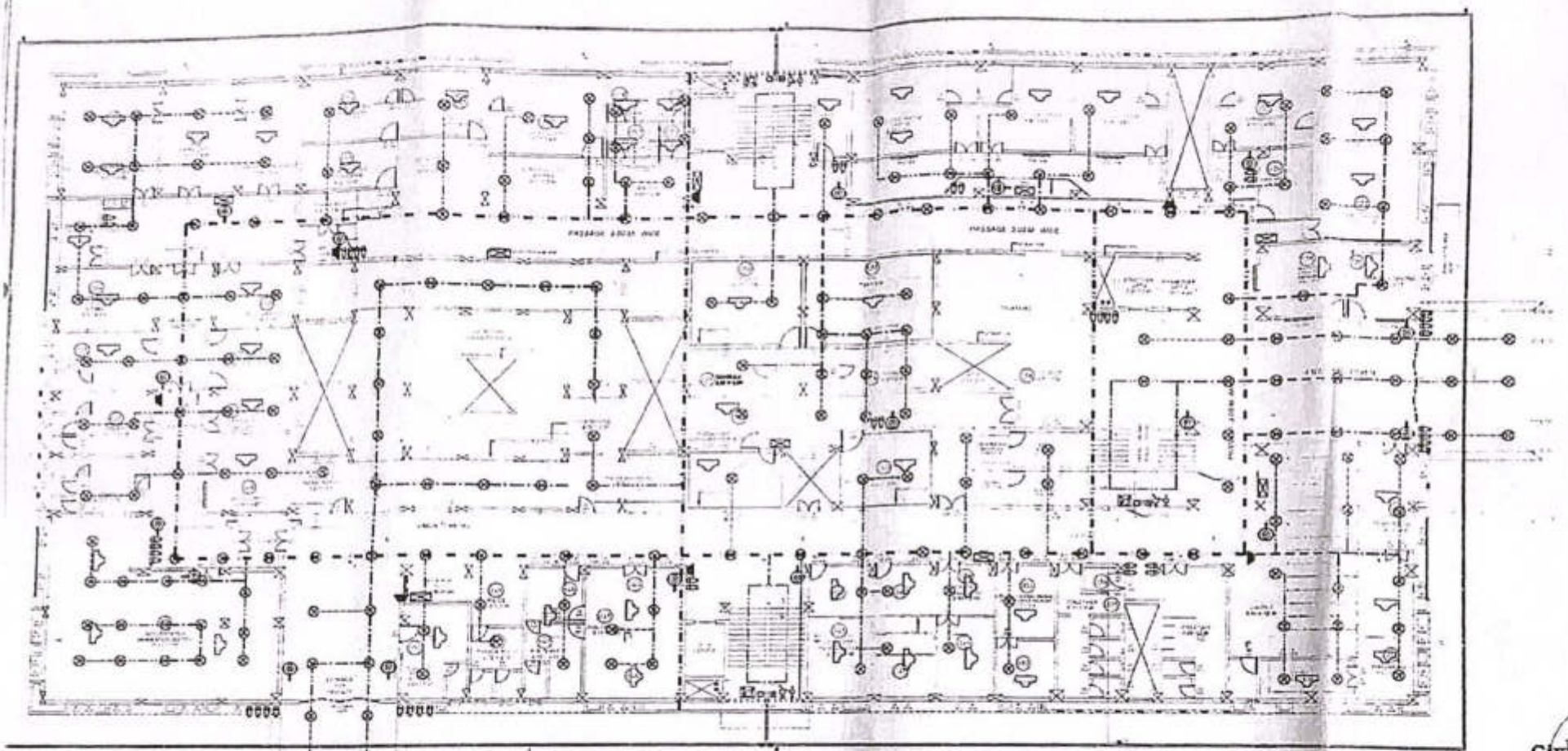
Civil Surgeon
Civil Hospital, Osmanabad.

Enviro Safe Consultants
Solapur

Executive Engineer
Public Works Divn,Osmanabad

Dean,
Government Medical College
Dharashiv

SHEET NO.:-10/20
(10B/20)



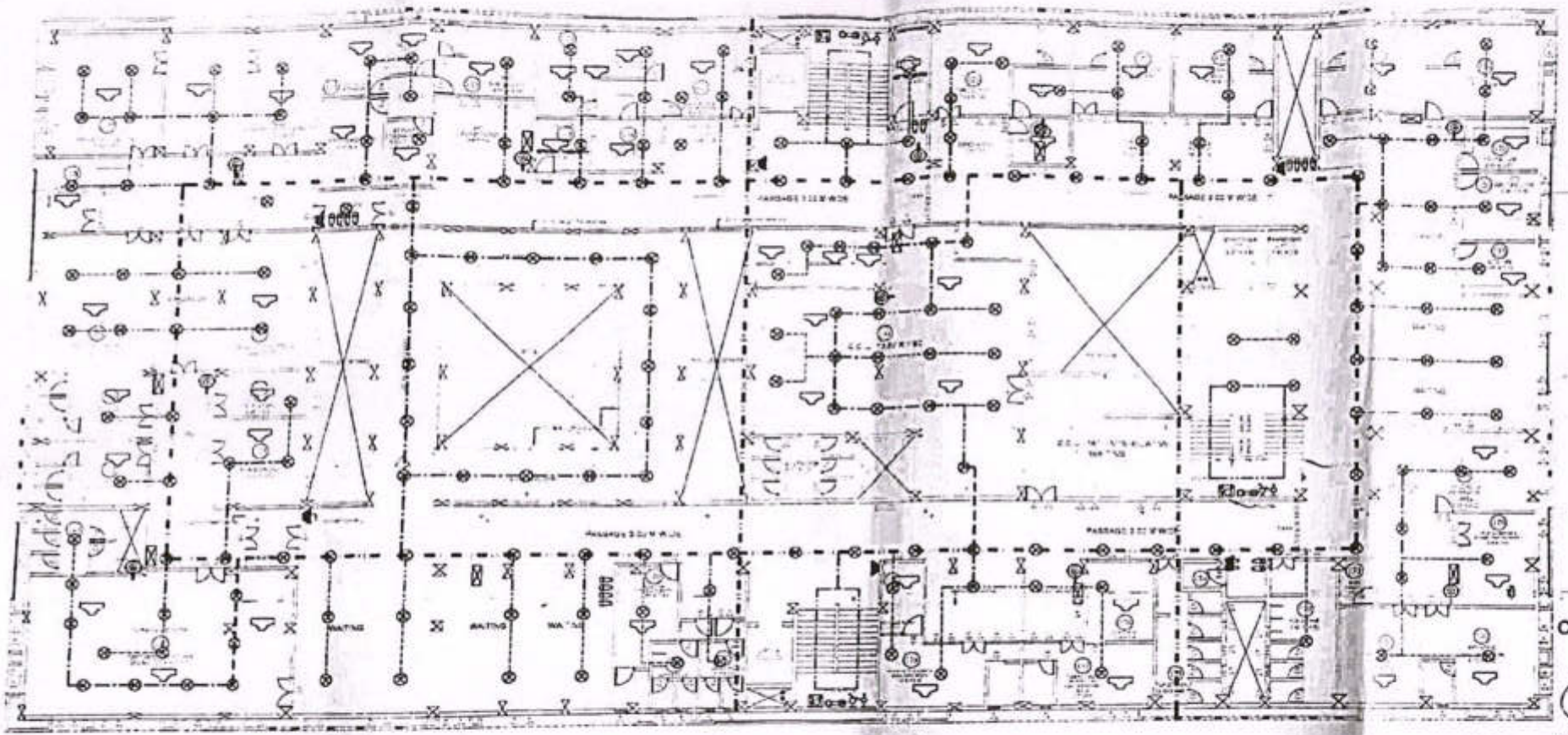
GROUND FLOOR PLAN

Civil Surgeon
Civil Hospital, Osmanabad.

