

## Facilities for Medico Legal Autopsy in India – Awareness among Doctors and Infrastructure Available

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### Abstract

Every doctor in the government set-up is bound by duty to perform medico legal autopsy, especially in the rural areas, where experts in the field are not available. The following study was undertaken to adjudge the awareness of the doctors involved in this work towards their duty and to study the infrastructure provided by the government for the conduct of these autopsies in different categories of hospitals across the country.

It was found that not only are the authorities indifferent towards the provision of basic facilities for medico legal autopsy, but the doctors themselves are also not aware of the requirements of such a task.

**Keywords:** Mortuary, Medico-legal autopsy, Autopsy block, Autopsy room, Mobile Autopsy Unit

### Introduction

The search for truth is the essence of medico-legal autopsy. This truth forms an essential link between the enforcement of law and the protection of the public in the administration of justice

An autopsy is a comprehensive study of a dead body, performed by a trained physician employing a recognized dissection procedure and technique<sup>(1)</sup>. ‘Autopsia,’ derived from Greek, means, seeing with one’s own eyes. Such an autopsy may be the result of an inquest into the death of an individual and the circumstances surrounding it. It is then called a Medico-Legal autopsy. Since inception of formal autopsies, recognition of their worth has been widely acclaimed but at the same time they have been progressively ill supported<sup>(2)</sup>. The support for autopsy fiscally, professionally and administratively, has remained dismally low. This is amply reflected from the latest observation of the National Human Rights Commission, which felt that the facilities in many mortuaries were abysmal and there was acute dearth of trained and qualified staff.

Under section 174 Cr.P.C., the inquesting authority can order any registered medical practitioner or medical graduate to carry out a medico legal autopsy. But practically it has been seen that the onus of conducting post- mortem examination falls on doctors employed in the State Health services in

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Primary and Community Health Centers and Forensic Medicine experts in Medical Colleges. It then becomes the responsibility of the doctor conducting the autopsy to ensure that his work place is equipped with the facilities required to conduct a medico legal autopsy. But is this really happening? Is our search for truth through forensic pathology conducted in a rational, scientific manner and buttressed with the infrastructure and the environment needed for such evaluation? This study tries to explore the answers to these questions and assesses the status of autopsy blocks in different hospitals across the country.

## Materials & Methods

The study was conducted through anonymous, structured, self-administered questionnaires distributed to 86 doctors working and performing medico legal autopsies in their respective hospitals selected randomly across the country.

The questionnaire consisted of four parts. The first part of the questionnaire aimed at determining the awareness of the doctors, who were asked to give the nomenclature and description of the place for conducting autopsy, while the remaining parts asked specific questions with respect to staffing, equipment and facilities available at the place designated for conducting autopsies in the different hospitals under study

## Results

All 86 doctors included in the study responded to the questionnaire. These doctors represented 54 Primary Health Centers (PHC), 3 Community Health Centers (CHCs), 5 District Hospitals (DH) and 24 Medical College Hospitals (MCH).

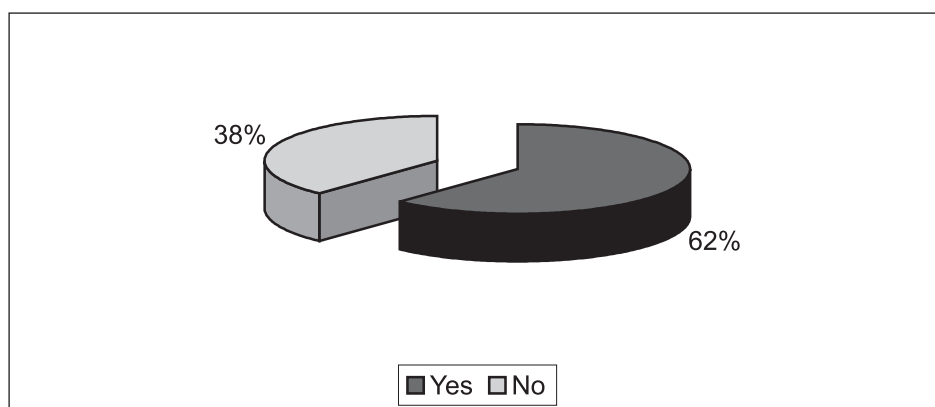
**Table I: Name of the Place for Medico legal autopsy**

Centers /hospitals	Total Number	Mortuary	Autopsy room	Both	No name
PHC	54	24	12	02	16
C.H.C.	03	02	–	–	01
Distt. Hosp	05	03	01	01	–
Medical Colleges	24	13	08	03	–
Total %	86 100%	42 (49%)	21 (24%)	06 (07%)	17 (20%)

It was found that only 24% of the responding doctors (who themselves were involved in conducting autopsies) identified the place for conducting medico legal autopsies in their hospitals correctly as an 'autopsy room' or 'autopsy block' (Table 1). Almost half of the doctors from PHCs as well as colleges harbor the wrong notion that the 'mortuary' is the place for conducting medico legal autopsy.

