

## Assessment of Knowledge Regarding Privacy and Confidentiality in Healthcare: A Study on Para-Clinical and Clinical Medical Students

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### Abstract

**Background:** Knowledge regarding privacy and confidentiality at healthcare is mandatory for all doctors as it is deeply rooted in core part of the medical ethics. To gauge the extent of knowledge of para-clinical and clinical medical students on privacy and confidentiality in healthcare.

**Materials and methods:** A cross sectional survey was conducted in between June 2023 to September 2023 on 300 medical students of Chattagram Maa-O-Shishu Hospital Medical College (CMOSHMC). A pretested questionnaire was used and data was analyzed by SPSS 22.

**Results:** Out of 300 responses from medical students of phase II, phase III and phase IV MBBS, the number of students were predominantly female and religion were Islam. The age range of the participants was from 20-25 years.

**Conclusion:** The medical students of this study had a reasonable knowledge about privacy and confidentiality in healthcare. However, the teaching of privacy and confidentiality related medical practice should be part of the medical curriculum to strengthen these attitudes so that they can maintain professional secrecy and sustain the standard of good clinical practice following medical ethics.

**Key words:** Confidentiality; Doctor-patient relationship; Good medical practice; Knowledge; Medical ethics; Privacy.

### Introduction

Professional secrecy is an implied term of contract between the doctor and his patient. The relationship of doctor and patient requires utmost trust, confidence, fidelity and honesty. The doctor is obliged to keep secret, all that he comes to know concerning the patient in the course of his professional work.<sup>1</sup> Its disclosure would be a failure of trust and confidence. The patient can sue the doctor for damages (Mental suffering, shame or humiliation) if the disclosure is voluntary, has

resulted in harm to the patient and is not in the interest of the public. But in case of privileged communication doctors disclose the secret. Privileged communication is a bonafide information upon any subject matter by a doctor to the concerned authority having corresponding interest, due to his legal, social or moral duty to protect the interests of the community or of the state.<sup>2</sup>

Hippocratic oath includes a promise to protect confidentiality and privacy of a patient.<sup>3</sup> The modernized version of the Hippocratic oath is the declaration of Geneva, as adopted by the third general assembly of world Medical Association at Geneva, Switzerland in September 1948. In one version, physicians of the oath state that "I will respect the secrets that are confided to me, even after the patient has died".<sup>1</sup> Disclosing patients' secrets without consent or privileged communication is a professional infamous conduct.

The presumption of legal knowledge is a jurisprudential postulate indicating that individuals are assumed to know the law. Although ignorance of the law is not punishable, it may result in sanctions if it manifests as illegal conduct. Fundamentally, even if the state does not compel legal knowledge, it does impose conformity with the law. On the other hand, conformity does not always entail legal knowledge but may derive from personal convictions or serendipitous alignments.<sup>4</sup> Nevertheless, knowledge of the law is a prerequisite for ensuring compliance and solving ethical dilemmas.<sup>5</sup> The study aims to assess the para-clinical and clinical medical students regarding knowledge about privacy and confidentiality.

### Material and methods

A cross-sectional survey was conducted during June 2023 to September 2023 on 300 para-clinical and clinical medical students (Medical students of phase II, phase III and phase IV MBBS course) of Chattagram Maa-O-Shishu Hospital Medical College (CMOSHMC). Questionnaire related to privacy and confidentiality at healthcare was

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distributed. Students filled the form and returned. Obtained data was analyzed to evaluate the participants' knowledge about privacy and confidentiality at healthcare.

#### Inclusion criteria

Interested medical students of phase – II to phase – IV of CMOSHMC were participated in the study. After obtaining informed written consent, they were included in study.

#### Exclusion criteria

Those who didn't want to participate were excluded.

The received responses were tabulated and statistically analyzed. Results are tabulated and analyzed using SPSS software version 22.0. The obtained data was analyzed to determine knowledge about privacy and confidentiality in medical practice.

This research was conducted after getting ethical clearance from the CMOSHMC Review Board (IRB).

## Results

Out of 300 responses from medical students in phases II, III and IV of MBBS, the majority of students were predominantly female, and their religion was Islam. The age range of the participants was 20–25 years.