Enviro Safe Consultants
Solapur

Executive Engineer
Public Works Divn,Osmanabad

Sub-Divisional Engineer
P.W.Sub-Division No.1 Osmanabad



FIRST FLOOR PLAN

SHEET NO.:-10/20
(10C/20)

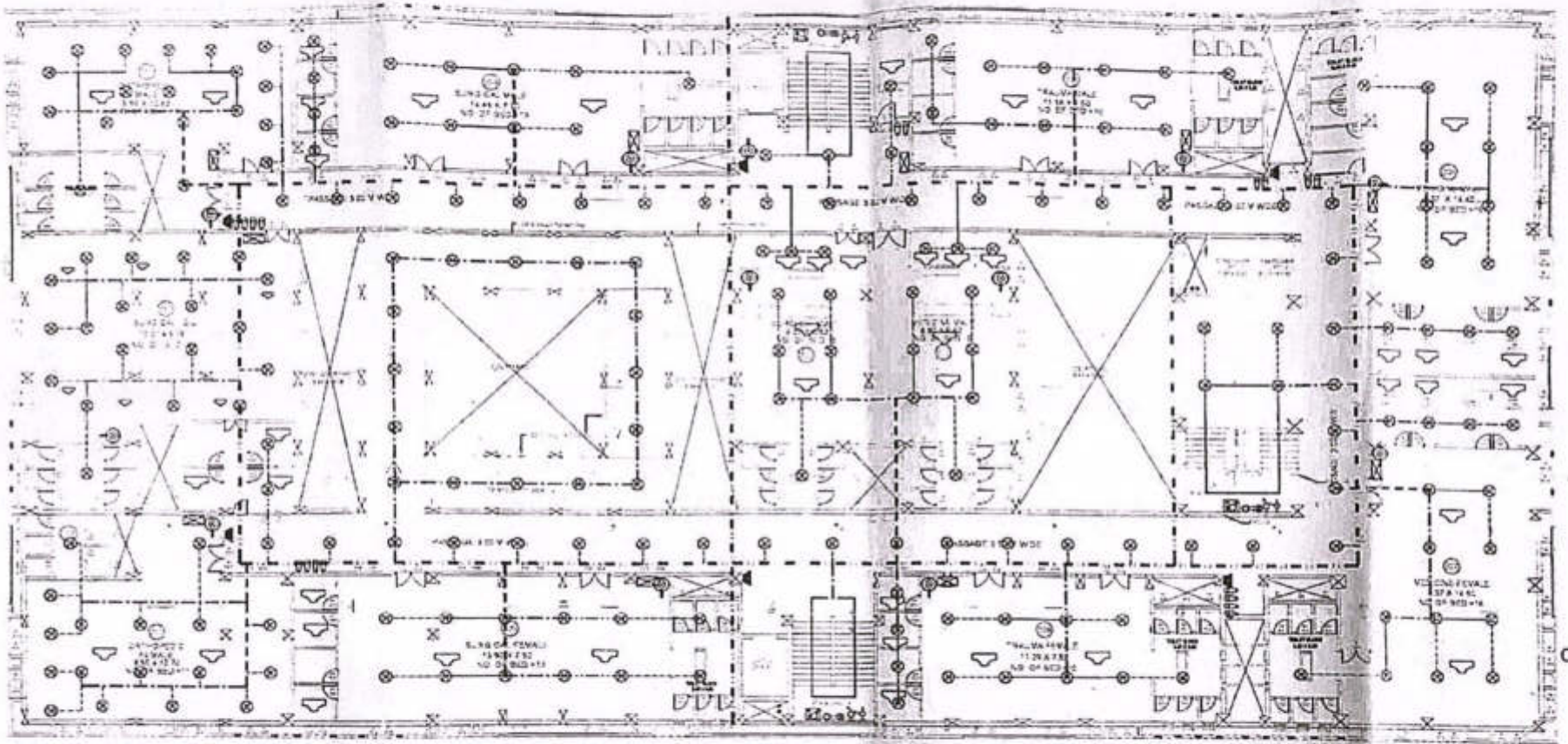
Civil Surgeon
Civil Hospital, Osmanabad

Executive Engineer
Public Works Diva,Osmanabad

Enviro Safe Consultants
Solapur

Sub-Divisional Engineer
P.W.Sub-Division No.1 Osmanabad

SHEET NO.:-10/20
(10D/20)