Regarding the availability of a suitable place for conducting autopsy, 62% of all the hospitals studied had some arrangement for a building for conducting autopsy (Figure 1). 46% of the PHCs and 33% of the CHCs under study were found to perform autopsies in open space, i.e. outside the village near the graveyard or near a water source. Ironically, none of the CHCs under study could boast of an autopsy room. 7% of the PHCs and 66% of the CHCs got autopsies conducted from other hospitals. District Hospitals and Medical Colleges (except one) had buildings where autopsies could be conducted, but the misnomer ‘mortuary’ was often used for these autopsy blocks.

**Figure 1: Availability of building for conducting autopsy**



Further it was observed that only 42 centers out of 86 hospitals (Table 2) studied i.e. 48.8 % were equipped with an autopsy table which forms the most important basic structure for an autopsy room. Despite the government norms for mandatory infrastructure for mortuaries at health care centers, it was observed that only 14 centers out of the total of 54 PHCs i.e. 26% had an autopsy table.

**Table II : Available Facilities for Medico Legal Autopsy in autopsy room**

Centers /hospitals	Total	Mortuary /autopsy room	Body Support Autopsy Table	Water supply		Drainage		
				Manual	Direct tap	Collect in bucket	Direct main drainage	Both
PHC	54	25	14	12	2	06	02	—
Dist. hosp	05	05	05	03	02	01	03	01
C.H.C.	03	--*	—	--	--	--	--	—
Colleges	24	23	23	02	21	00	22	01
Total	86	53	42	17	25	07	27	02
%	100	61.6	48.8	19.7	29	8.13	31.3	2.3

\*Autopsy conducted in other Hospital

The water supply and drainage systems (Table 2) were found to be present in 48.7% and 41.73% of the hospitals studied respectively i.e. more than half of the centers studied were deprived of proper sanitation and water supply. Moreover, direct water supply was available in just 3.5 % of the PHCs and 40% of the District Hospitals under study. The drainage system also showed the same pattern of availability, with 3.5% of the PHCs having a direct main drainage system

With respect to pattern of staff for medico-legal autopsy work (Table 3), once again no uniformity was seen. In tertiary centers like colleges, the majority of work was done by forensic experts i.e. ~77% and they were assisted by the para medical staff, but on the contrary at the PHC and district hospital level, autopsy work was done by medical officers or other specialists. Moreover, assistance from para medical and ancillary staff was not forthcoming due to shortage of staff. It is important to observe that altogether only 20 sweepers/ class IV workers were available for a total of 54 PHCs, so that even if one worker was posted at one PHC, still 34 PHCs i.e. 63% were forced to run without adequate manpower.

**Table 3 : Staffing pattern for medico legal autopsy room/block**

Centers / hospitals	Autopsy performed by			Lab. Tech	Lab. Asst	Autopsy attendants / Morticians	Sweeper /IV class
	Medical Officers/ Any specialist	Forensic Medicine expert	Both				
<b>PHC 54</b>	54	00	00	00	3	00	20
<b>CHC 3</b>	Answer NA	Answer NA	Answer NA	Answer NA	Answer NA	Answer NA	Answer NA
<b>Dist. Hosp 5</b>	5	00	00	1	01	01	5
<b>College 24</b>	4	17	3	3	10	12	23
<b>Total 86</b>	63	17	3	04	14	13	48
<b>100%</b>	73.2%	19.7%	3.75%	4.6%	16.2%	15.1%	55.8%

