

# Medical Ethics among Physicians and Nurses in Fayoum University Hospitals and Fayoum General Hospital, Egypt

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## Abstract

**Background:** Medical ethics is a system that applies values to practice clinical medicine and in scientific research. This study aimed to assess knowledge and practice of medical ethics among physicians and nurses in Fayoum General Hospital and Fayoum University hospitals. **Methods:** A cross sectional descriptive study was carried out at Fayoum General Hospital and Fayoum University Hospital. The study was conducted from July 2019 to December 2019.

**Result:** Our Study showed that there is statistically significant higher mean of ethics score among University hospital physicians and nurses than General hospital physicians and nurses. In each hospital physician show higher ethics score than nurses. There was no effect of gender on ethics score. There is statistically significant higher mean of ethics score among physician of surgical department more than medical departments. On the other hand there was no statistically significant difference in ethics score between different hospital departments in nurses in both study hospitals, also in each hospital and in each staff. Generally regardless type of hospital or staff there was statistically significant positive correlation between ethics score and age. **Conclusion:** Medical ethics learning courses must increase for physician and nurses especially for general hospitals.

**Key words:** *Fayoum, knowledge, practices, Medical ethics, clinical education of ethics*

## Introduction

Medical ethics is a set of moral beliefs, values and principles which help professionals to make the right choices. Unfortunately, for many decades, ethics educating has been disregarded in undergraduate as nicely as Postgraduate clinical programs.<sup>10</sup> This has resulted in a deficiency in the practice of healthcare ethics on a day-to-day. Furthermore, lack of knowledge and practice of medical ethics and increasing public awareness of their rights have led to legal suits against healthcare professionals.<sup>14</sup> The basic principles of medical ethics are autonomy, beneficence, non-maleficence, justice, and confidentiality.<sup>7</sup> Ethical practices in daily clinical practice have to be determined by health professionals.<sup>1</sup>

Autonomy is intentionality, understanding decision-making capacity and absence of controlling influences. The moral rules which derived from the application of autonomy are telling the truth, respecting the privacy of others, protection of confidential information and

obtaining consent for interventions with patients.<sup>5,21</sup>

Beneficence: health care providers must act for the benefit of others. They must provide benefits and balance between benefits and risks/harms. Non-maleficence is an obligation not to inflict harm on others, does not kill, do not cause pain or suffering, do not incapacitate and do not cause offense. Health care providers must equitably distribute benefits, risks, costs, and resources.<sup>23</sup> Rules supported by justice are: To each person an equal share according to need, effort, contribution and to merit. In addition to the 4 basic ethical principles, most professional societies or organizations have established professional code of ethics with respect to human dignity, confidentiality, privacy, and patient rights.<sup>19</sup>

Equal rights for all patients to get right of entry to health offerings are very essential. Patient rights are frequent values that have to be adopted. They set up a foundation for keeping top relationships among patients, doctors, nurses and distinct healthcare providers. Patient

rights are regarded as a reflection of human rights in the contemporary day society<sup>20</sup> Open and trustworthy communication is a critical part of the doctor-patient relationship. This is a basic affected person right.<sup>(16)</sup>

Patient has many rights as informed consent, Confidentiality abandonment and right to refuse Care. Informed consent entails the patient's understanding of the following: 1-What the health practitioner is proposing to do 2-Whether the doctor's thought is a minor procedure or major surgery. 3-The nature and cause of the treatment. 4- Intended effects versus possible side effects. 4-The dangers and predicted benefits worried 5-All reasonable alternatives such as dangers and benefits.<sup>12</sup>

Closely related with knowledgeable consent, the patient rights include the following: 1-Freedom from force, fraud, deceit, duress, overreaching or other ulterior form of constraint or coercion. 2-The right to refuse or withdraw without influencing the patient's future healthcare. 3- asking questions and negotiation aspects of treatment.<sup>15</sup>

Confidentiality: the physician and nurse need to by no means disclose patient information. Physician and nurse can disclose patient information, If the patient wants his information to be disclosed to others or except required doing that with the aid of law. Information release must be in the form of an official signed document.<sup>13,25</sup>

Abandonment: The medical doctor and nurse have the responsibility to continue a patient's healthcare after consenting to supply medical care until the patient no longer requires remedy for the illness.<sup>2)</sup> The physician must notify the patient and transfer care to some other ideal physician if planning to withdraw care.<sup>9</sup>

Right to refuse Care: Adults, parents for children competent grownup patients have the right to refuse health care (it is wise to report that the affected person in reality understands the dangers and advantages of their decision, however there is exceptions, if patients are with an altered mental status or parents or guardians deny children necessary medical care.<sup>15</sup> In some hospitals, if treatment is unable to benefit the patient, medical futility is referred. Avoiding futility by practicing non-

maleficence is an important part of practicing good medical ethics.<sup>(5,8)</sup>

This study aimed to assess knowledge and practice of medical ethics among physicians and nurses in Fayoum General Hospital and Fayoum University hospitals.