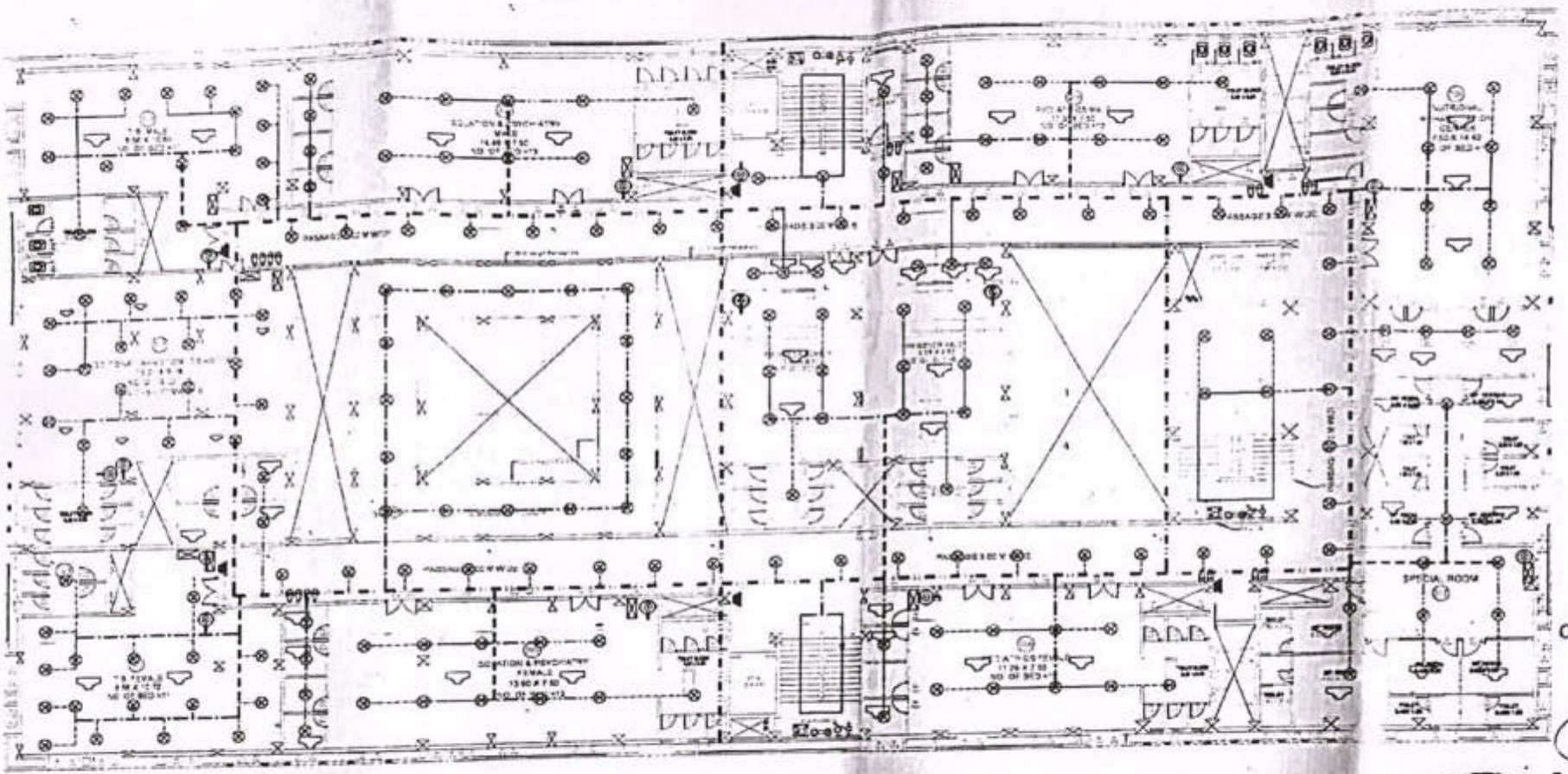


SECOND FLOOR PLAN

Civil Surgeon
Civil Hospital, Osmanabad.

Executive Engineer
Public Works Div. Osmanabad

Enviro Safe Consultants
Solapur



THIRD FLOOR PLAN

SHEET NO.:-10/20
(10E/20)

LEGENDS

FIRE HYDRANT POINT	
SCALE HYDRANT VALVE	
YARD HYDRANT POINT	
FIRE HOSE REEL DRUM	
FIRE BRIGADE INLET	
FIRE EXTINGUISHER	
SAND BUCKET	
SPRINKLER	
SMOKE DETECTOR	
HOOTER	
VALVE CHAMBER	
HOSE BOX WITH BRANCH PIPE & 63 MM HOSE PIPE	
D.C. ASS V.S. PIPE 75 MM	
D.C. ASS V.S. PIPE 63 MM	
D.C. ASS V.S. PIPE 50 MM	
D.C. ASS V.S. PIPE 40 MM	
D.C. ASS V.S. PIPE 32 MM	
D.C. ASS V.S. PIPE 25 MM	

Civil Surgeon
Civil Hospital, Osmanabad

Executive Engineer
Public Works Divn,Osmanabad

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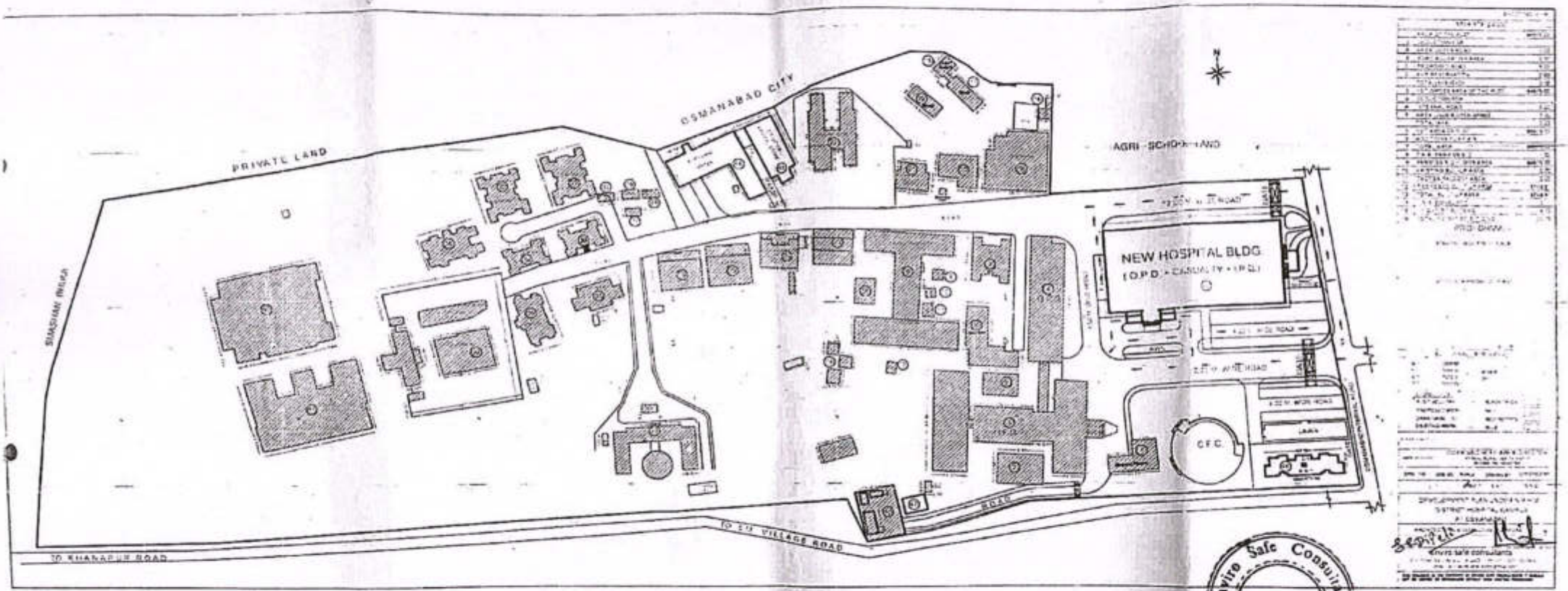
Sub-Divisional Engineer
P.W.Sub-Division No.1 Osmanabad