**Table I** Socio-demographic characteristics of medical students (n=300)

Year	Gender	Religion
	Male	Female
3 <sup>rd</sup> year	35	65
4 <sup>th</sup> year	33	67
5 <sup>th</sup> year	32	68

  

Figure 1 Age distribution of different year

**Table II** Medical student's knowledge regarding privacy and confidentiality in medical practice

Question	Resp-onse	Phase II	Phase III	Phase IV	Total percentage
i) The term "Professional secrecy" denotes a doctor-patient contract.	Yes No	90 10	97 3	97 3	94.7% 5.3%
ii) For an adult patient, without his consent, doctor cannot disclose anything to his parents.	Yes No	87 13	85 15	88 12	86.7% 13.3%
iii) In case of minor patients, disclosure of the nature of the illness to parents or guardians leads to breach of professional secrecy.	Yes No	20 80	15 85	13 87	16% 84%
iv) Despite a servant is examined at the request of master, without the servant's consent, his information cannot be disclosed to his master.	Yes No	62 38	69 31	70 30	67% 33%
v) Without patient's consent, his information cannot be provided to third party.	Yes No	65 35	66 34	68 32	66.3% 33.7%
vi) A patient's identity cannot be disclosed while reporting a case in medical journal.	Yes No	58 42	55 45	52 48	55% 45%
vii) Sharing information about patient's status with spouse or friends without patient's consent breaks professional secrecy.	Yes No	75 25	78 23	82 18	78% 22%
viii) Breach of professional secrecy is professional misconduct of doctor.	Yes No	72 28	77 23	83 17	77.3% 22.7%
ix) If a person is convicted by court, the doctor can disclose the result to the authorities.	Yes No	85 15	90 10	92 8	89% 11%
x) If the patient felt desecrated for disclosure of his information without consent and not in the interest of public, he can sue his doctor.	Yes No	55 45	52 48	48 52	51.6% 48.3%
xi) During the hospital treatment for the uterine bleeding of a 23-year-old woman who self-induces abortion, she said that she was responsible for it. Should her doctor report this to legal authority?	Yes No	25 75	22 78	18 82	21.7% 78.3%
xii) A bus driver was examined by a doctor. He has low visual acuity (Outside the allowed parameters). Will it be a breach of confidentiality if informing the company against the employee's wish about this?	Yes No	72 28	77 23	83 17	77.3% 22.7%

Question	Resp-onse	Phase II	Phase III	Phase IV	Total percentage
xiii) A 25-year-male informs his psychiatrist that he is planning to kill his ex-girlfriend soon. Should the psychiatrist break confidentiality immediately to inform it to the legal authority?	Yes	75	78	82	78%
	No	25	23	18	22%
xiv) A 39-year-patient informs his physician that he has committed a murder in past and another person is imprisoned in his place. Should the physician inform legal authority about the fact?	Yes	85	90	92	89%
	No	15	10	8	11%
xv) A 29-year-old bricklayer, married, with three healthy children, presents at OPD with complaint of weight loss and oral candidiasis. HIV serology is requested, found positive. The patient wants not to disclose this fact to his wife as he has extramarital affairs and does not want her to know about it, as she would abandon him. Will it be judicial to disclose the fact to the patient's spouse?	Yes	58	55	52	55%
	No	42	45	48	45%

## Discussion

Responding to the first question about Professional secrecy, 94.7% of the participants agreed about its being a doctor-patient contract. In Pragnesh Parmar study, 55% intern doctors were sure.<sup>3</sup> When responding to 2nd situation relating to an adult patient, without his consent, doctor cannot disclose anything to his parents, 86.7% of the participants are well aware to the facts. In Pragnesh Parmar study, 56% intern doctors were not agreed on that.<sup>3</sup> In case of minor patients, disclosure of the nature of the illness to parents or guardians leads to breach of professional secrecy, 84% of the total study group disagreed in our study. But in Pragnesh Parmar study, 49% intern doctors were disagreed.<sup>3</sup> 67% students in our study agreed not to disclose anything to master without consent of servant when servant was examined at the request of master. In Pragnesh Parmar study, it was only 37%.<sup>3</sup>

Here, 66.3% students would not respond to any enquiry by third party without consent of patient. In Pragnesh Parmar study, 43% intern doctors were strongly agreed not to answer the enquiry by third party.<sup>3</sup> Among study participants, 55% strongly agreed not to disclose patient's identity while reporting a case in medical journal.