## Subjects and Methods

### The study Design;

A cross sectional descriptive study was carried out at Fayoum General Hospital and Fayoum University Hospital. The survey was conducted over a period of six months between July 2019 and December 2019.

A total sample of 400 participants (200 physicians and 200 nurses) was included in the study.

This study was based on a self-administered, structured, close ended questionnaire developed for the stated objectives. The questionnaire was designed based on wide search in the literature. The questionnaire had two parts: the first part was for getting information on certain demographic characteristics. The second part was designed to assess the knowledge and practice about medical ethics.

The responses were based on 2 points which included (know or do not know) for knowledge questions; the know answer was scored 1, don't know was scored 0 and (Done and not done) for practice questions; right practice was scored 1 and a bad practice was scored 0.

### Statistical Analysis

Data analysis was performed using Statistical Package of Social Science (SPSS) software version 22 in windows 7. Quantitative data included in the study was first tested for normality by One-Sample Kolmogorov-Smirnov test in each study group then inferential statistical tests were selected. For quantitative parametric data, Independent student t-Test was used to compare measures between two independent groups of quantitative data. Bivariate Pearson correlation test was used to test the association between quantitative parametric variables. The p-value < 0.05 was considered the cut-off value for significance.

## Result

Table (1) illustrated that there was no statistical significance difference between Fayoum General Hospital (FGH) and Fayoum University Hospitals (FUH) physicians' demographic characters as age, sex, and department of work. It indicated proper matching between study groups.

Table(2) showed no statistical significance difference between Fayoum General and University hospitals nurses' demographic characters as age, sex, and department of work. It indicated proper matching between study groups.

Our Study showed that means of ethics scores of FGH physicians and FUH physicians were  $23.3 \pm 2.3$  and  $20.6 \pm 2.9$  respectively. There was statistically significant higher mean of ethics score with p-value  $< 0.05$  among University hospital physicians than General hospital physicians.

Also means of ethics (knowledge and practices) scores of FGH nurses and FUH nurses were  $17.7 \pm 3.3$  and  $20.5 \pm 3.3$  respectively. There was statistically significant higher mean of ethics knowledge and practices score with p-value  $< 0.05$  among University hospital nurses than General hospital nurses. In this study, Physicians and nurses had a shortage in knowledge about disclosure of medical reports and the relationship between physicians and patients and relationship between nurses and patients in participants of FGH compared to participants of FUH. The majority of participants could do the correct practice with a percentage close to 100% in most items regarding the practice about medical ethics. This study had shown the keen of all participants to check the patient in a private room keeping the secrecy of him. Although FUH and FGH are public hospitals, where the patient may be examined and history is taken in front of any person present in the room of examination which makes the patient hide any details about his illness.

The shortage of participants of both hospitals in taking informed consent from patients before examination was reported in this study. The nature of the culture of both participants and the patient and what grew up and learned by each of them as well as knowledge lack related to good practice explain that result.

Most of the participants of FGH keen patients' right to refuse examination by medical and nurse students compared to FUH participants, This current Study showed that there was statistically significant higher mean of ethics knowledge and practices score among FUH physicians and nurses than FGH physicians and nurses as shown in table (3).

There was no statistically significant difference with p-value  $> 0.05$  in ethics score between different gender in each study hospitals, and in each study staff (physician and nurses).

Table (5) illustrated that there was statistically significant higher mean of ethics score with p-value  $< 0.05$  among physician of surgical department in General hospital and University hospital more than medical departments. On the other hand there was no statistically significant difference with p-value  $> 0.05$  in ethics score between different hospital departments in nurses in both study hospitals, also in each hospital and in each staff.

Table (6) showed that generally regardless type of hospital or staff there was statistically significant positive correlation between ethics score and age p-value  $< 0.05$ , which indicated older participants keen on ethics more than younger participants. On the other hand there is no statistically significant correlation with p-value  $> 0.05$  among physician and nurses generally and in each study hospital. Among FUH staff there was statistically significant positive correlation between ethics total score and age.