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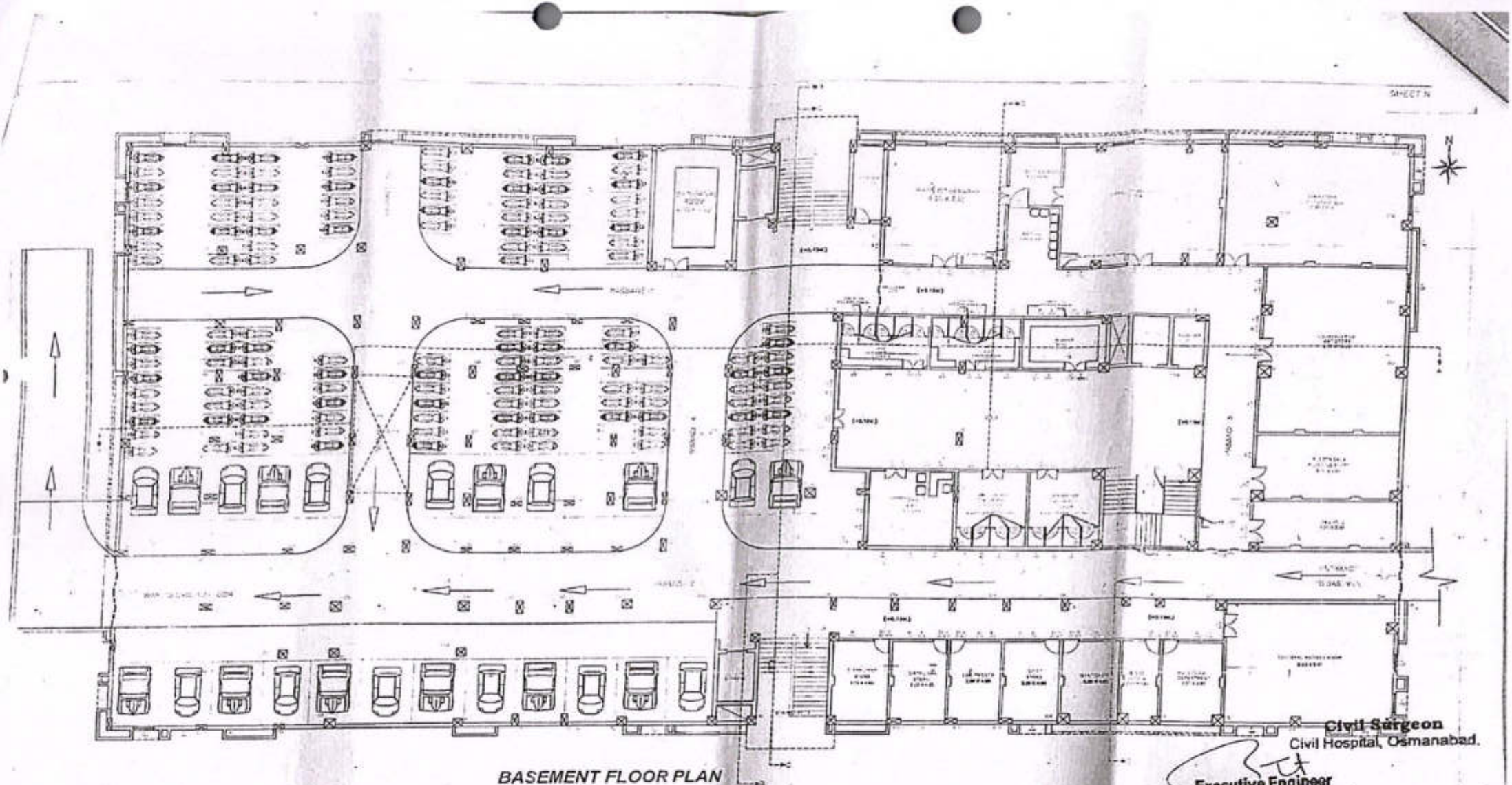
Solapur

Executive Engineer
Public Works Divn,Osmanabad

Civil Surgeon
Civil Hospital, Osmanabad.

Sub-Divisional Engineer
P.W.Sub-Division No.1, Osmanabad



BASEMENT FLOOR PLAN

Civil Surgeon
Civil Hospital, Osmanabad.

Executive Engineer
Public Works Divn,Osmanabad

BUILTUP AREA OF BASEMENT
1171.13 SQ.M

STAMP OF APPROVAL

COMMISSIONER (F&W) & DIRECTOR
NATIONAL RURAL HEALTH MISSION
MUMBAI MAHARASTRA

BASEMENT FLOOR PLAN

PROPOSED CONSTRUCTION OF
ADDITIONAL
IPD & OPD BUILDING
AT DISTRICT HOSPITAL CAMPUS , OSMANABAD

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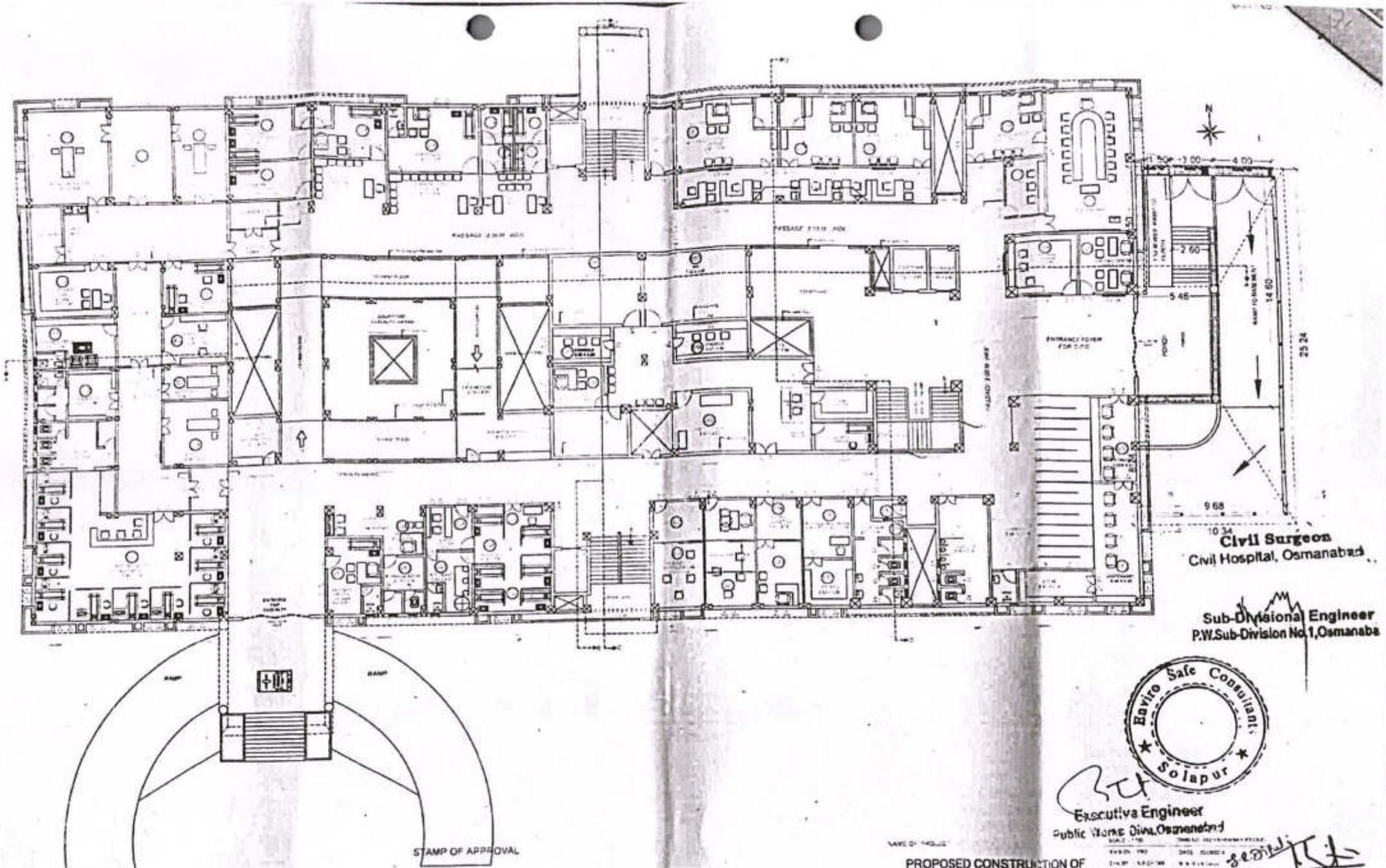

Civil Surgeon
Civil Hospital, Osmanabad

Sub-Divisional Engineer
P.W.Sub-Division No.1,Osmanaba

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Executive Engineer
Public Works Divn,Osmanabad

