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Original Research Article

Knowledge, Attitude, Practice about Disclosure of Medical Errors among Residents of a Tertiary Care Hospital, Dakshina Kannada

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ABSTRACT

Medical errors are considered to be grave threats to patient's safety. Effective error reporting is an obligatory tool to prevent and diminish its occurrence. This study was conducted to determine the knowledge, attitude, and practices about disclosure on medical error reporting among postgraduates from a tertiary care hospital in Dakshina Kannada. 61 postgraduates, both male and female from medical and dental faculty, within age group of 23 years to 33 years were included in the study. We aimed at performing a cross-sectional study on residents in a tertiary hospital setting in Mangalore to evaluate knowledge, attitude, and practice about disclosure of medical errors and negligence in resident doctors and its ethical aspect. The results showed that majority of doctors have adequate knowledge regarding medical errors. Attitude of doctors and practice suggest knowledge and awareness about handling the medical error is need of the day and they readily agreed to disclose the error to patient and face the consequences and future prevention. Still most acceptable approach for disclosure in this study was disclosure to colleague and then to disclose to patient. Awareness of legal consequence of medical error is needed to be addressed to doctors. Based on the results, it can be concluded that an improvement in medical error reporting system is still needed. Strengthening education about reporting is one of the ways to do such improvisation. Reporting system that may encourage health practitioners to report without having any doubt must also be established properly in hospitals so as to improve patient care.

Keywords: Medical error, Ethics, Knowledge, Attitude, Disclosure, Healthcare

INTRODUCTION

Medical Ethics deals with moral principles which should guide the members of medical profession in their dealings with each other, with their patients and with the state. [1] Patient safety and healthcare quality has increased enormously in India, but errors and adverse outcomes still prevail in clinical practice.

There are many definitions for the term medical error; however, the Institute of Medicine Report (IOM), 1999 defines a medical error as 'the failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim'. [2]

Ethics, law, and the literature suggest that when doctors make mistakes, they have a moral obligation to disclose their errors to the patient- timely and openly. Sweeping errors under the carpet weakens patient trust on healthcare because patients feel that doctors are more interested in protecting themselves and their colleagues. [3] Health care system monitors

patients' experience in order to appraise the quality of care. Medical professionals spend a lot of time with patients; they have major impact on patient experience. Thus, to improve quality of care, the medical professionals need to know what are the factors in medical work environment are of influence. [4]

Knowledge of understanding such issue is the vital contributing factors to this problem and needs a strong action to improve patient health care and safety. The healthcare delivery system is vulnerable to medical errors because of its decentralized and fragmented nature. Inappropriate management of healthcare professionals, clinical workflow processes, and information systems often leads to medical errors. [5]

As per the Indian Contract Act, the general principle of contract and its obligations states that there is a voluntary exchange of an offer of a service and its voluntary acceptance. The consent form requires disclosure of risks and alternatives that a reasonable patient would consider before undergoing a treatment. [6]

Health practitioners are accountable for identifying, contributing factors to medical errors and taking proper measure to reduce their occurrence. The attitude and practice of health practitioners affect their way of reporting medication errors. Disclosure of medical errors to patients and family members serves as a catalyst for litigation and thus the establishment of appropriate moral and ethical standards cannot be ignored when executing solutions to remedy the situation. [7]

Doctors who notice medical errors made by their colleagues may find themselves in a controversial situation between sincerity to colleagues and the duty to inform the patient. Their inner conscience permits them that something is going wrong and they should inform the patient but at the same time their loyalty to colleagues may stop them. [8] Ethical code tells us both about colleagues as well as patients but we don't have a definite or firm protocol on how to encounter and handle such situations. We need to have some good studies and protocols to overcome such situations in view of ethics and medical etiquette. [9]

Assessment of medical negligence in a healthcare organization is the first step to know the problem. Knowledge of ethical aspects of dealing with medical errors is still under research. We don't have any tools that can help us to know the quality of learning, practical skills, level of theoretical knowledge on various aspects and of course evidence based medical practice during residency.

This study was conducted to evaluate knowledge, attitude, practice and about disclosure of medical errors and negligence in resident doctors and its ethical aspect.

MATERIALS AND METHODS

Study Participants: Postgraduate doctors in a tertiary hospital of a Medical College, at Dakshina Kannada district in Karnataka.

Type of study: Cross sectional study.

Sample size: Convenient sample size of 61 (37 male and 24 female) between age group of 23 to 33 years.

Duration of study: 8th November 2016 to 7th December 2016.