## Discussion

A mortuary, in the real sense, is meant to preserve dead bodies till the relatives of the deceased or the police (as the case may be) come and claim them either for disposal or further legalities respectively. Therefore, the facilities are restricted only to preserving the dead bodies. However, while doing so, precautionary steps are taken and facilities provided to prevent the spread of infection, arrest of postmortem changes, emanation of foul smell and avoid destruction or disfigurement of dead bodies by rodents or insects. In addition, facilities are provided to prevent exchange or illegal transportation or transfer of bodies. Therefore, for all these purposes, the required facilities include a hall, with insect

proof windows, strong walls, big door and chambers to keep the dead bodies. The chambers may be of cold storage like refrigerator compartments of temperatures  $\sim -20^{\circ}\text{C}$  and  $+4^{\circ}\text{C}$  or air conditioners with drainage system. There may be an attached room for record maintenance as well as for a security guard. There is no need of any skilled or technical staff to maintain the mortuary, while for an autopsy room, requirements in terms of staff as well as equipment are more stringent and include adequate space, natural as well as filtered light, autopsy table, source of water as well as an outlet for the drainage of water, weighing machine, provisions for the preservation and examination of body parts, trained doctors, laboratory technicians and attendants in addition to an entire plethora of surgical instruments, to mention just a few of the special requirements. The basic purpose of equipping the autopsy room thus is to facilitate the investigation into the cause of death of the body, and not just to preserve it till it can be disposed. However, the study established that doctors who themselves were conducting autopsies were not able to make the fine distinction between the two terms.

The proper establishment and protection of a medico legal autopsy is a must to protect and provide justice for every individual of the society. The basic reason for the present scenario is both, lack of planning at the time of inception and lack of motivation among medical staff. In a majority of centers, the mortuary or the so called space for medico legal work has not been designed at the time of inception of the building, but has been added later as per need. Usually, the requirement is supplemented by adding some vacant space or room as a stopgap arrangement, without thought to design or function.

The medical doctors posted in Primary Health Centers lack motivation for autopsy work, partly because of the gruesome and thankless nature of the job and partly due to the paltry facilities at their disposal to perform the autopsies. Also, a majority of them are on the verge of getting transferred, few of them are on ad hoc or contract basis and do not want to get involved in medico legal cases.

The autopsy table forms the basic infrastructure for an autopsy room. Two tables are usually required for 400 beds or alternatively for every 450 deaths per year, within the hospital or for a group of hospitals served by the mortuary<sup>3, 4, 5</sup>. In small hospitals, one table is usually sufficient. Generally, the table should be of porcelain or fireclay but stainless steel tables may be used as they do not chip and are easy to clean. Each table should be provided with temperature-controlled water from a thermostat controlled mixing valve and a proper drainage system<sup>4, 5</sup>. It is best to use a standard autopsy table, with an outlet at the lowest point, with an arrangement for a drain that leads into an open gully, which is part of the drainage system of the autopsy room.

The lack of adequate water supply also leads to hindrance in autopsy as it plays an important role in the proper interpretation of autopsy findings. It is also used for cleaning the dead body, which, if not handled properly, amounts to sacrilege and can result in emotional turmoil for the relatives.

A proper drainage system is always required to keep the environment clean and hygienic, which, if not improved, might accelerate the decomposition of the dead body. It also attracts rodents and carnivorous animals/birds, which might at times lead to destruction of the preserved body.

The lack of staff at the PHC level is a matter of concern and should be improved at any cost. It is one of the most important reasons for delay in medico-legal work, or referral of medico legal work to higher centers. As most centers are deprived of sweepers/ class IV / morgue attendants, the conduct of an autopsy alone without any physical help becomes a daunting task for the doctor, who then prefers to refer the case to a higher center or goes on leave to avoid performing the autopsy.

## Conclusion

Many government college hospitals and some district hospitals have their own autopsy block, named as mortuary, used for both medico legal autopsy as well as for preservation of dead bodies. At P.H.C. /C.H.C. level, mortuaries are for namesake only, but autopsy work is still being conducted. Almost all medical doctors involved in the conduct of medico legal autopsy (doctors of any specialization or forensic medicine experts/forensic pathologists) have little or no awareness/interest about facilities available or provided for autopsy. The lack of infrastructure support in the facility available is another spanner in a professional approach to the performance of such autopsies. This eventually translates into delay/ deferment of justice for society at large and individuals in particular, in addition to reflecting poorly on the medical profession. Thus, proper establishment and protection of a team and teamwork for medico legal autopsy is a must. The introduction of mobile autopsy units (like mobile health units) attached to the police department at the district level can be arranged to avoid the conduct of autopsies in an open space in front of the public. **It is always better if the Ministry of law / Ministry of Home affairs, in harmonization with Ministry of Health and Family Welfare, takes up the responsibility to provide facilities for medico-legal autopsy work both fiscally and constitutionally.**

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