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MUMBAI MAHARASTRA

PROPOSED CONSTRUCTION OF
ADDITIONAL
IPD & OPD BUILDING
AT DISTRICT HOSPITAL CAMPUS , OSMANABAD

GROUND FLOOR PLAN

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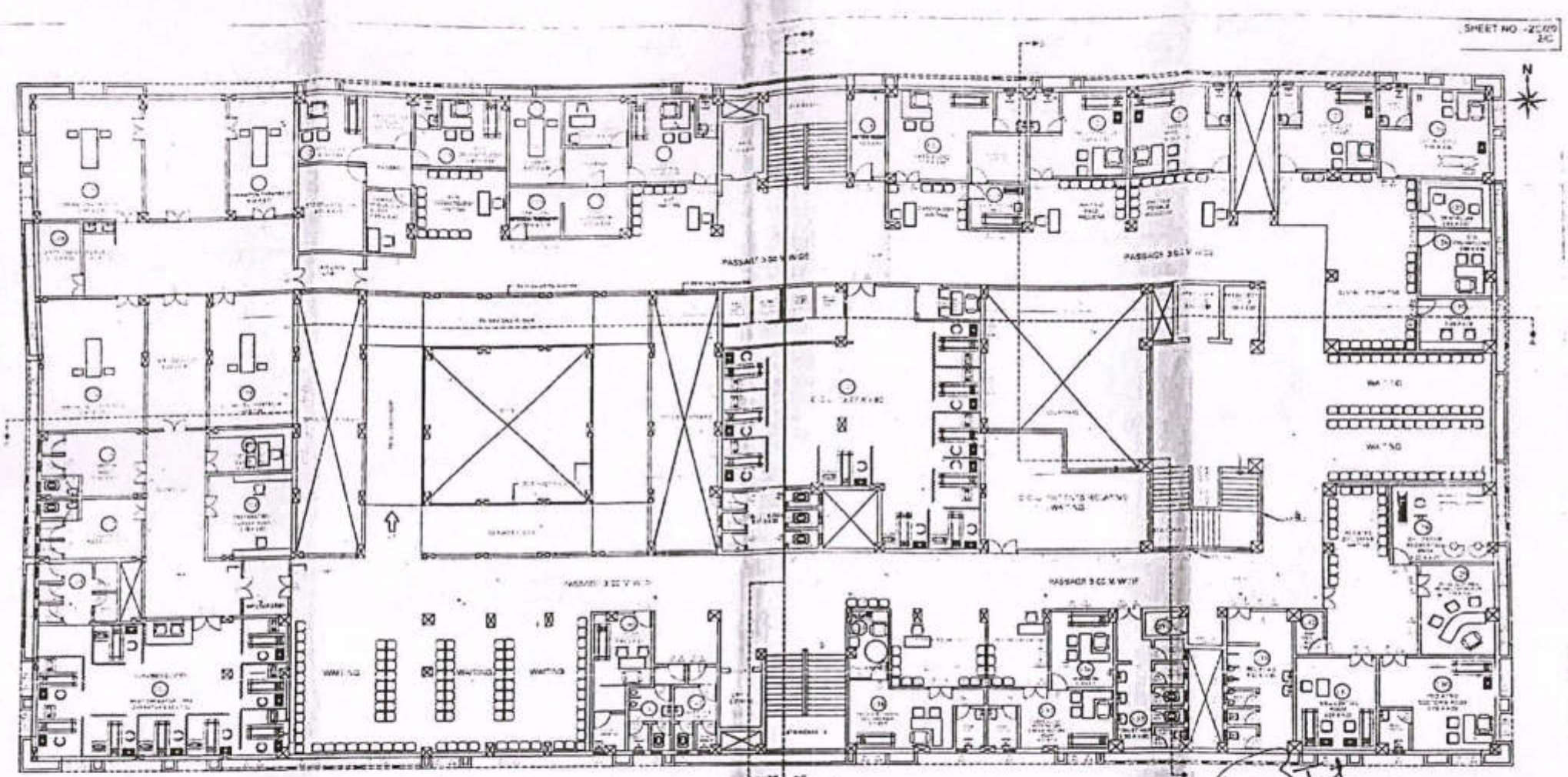

Executive Engineer
Public Works Divn,Osmanabad

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Solapur

COMMISSIONER (F&W) & DIRECTOR
NATIONAL RURAL HEALTH MISSION
MUMBAI, MAHARASTRA

PROPOSED CONSTRUCTION OF
ADDITIONAL
IPD & OPD BUILDING
AT DISTRICT HOSPITAL CAMPUS , OSMANABAD

FIRST FLOOR PLAN

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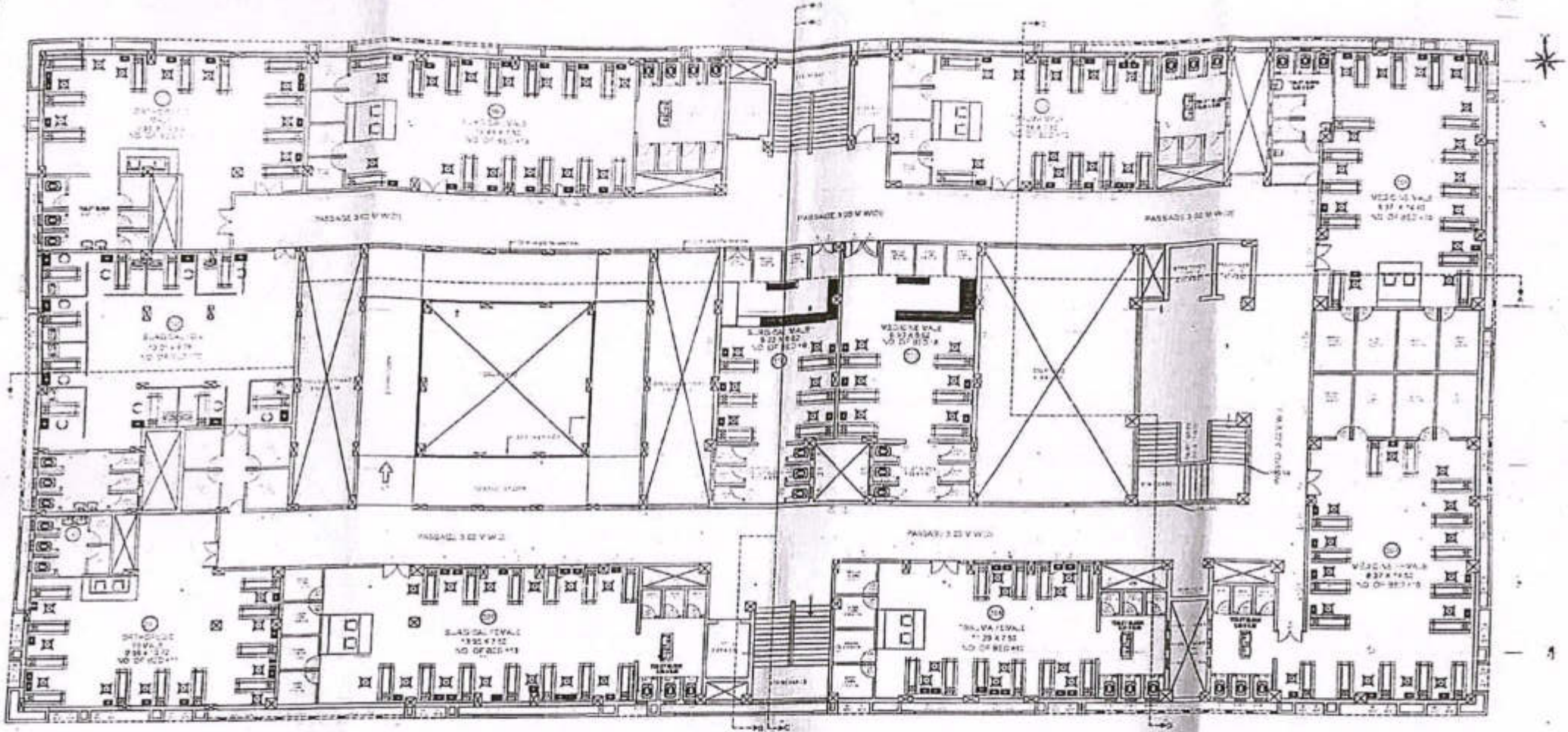
Civil Surgeon
Civil Hospital, Osmanabad.