Inclusion criteria: Postgraduate of tertiary institution recognised under medical council.

Statistical analysis: Data was analysed using Microsoft version 10. Data was expressed in percentages and represented in pie and clustered bar charts.

Data Collection: The study was initiated after approval from the Institutional Ethics Committee. Informed written consent was taken from the study participants. Every resident, who participated in this study was given a questionnaire form, which was formulated on medical negligence and errors keeping knowledge of resident doctors into consideration. The questionnaire was in the form of a modified Likert scale ranging from strongly agree to

strongly disagree and the score ranges from 1 to 5 respectively.

Ethical issue

Ethical clearance granted by Institutional ethics committee.

Anonymity, privacy and confidentiality of participants were maintained.

RESULTS

Table 1: Socio-demographic profile of the study participants

Age (years)	Frequency	Per cent
23-27	35	57.4
28-32	21	34.4
33 and above	5	8.2
Gender		
Male	34	63.7
Female	27	44.3
Faculty		
Medical	45	73.8
Dental	16	26.2

A total of 61 doctors participated in the study belonging to medical and dental faculty of tertiary care hospital Mangalore, between the age group of 23 to 33+ years. Majority of doctors 57.4% belonged to age group 23-27 years and least 8.2 % were of more than 33 years of age. Out of 61 doctors who participated in the study 63.7 % (34) were male and 44.3 % (27) were female. A total of 61 doctors participated in the study out of which 73.8% (45) were of medical faculty and 26.2% (16) were of dental faculty.

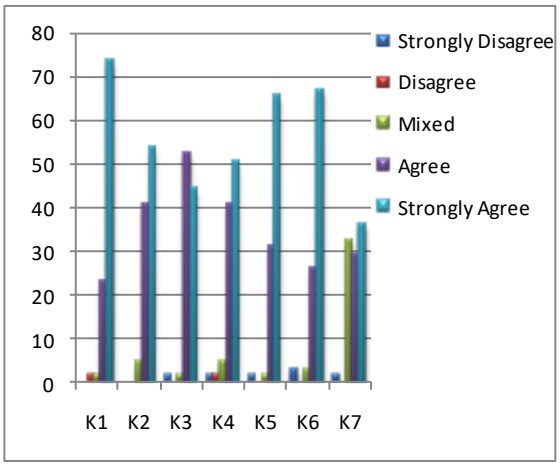

Fig 1: Distribution of study participants about the knowledge of medical error

When asked about knowledge of medical error, more than 55% (34) of doctors had good knowledge of medical error and 44 % (27) agreed various factor lead to medical error. Awareness about the law was fair.

K1: Medical error is deviation of accepted standard of care; K2: There are different types of medical error; K3: Various factors contributing to medical error; K4: There are different ways to speak up about medical error; K5: Medical error should be reported?; K6: Doctors should report medical error; K7: Awareness about the law.

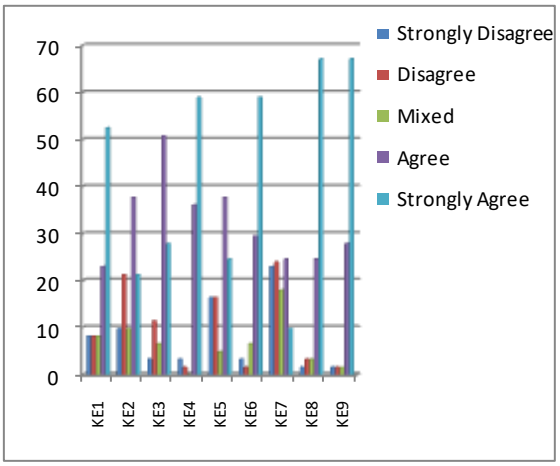

Fig 2: Distribution of study participants about the knowledge of cause of error

When asked about cause of medical error, more than 67% (41) postgraduates were of the opinion that workload and unavailability of medication and proper instrument were the main factors for medical error. 59% (36) postgraduates strongly agreed that error happen due to limited staff and patients do not follow prescriptions and 23% (14) strongly disagreed that error are avoidable.

KE1: Inadequate attention to patients; KE2: Inexperienced health personnel; KE3: Negligence of duty by health staff; KE4: Limited staff; KE5: No team work; KE6: Patients not following prescriptions; KE7: Errors are unavoidable; KE8: Work load; KE9: Unavailability of medication/instruments.