In Pragnesh Parmar study, it was 39%.<sup>3</sup> 78% participants accuse the discussion of patient's findings with spouse or friends without patient's consent as a breach of professional secret. In Pragnesh Parmar study 70% participant doctors were agreed for the same issue.<sup>3</sup> 77.3% participants of this study did not agreed that the breach of professional secrecy as a misconduct of doctor; whereas in Pragnesh Parmar study, 38% intern doctors were disagreed for same issue.<sup>3</sup> A doctor should disclose patient information to legal authorities if a person is convicted by court and most of the participants (89%) agreed.

In response to the question no. 10 in our study, 51.6% agreed about this. In Pragnesh Parmar study, 55 intern doctors were unsure about that patients can sue the doctor for desecrate if disclosure is done without his consent and not in the interest of public.<sup>3</sup> In response to the scenario about the lady with uterine bleeding (Question 11) 78.3% students disagreed. In Kevin TimmLütz study, 58% (Group 1) 83.2% (Group 2) and 73.2% (Group 3) were disagreed about the similar question (6). 77.3% students were agreed in the response to the question no. 12. In Kevin TimmLütz study, 72% (Group 1), 85.8% (Group 2) and 78% (Group 3) were agreed about the question. Visual impairment of a bus driver carries imminent risk of harm to third parties and so, despite the patient want not to disclose his condition, a physician should break confidentiality for a clearly fair motive.<sup>6</sup>

78% students were agreed in response to question no. 13. In Kevin TimmLütz study, 84% (Group 1), 97.3% (Group 2) and 81.9% (Group 3) were agreed about the question.<sup>6</sup> In scenario 13, a significant threat to the life of some one is evident with the intent of the patient to commit a homicide. The issue must be reported immediately to the legal authority to avoid the historic tragedy "Tarasoff case" where the psychotherapist was convicted for maintaining confidentiality in a similar scenario.<sup>7</sup> 89% students were agreed in the response to the question no. 14 of the questionnaire of study. In Kevin TimmLütz study, 53% (Group 1), 46% (Group 2) and 52.8% (Group 3) were agreed about the similar question.<sup>6</sup>

55% students agreed to the question no. 15 in our study. In Kevin TimmLütz study, 45% (Group 1), 73.5% (Group 2) and 61.4% (Group 3) were

agreed to the similar question.<sup>6</sup> As HIV infection carries significant risk of spread and damage, despite patient won't share, a doctor should disclose the information to prevent spread and as it is a disease of compulsory notification for epidemiological purposes, each case must be reported to the respective authority, as its omission is considered a crime.<sup>8,9</sup>

In our study, participating medical students had overall a reasonable knowledge and positive attitude towards professional secrecy and confidentiality. But, Maria Cristina Plaiasu study revealed insufficient knowledge amongst physician about confidentiality and laws.<sup>10</sup>

### Limitations

The study was conducted among medical students only in a single medical college, which may not represent the exact scenario of the whole population.

### Conclusion

The medical students participated in this study had a reasonable knowledge towards privacy and confidentiality in medical practice. Good medical practice includes preserving professional secrecy and confidentiality about patient information. It has significance not only about persons, their rights and reputation, but also for the faith and strength on doctor-patient relationship. In certain instances, confidentiality or professional secrecy needs to be broken to provide a favour to the state or a larger community.

### Recommendations

The medical ethics and acts related to medical practice should be emphasized in both the undergraduate and postgraduate syllabus and examinations. Learning a medical education never end. The periodical CME program on medical ethics and professionalism should be made mandatory for all practitioners.

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### Contribution of authors

MD-Concept, design, data collection, data analysis, interpretation of data, drafting & final approval.

RPC- Data analysis, drafting and critical revision & final approval.

### Disclosure

All the authors declared no competing interests.

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