Sub-Divisional Engineer
P.W.Sub-Division No.1,Osmanabad



Sub-Divisional Engineer
P.W.Sub-Division No.1,Osmanabad

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CIVIL SURGEON DISTRICT HOSPITAL OSMANABAD | SUB DIVISIONAL ENGINEER | EXECUTIVE ENGINEER | SUPERINTENDING ENGINEER P.W.CIRCLE OSMANABAD | CHIEF ENGINEER P.W.REGION AURANGABAD

NAME OF CLIENT:
COMMISSIONER (F&W) & DIRECTOR,
NATIONAL RURAL HEALTH MISSION
MUMBAI, MAHARASTRA

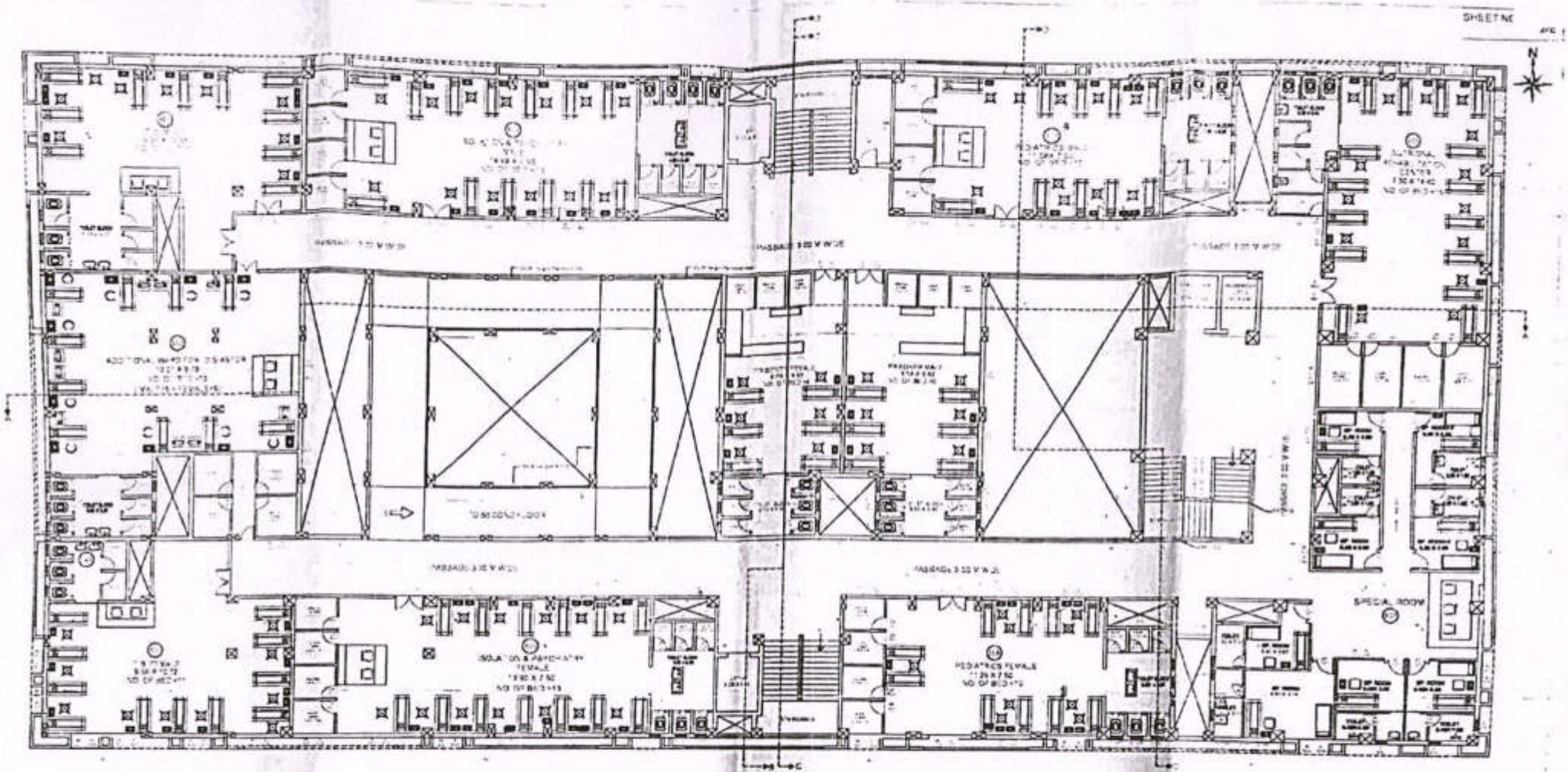
TITLE:
SECOND FLOOR PLAN

NAME OF PROJECT:
PROPOSED CONSTRUCTION OF
ADDITIONAL
IPD & OPD BUILDING
AT DISTRICT HOSPITAL CAMPUS, OSMANABAD

Civil Surgeon
Civil Hospital, Osmanabad.

enviro safe consultants

Executive Engineer
Public Works Divn,Osmanabad



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Envirо Safe Consultants Solapur