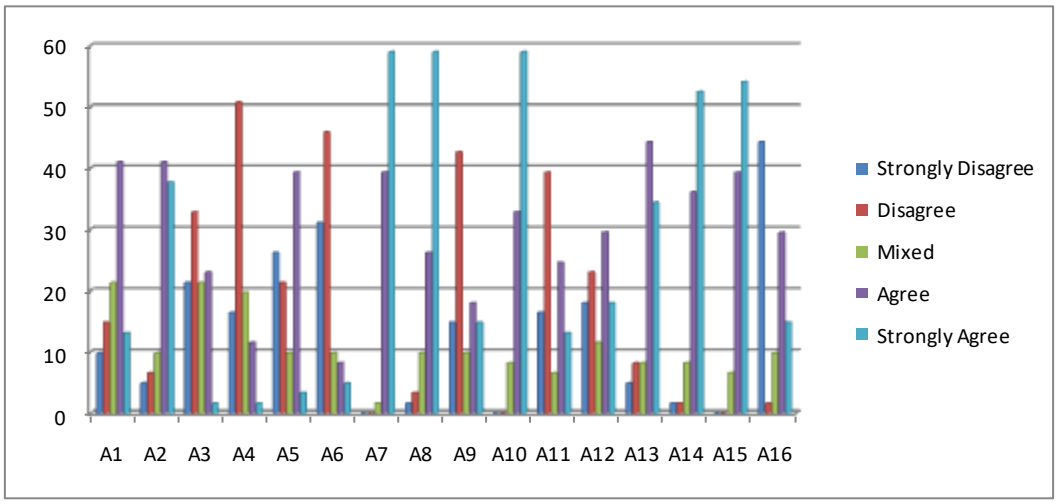

Fig 3: Distribution of study participants according to attitude towards medical error

In response to the question asked to understand the attitude of doctor towards medical errors doctor's respondents ranked the various factors:

Rank 1: Punishment makes errors underreported.

Rank 2: A confidential reporting system that documents medical errors is important for safety.

Rank 3: Use of abbreviations and dose expressions also lead to medical errors

Around 50% (31) of doctor disagreed that error are sign of incompetence.

A1: Most doctors make medical errors; A2: In India, medical error is common; A3: It is very unusual for patient to be misdiagnosed; A4: Errors are a sign of incompetence; A5: Mistakes are handled appropriately in this hospital; A6: Errors committed during patient management are not important, as long as the patient improves; A7: A confidential reporting system that documents medical errors is important for safety; A8: Punishment makes errors underreported;A9: Use of abbreviations and dose expressions lead to medical error; A10: When an error occur doctor should notify; A11: Mild side effects of drug can be ignored and need not be reported; A12: Reporting a medication error will make others to underestimate one's capabilities; A13: Paediatric and elderly most like to suffer medical error ; A14: A near-miss is an error that is detected and corrected before harm can be done; A15: Doctors should be open and honest about medical error; A16: Admitting an error made would lead to just a fair treatment for management.

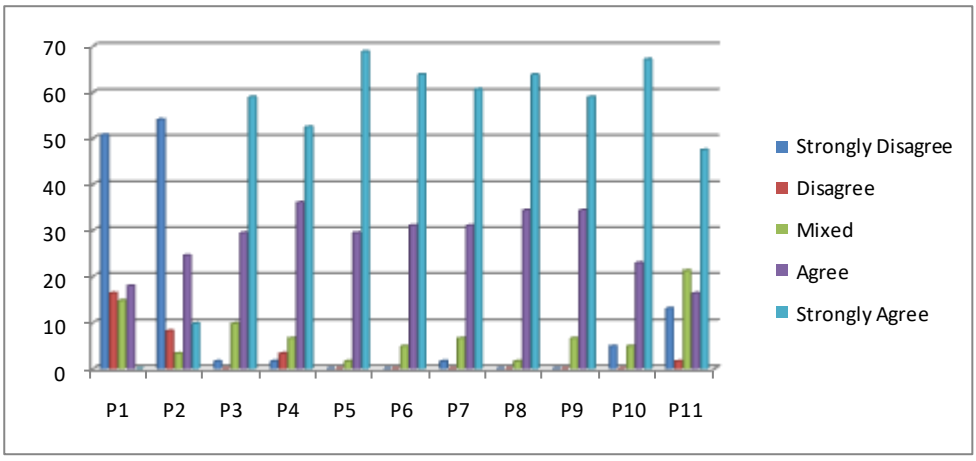

Fig 4: Distribution of study participants according to practice of medical doctors:

When asked about the practice to avoid medical error, most of the doctor agreed that disclosing about error will not be easy and were of opinion that others should not be blamed, rather should focus on error. Most of the doctors acknowledge education and safety measure will prevent errors. Mixed response was seen about punishment of whistle blowers.