**Table (1): Demographic characters in different physician groups.**

Variables	FGH (n=100)		FUH (n=100)		p-value
Age (years)					
Mean /SD	35.5	7.8	34.6	7.2	0.9
Sex					
Male	69	69%	63	63%	0.5
Female	31	31%	37	37%	
Department					
Medical	32	32%	29	29.3%	0.8
Surgical	68	68%	70	70.7%	

**Table (2): Demographic characters in different nurse groups**

Variables	FGH (n=100)		FUH (n=100)		p-value
Age (years)					
Mean /SD	32.7	6.9	32.2	6.6	0.6
Sex					
Male	59	59%	60	60%	0.9
Female	41	41%	40	40%	
Department					
Medical	32	32%	33	33%	0.9
Surgical	68	68%	67	67%	

**Table (3): Ethics score in different study groups.**

Variables	Ethics score		p-value
	Mean	SD	
Physician			
FGH	20.6	2.9	<0.001*
FUH	23.3	2.3	
Nurses			
FGH	17.7	3.3	<0.001*
FUH	20.5	3.3	
Fayoum General hospital staff			
Physician	20.6	2.9	<0.001*
Nurses	17.7	3.3	
Fayoum University hospital staff			
Physician	23.3	2.3	<0.001*
Nurses	20.5	3.3	

**Table (4): Ethics score in different gender among different study groups.**

Variables	Males		Females		p-value
	Mean	SD	Mean	SD	
Physician					
FGH	20.5	2.7	20.7	3.6	0.8
FUH	23.5	1.8	22.9	2.9	0.2
Nurses					
FGH	17.4	3.5	18.02	3.1	0.4
FUH	20.2	3.5	21	3.03	0.3
Type of hospital					
FGH	19.1	3.4	19.2	3.5	0.9
FUH	21.9	3.2	21.9	3.1	0.9
Hospital staff					
Physician	21.9	2.8	21.8	3.4	0.9
Nurses	18.8	3.7	19.5	3.4	0.2

**Table (5): Ethics score in different department among different study groups.**

Variables	Medical		Surgical		p-value
	Mean	SD	Mean	SD	
Physician					
FGH	19.6	3.2	21	2.8	0.03*
FUH	18.6	1.7	20	2.2	0.03*
Nurses					
FGH	17.7	3.	17.6	3.2	0.9
FUH	20.4	3.7	20.6	3.1	0.8
Type of hospital					
FGH	18.7	3.4	19.3	3.5	0.2
FUH	21.9	3.3	21.9	3	0.9
Hospital staff					
Physician	21.5	3.3	22.1	2.7	0.2
Nurses	19.1	3.8	19.2	3.5	0.9

**Table (6): Correlation between ethics score with age in different study groups.**

Age	Ethics score	
	r	p-value
Age total study group	0.13	0.009*
FGH	0.14	0.06
FUH	0.19	0.006*
Physician	0.09	0.2
Nurses	0.05	0.5
FGH- Physician	0.11	0.3
FUH- Physician	0.18	0.08
FGH- Nurses	0.02	0.8
FUH- Nurses	0.11	0.3

## Discussion

There are growing worries about ethical problems in the healthcare system. Medical ethics is an association of desirable guidelines that follow characteristics to the act of clinical medicine.<sup>18, 22</sup> generally, healthcare personnel have restricted formal training in ethics, however in everyday work there is immediate or indirect need for knowledge in this area. The view has been unequivocally communicated that teaching and training of ethics ought to be a nonstop procedure in medical training. It is likewise proposed that medical and nursing students could be trained together in interdisciplinary settings to enhance ethical practice in social insurance.<sup>12</sup>

*This study is a cross-sectional descriptive study which aims to assess knowledge and practice of medical ethics among physicians and nurses in Fayoum General Hospital and Fayoum University Hospital.*

There was no statistically significant difference with in total knowledge and practice score between different gender in each study hospitals, and in each study staff (physician, and nurses). That indicated no effect of gender on ethics practice score. In disagreement with Mohamed et al. (2012), who revealed that 31.2% of males (P =

0.003) were compliant with the principles of medical ethics compared with 61.8% of female physicians. On the contrary Amro and Mohamed<sup>3</sup> reported that total knowledge and practice score was significantly higher in males than females in FGH participants, this may be due to many of the participants were males. Generally regardless type of hospital or staff there was statistically significant positive correlation between ethics practice score and age, which indicated older participants keen on ethics more than younger participants.

Among FUH staff there was statistically significant positive correlation between ethics practice score and age, which indicated increase in age will associated with increase in ethics practice score. More age, more the education the more the knowledge, frequent medical learning, conferences attendance and communication with different colleagues. In disagreement with Amro and Mohamed<sup>3</sup> reported that a negative correlation with practice, they explained that as young doctors keen to work more and prove their presence among their colleagues' doctors. Also Anup et al.<sup>4</sup> who revealed that the practice scores varied with age and no statistically significant difference. Best practice scores were in the



age group from 34-43years.