C

COMMISSIONER (F&W) & DIRECTOR,
NATIONAL RURAL HEALTH MISSION
MUMBAI, MAHARASTRA

THIRD FLOOR PLAN

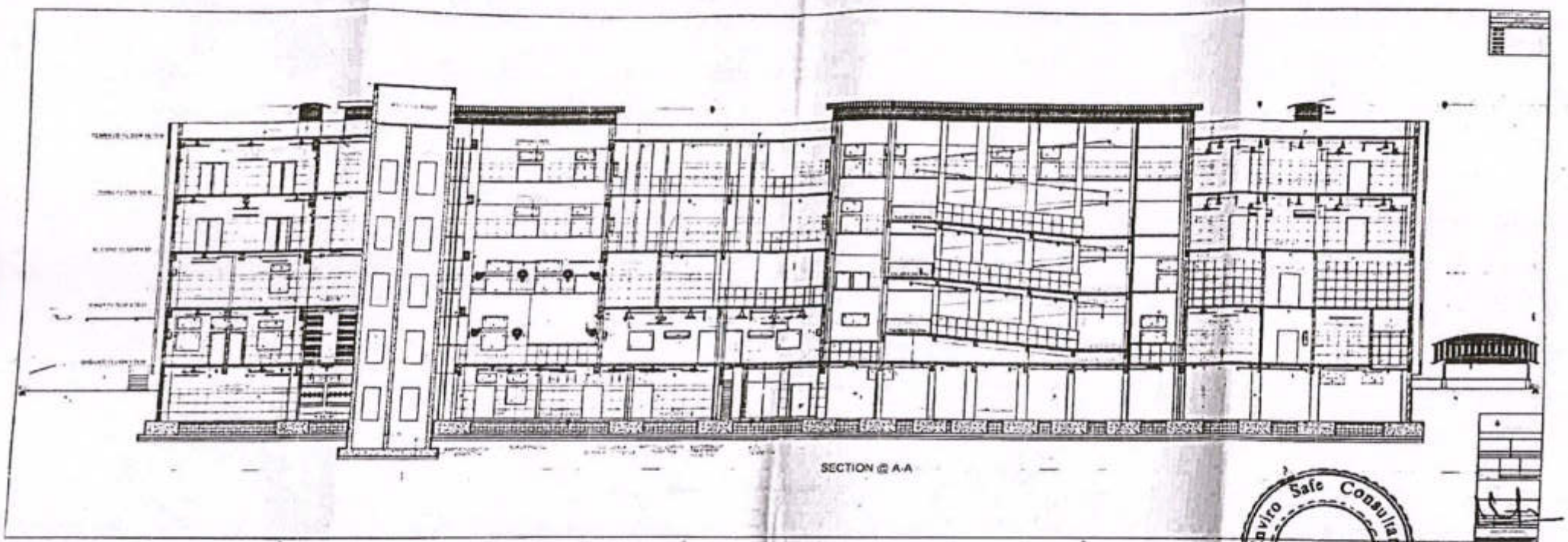
PROPOSED CONSTRUCTION OF
ADDITIONAL
IPD & OPD BUILDING
AT DISTRICT HOSPITAL CAMPUS, OSMANABAD

Civil Surgeon
District Hospital, Osmanabad.

Envirо Safe consultants

Sub-Divisional Engineer
P.W.Sub-Division No.1,Osmanabad

Executive Engineer
Public Works Divn,Osmanabad



SECTION @ A-A

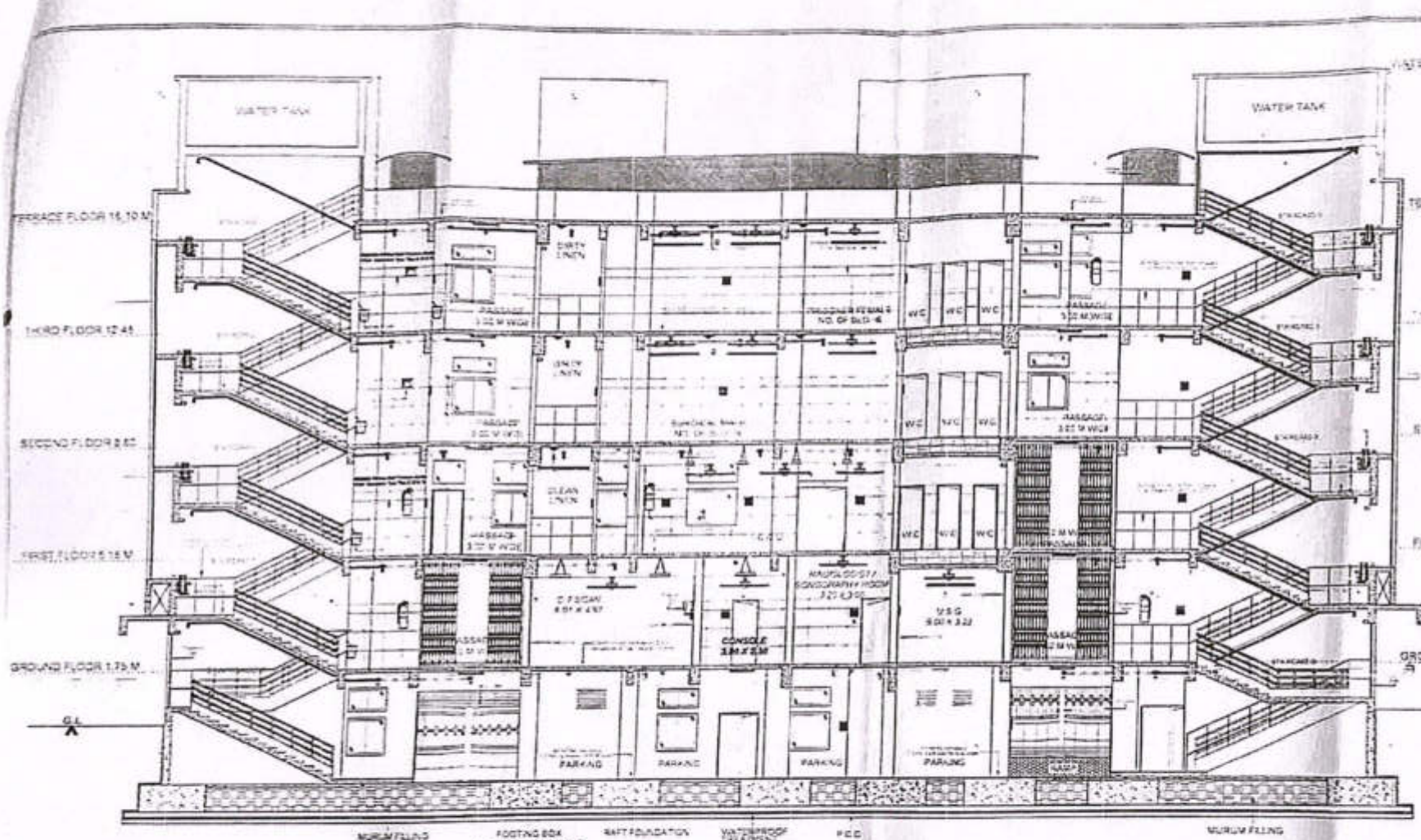
Enviro Safe Consultants
Solapur

Executive Engineer
Public Works Divn,Osmanabad

Civil Surgeon
Civil Hospital, Osmanabad

Sub-Divisional Engineer
P.W.Sub-Division No.1,Osmanabad

C



SECTION @ C-C

SHEET NO. - 48/20

LEGEND

Fire Fighting Pipe Diameter

C CLASS M.S. PIPE 32 MM ID
C CLASS M.S. PIPE 25 MM ID
C CLASS M.S. PIPE 50 MM ID
C CLASS M.S. PIPE 80 MM ID
C CLASS M.S. PIPE 100 MM ID
C CLASS M.S. PIPE 150 MM ID