P1: Telling about error I made would be easy;P2: It is easier to blame someone rather than focus on the cause of error; P3: I always ensure the patient safety is not compromised; P4: Environmental factors like other noises in the ward and calling for other work in between can cause medication errors; P5: I think proper documentation of facts will improve patient safety; P6: If I keep learning by mistake, I can prevent common errors; P7: It is important to acknowledge and deal with medical error by end of residency; P8: Education on medication safety reduces the risk of medication error; P9: The doctors need to be committed identify and address medical error; P10: Health administration should make error easy to report; P11: Whistle-blower should be punished.

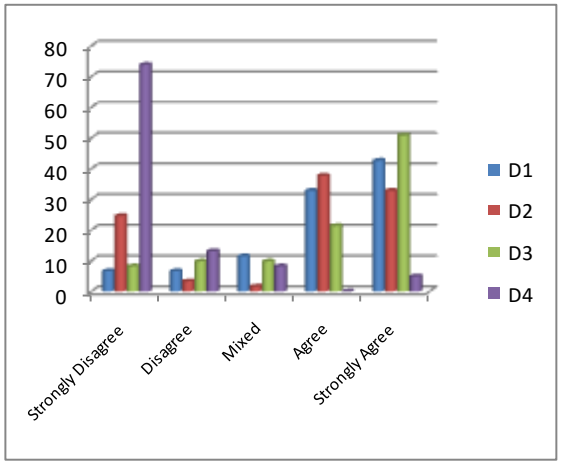

Fig 5: Distribution of study participants according to disclosure of medical error

When asked about disclosure of medical error 50% (31) of the doctor preferred disclosure to colleague. About one third of doctor agreed on open communication with patient. 73% (45) doctor strongly disagreed on concealing the whole thing. Fig.5.

D1: Open communication with patient; D2: Talk with high authority; D3: Disclosure to colleague; D4: Bury the whole thing. Fig5.

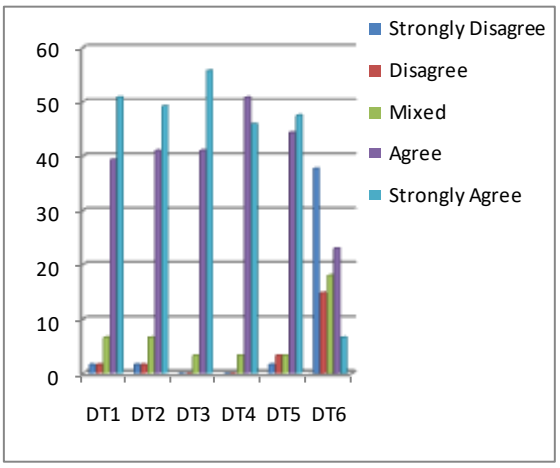

Fig 6: Distribution of study participants according to techniques of medical error disclosure

When asked about the best technique for disclosure of medical error a reasonable number of doctors agreed that steps should be taken to manage errors and patient should be told about the error, consequences of error and further management and prevention of recurrence.

DT1: Describe what happen to patient; DT2: Tell consequences of the error; DT3: Tell steps taken to manage; DT4: Steps taken to prevent recurrence; DT5: Express your sorrow and regret; DT6: Apology creates a legal liability.

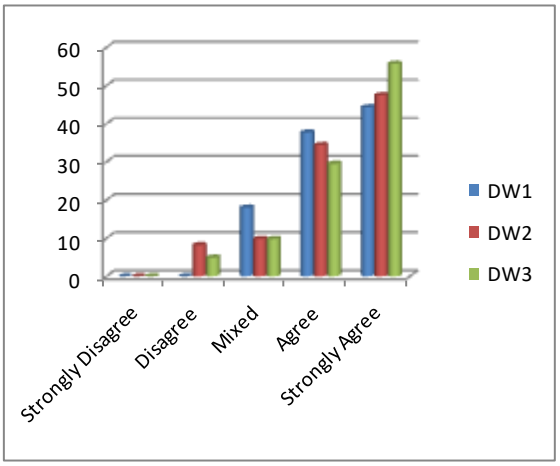

Fig 7: Distribution of study participants according to why to disclose medical error

When asked why it was necessary to disclose medical error the most of the doctor agreed on doctor patient relationship is most important reason.

DW1: Disclose as doctors are patient advocate; DW2: Disclosure will rebuild trust; DW3: Doctor patient relationship.