This study showed that, knowledge score was positively correlated with practice score, as the more knowledge the more practice. In agreement with Amro and Mohamed<sup>3</sup> reported the same result.

In this study each hospital physician show higher ethics knowledge and practices score than nurses that agree with Walrondet al<sup>23</sup>, 159 participants from doctors and nurses included junior doctors, consultants, staff nurses and sisters-in-charge. The frequency with which the participants encountered ethical or legal problems varied widely from 'daily' to 'yearly'. 52% of senior doctors and 20% of senior nursing staff knew little of the law pertinent to their work. 29% of doctors and 37% of nurses had no knowledge of an existing hospital ethics committee. 11% of the doctors did not know the contents of the Hippocratic Oath whilst 25 % of nurses did not know the Nurses Code. Nuremberg Code and Helsinki Code were known only to a few individuals.

In this study, Physicians and nurses had a shortage in knowledge about disclosure of medical reports and the relationship between physicians and patients and relationship between nurses and patients in participants of FGH compared to participants of FUH, the bad treatment of patients with doctors and nurse, as well as doctors' fear of legal liability and frequent complaints against doctors from patients and their families cause. Our study results agree in most topics of knowledge with Mohamed et al<sup>17</sup> who studied knowledge and practice among residents of Alexandria University hospitals. On the other hand they disagree with our results in none of the participants of FUH considered disclosure of medical reports were a good idea compared to their results as disclosure of medical reports were good (45.3%). In Amro and Mohamed<sup>3</sup> study, none of the participants of FUH considered this good the same as our results.

This study reported that the majority of participants could do the correct practice with a percentage close to 100% in most items regarding the practice about medical ethics. This might be because of the way that questions based on practice were basic and simple to reply as they depended on fundamental good standards. This was in agree with Amro and Mohamed<sup>3</sup>, Anup et al.<sup>4</sup>, Mohamed et al.<sup>17</sup>, Hariharan et al.<sup>11</sup> This study had shown the keen

of all participants to check the patient in a private room keeping the secrecy of him. Although FUH and FGH are public hospitals, where the patient may be examined and history is taken in front of any person present in the room of examination which makes the patient hide any details about his illness. This was in accordance with Mohamed et al.<sup>17</sup>, Geiderman et al.<sup>13</sup>, Amro and Mohamed<sup>3</sup>

The shortage of participants of both hospitals in taking informed consent from patients before examination was reported in this study. The nature of the culture of both participants and the patient and what grew up and learned by each of them as well as knowledge lack related to good practice explain that result. This was in accordance with Amro and Mohamed<sup>3</sup> On the contrary Mohamed et al.<sup>17</sup> found that all residents took informed consent and complied with the principle of not harming the patient.

Amro and Mohamed<sup>3</sup> reported that most of the participants of FGH keen Patients' right to refuse examination by medical and nurse students compared to FUH participants, this is explained by the nature of FUH educational institution aimed at teaching students. The same results reported in this current study, but in opposite to Mohamed et al.<sup>17</sup> stated that 93% of participants accepted the patients' request not to be examined by medical students.

This current Study showed that there was statistically significant higher mean of ethics knowledge and practices score among FUH physicians and nurses than FGH physicians and nurses. This finding may be explained by continuous medical education from participants' seniors and attending seminars or conferences periodically where they meet other mates from different universities and learn from their experience. This was in accordance with Mohamed et al.<sup>17</sup>, Anup et al.<sup>4</sup>. Amro and Mohamed<sup>3</sup> reported nearly similar results, participants were in institution and related to academics, educational modules and different ongoing advances had more knowledge in correlation with those had no connection. In close affirmation to our results Hariharan et al.<sup>11</sup> revealed in his study that professionals had better practice score if they were related with both clinical and academic practice compared to private specialists because they work under logical morals advisory group

which enable them to work under the moral standards.

## Conclusion

This study reveals that knowledge and practice levels were low. In Fayoum University Hospital, participants were better than Fayoum General Hospital participants in some topics of knowledge and practice of medical ethics. Meanwhile, that medical ethics learning in Faculty of medicine and nurse faculty, Fayoum University ought to be reinforced, there is a need to postgraduate course for ethics and activates the role of the Ethics Committee more than that.

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**Abbreviation:**

FUH: Fayoum University hospital

FGH: Fayoum General hospital      SPSS: Statistical Package of Social Science.

MCI: Medical Council of India

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