COMMISSIONER F&W & DIRECTOR

STAMP OF APPROVAL

Civil Surgeon
Civil Hospital, Osmanabad

DEVELOPMENT PLAN UNDER N.R.H.M.
DISTRICT HOSPITAL CAMPUS
AT OSMANABAD

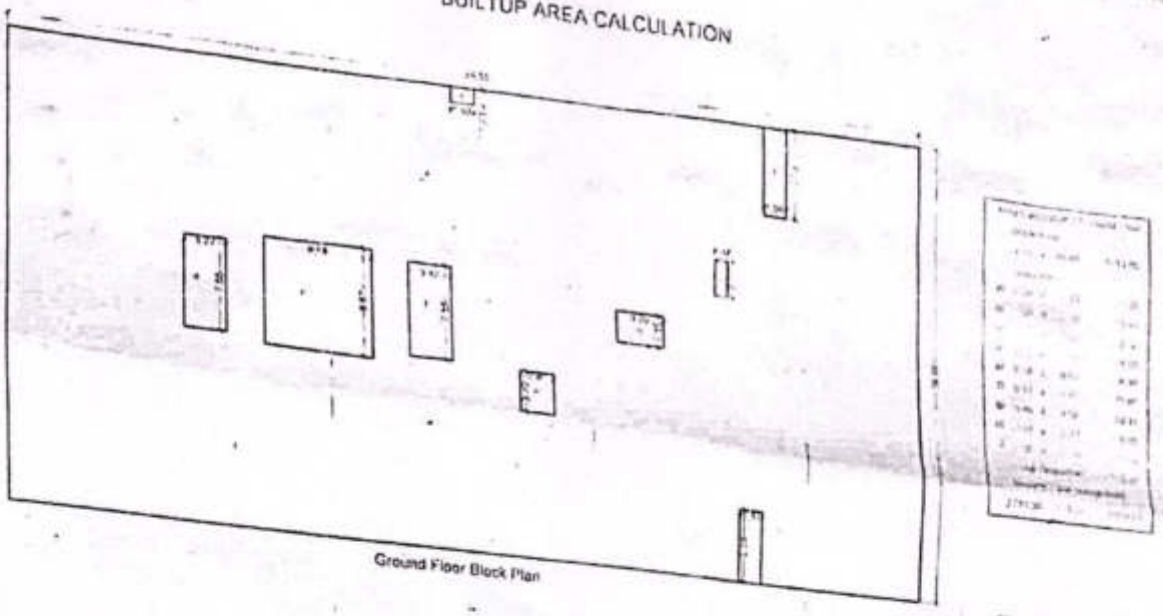
SECTION C-C OF
P.W.D. BUILDING
AT DISTRICT HOSPITAL CAMPUS, OSMANABAD

Executive Engineer
Public Works Div. Osmanabad

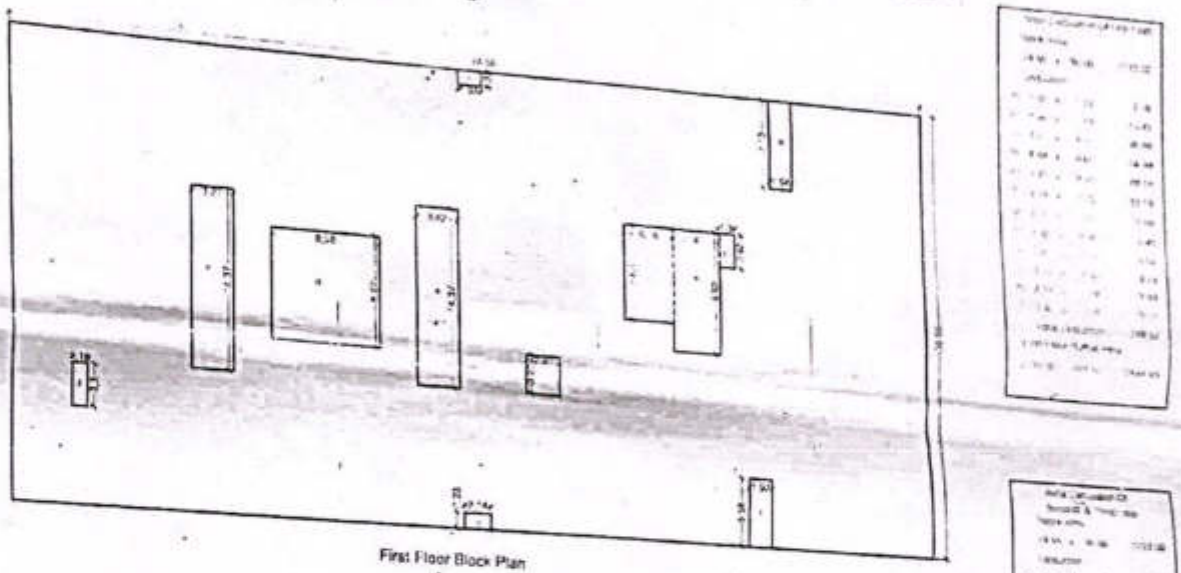
Enviro Safe Consultants
Solapur

Sub-Divisional Engineer
P.W.Sub-Division No.1, Osmanabad

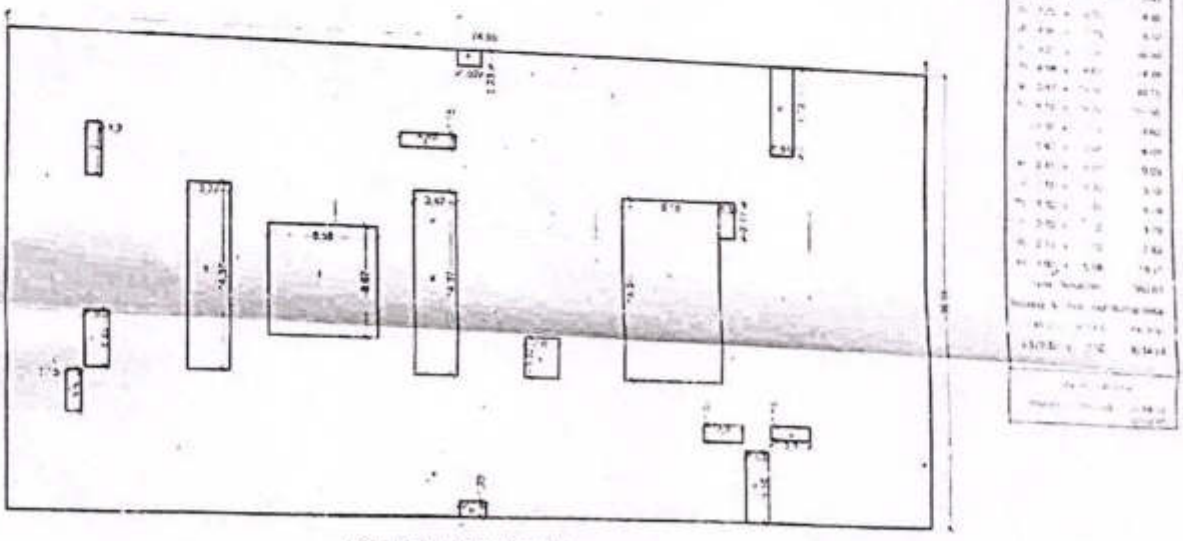
BUILTUP AREA CALCULATION



Ground Floor Block Plan



First Floor Block Plan



Second & Third Floor Block Plan

NAME OF CLIENT
COMMISSIONER (F&W) & DIRECTOR
NATIONAL RURAL HEALTH MISSION
MUMBAI, MAHARASHTRA

TITLE
BUILTUP AREA CALCULATION

PROPOSED CONSTRUCTION OF
ADDITIONAL
IPD & OPD BUILDING
AT DISTRICT HOSPITAL CAMPUS, OSMANABAD

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Sub-Divisional Engineer
P.W.Sub-Division No.1,Osmanabad