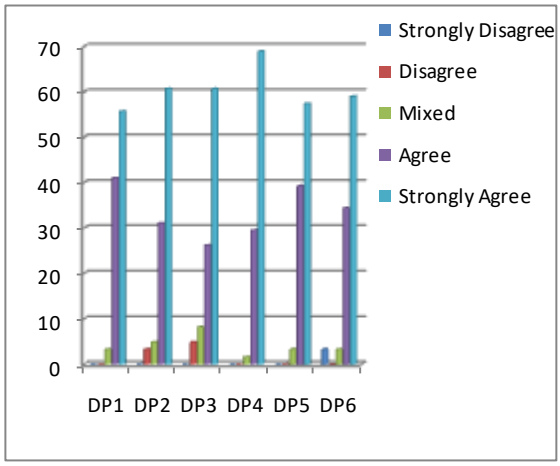

Fig 8: Distribution of study participants according to post – disclose medical error measures

For post disclosure most of the doctor had an opinion for improvement of patient safety and patients speak up initiation education programme. Also suggest for written policy and procedure for error reporting.

DP1: Educate Doctor Do and don't; DP2: Educate patients about speak up initiation; DP3: Provide a written policy and procedure for error reporting; DP4: Improve patient safety measures; DP5: Proper documentation and early information of medical error; DP6: Reaffirmation and reassurance to doctor professional competence and of self-worth.

DISCUSSION

Medical errors are unfortunate but are unavoidable part of medical practice. Our study suggested that majority of doctors have adequate knowledge regarding medical errors and awareness about the law. Knowledge of medical had no significant variations with different faculties. Another similar study conducted in Indonesia (2014) on 61 doctors, found lack of adequate knowledge about medical errors and legal responsibility. Awareness of legal consequence of medical error needs to be addressed to doctors as many were unaware of the legal consequences of medical errors. [10] Other Study in Nigeria (2013), on 269 patients and 10 doctors, showed that there is no significant relationship between knowledge of error and gender of respondents. Also, that age of respondents did not significantly influence their knowledge of error, although knowledge increased as level of education increased which is similar to the finding of this study result. Although the knowledge about medical errors was adequate in our study group, however this knowledge needs to be translated into practice.

In this study attitude of doctors toward medical errors suggested various factors punishment makes errors underreported, confidential reporting system that documents medical errors is important for safety and use of abbreviations and dose expressions also lead to medical errors. A study conducted in Nigeria (2013), on 10 caregivers, suggested medical errors are not only due to human mistakes but mostly due to faulty protocols in the health system. [11]

In the practice to avoid medical errors, most of the doctors in our study agreed that disclosing about error will not be easy and were of opinion that others should not be blamed, rather should focus on error. Most of the doctors acknowledged that education and safety measure will prevent errors. In a similar study on medical errors (2002) in America, majority of respondents want medical errors to be informed immediately upon its detection regardless of health care utilization. The study also emphasized on teaching physicians error disclosure techniques, honesty, and compassion and were endorsed as a priority for educators who teach error management. [12]

In our study it was worth noting that doctor preferred disclosure of medical error to colleague as best possible way. Doctor strongly disagreed on concealing the whole

thing. Other similar study on disclosure also revealed that disclosure to peer or colleague is favoured by the doctor in different countries. A study in Norway (2005) on 368 doctors, suggest that acceptance of criticism and discussion of ethical and professional matters among colleagues is not necessarily a sign of a colder and less human atmosphere, as this was positively related to increased perceived support from colleagues after the event. [13]

Study conducted in Boston, USA (2004) emphasized that open, honest and timely disclosure should be the only approach to medical error. In our study, even though our study also suggest open disclosure but first to colleague and then to patient. [14]

Post disclosure as per this study suggestion about policy and procedure about error reporting is needed to be considered and a comprehensive teaching and awareness program was suggested. A study in Washington (2003) on 52 patients and 46 doctors, suggested that role physician educators should take part in dealing with medical mistakes. The largest number of the respondents felt educators should focus on teaching students to be honest and compassionate. [15]

CONCLUSION

The study found that awareness about medical error among residents doctor was adequate. Medical error can be encountered quite often, makes it difficult for us to disclose medical errors to management or fellow doctors. Doctors need to be encouraged to disclose their error to their patients, and so to maintain doctor patient relationship. Moreover, doctors require education and guidance about how to handle medical error. Effective physician education, communication, and management strategies for error prevention and disclosure can be developed for a better health care system.

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