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# Medical Ethics: Complexities and Challenges

**Abstract:** Profound changes are occurring in medical practice due to research, new discoveries, technological advances and different policies. The current and future changes are having a great impact on cost, health care services and ethics. Medical practitioners need to have enough knowledge of ethics to be able to practice their growing practical and research responsibilities with fairness and pride. The aim of this paper is to evaluate the abilities of a group of practitioners to explain ethics and their applications. Twenty medical practitioners responded to a questionnaire distributed to them while attending a course on ethics, research and scientific writing. The results showed that the majority of the candidates were able to explain the meaning of ethics. There were deficiencies concerning research, authorship and writing. None of the candidates mentioned the impact of current changes and future developments on ethics in health care and research. There is a great need to expand on the knowledge and practice of ethics among health care professionals.

**Keywords:** Ethics, medical practice, research

## Introduction

Since the early days of practicing medicine, the issue of ethics in caring for the people has been raised. Sets of principles for dealing with patients have been declared from the Hippocratic code to the Helsinki declaration in 1964. The World Medical Association has frequently revised and updated the declaration to meet the developing changes, challenges and controversies in medical practice and research (Forster *et al.* 2001; Human 2002).

Traditional medical ethics inherited from the old

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أخلاقيات مهنة الطب: التعقيدات والتحديات  
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**المستخلص:** تحدث تغيرات هائلة في مهنة الطب بسبب الإكتشافات الحديثة والتطور التكنولوجي واختلاف السياسات. ولهذه التغيرات الحالية والمتوقعة منها في المستقبل، أثر كبير على تكاليف الخدمات الصحية، وأخلاقيات المهنة. لذلك يحتاج المنتسبون إليها إلى إلمام بأخلاقياتها حتى يتمكنوا من مواصلة مهنتهم النامية ومسؤولياتهم البحثية. الغرض من هذه الدراسة هو تعريف مفهوم الأخلاقيات الطبية في الممارسة والبحث عند مجموعة من ممارسي مهنة الطب. ومادة هذه الدراسة هي إجابات عشرون من المنتسبين إلى مهنة الطب على إستبيان وزع عليهم أثناء حضورهم دورة عن البحث العلمي والكتابة للنشر والأخلاقيات المهنية. أوضحت النتائج أن معظم المشاركين لديهم بعض المعرفة بما هي أخلاقيات المهنة. ولكن إتضح أن هناك قصوراً بالغاً فيما يتعلق بالبحث والكتابة والنشر. كذلك لم تتطرق الإجابات من أي من المشاركين على تأثير التغيرات الحالية والمستقبلية على أخلاقيات المهنة. وهكذا أوضحت الدراسة أن هناك حاجة ماسة لتنمية أخلاقيات مهنة الطب في الممارسة والبحث.

كلمات مدخلية: الطب، مهنة، بحوث، أخلاقيات، تكنولوجيا، تطور، سياسات، إختلاف، تأثير.

generations were simple, easy to understand and applicable. Traditional ethics were primarily concerned with the mission of the healers in the form that the physician should safeguard the health of people with his knowledge, skills, and conscience. With the development of research, and both diagnostic and therapeutic facilities, the issue of ethics became more challenging and complicated.

Calanan (1976) explained the basic principles of research ethics that satisfied the need for a long time. Clinical research has to be justified, planned, approved and conducted only by scientifically qualified persons. Combining clinical research with patient care requires justification of the trials' therapeutic value. The required criteria should be followed for patients' consent following full explanation, continuity of the research and reporting on the results. Writing should declare financial grants and the facts. Authors should be restricted to those who contributed substantially to the work.

Modern health care with its advanced technology, quality, cost containment and resource allocation raises a variety of ethical issues (Anderson 1996). In recent years, we have witnessed fascinating advances in science based on a wide range of research projects on humans, on animals and in laboratories. Among the numerous developments, we are observing the impact of molecular biology, genetics and gene therapy. When the issue of ethics is raised to balance medical practice, research, cost and equity, it is important to keep in mind the aim of traditional ethics in health care. Basic traditional ethics in clinical practice should not be compromised. However, flexibility and reform are needed to make them applicable to the fast changing world.

The variations of human nature and behaviour make detailed ethics difficult to standardise or to define (Savulescu 1998). The issue of ethics needs to be raised at all levels. First, among the leaders and senior members of the health care professionals, to be followed at an early stage among all members of the profession. Involvement of the public as customers of health services is equally essential.

The public should be aware of the difficulties facing ethical issues and they have the full right to be reassured about the presence of safeguards for clinical practice and research (Doyal 2001). Medical practitioners need to have enough knowledge of ethics to be able to practice their growing responsibilities with comfort, fairness and satisfaction. It has been stated that until we come to terms with our objectives in medical practice, we shall not be regarded as a profession with a mission and that is a shame (Loewy 2002).

The aim of this paper is to evaluate the understanding of ethics among a group of health care professionals who attended a workshop/course organized by the Bahrain Medical Bulletin (BMB) in the year 2002. The course was about research, writing and editing in medicine. The evaluation was through a questionnaire to assess the candidates' abilities to explain the meaning of ethics and their views concerning ethics of research, authorship and scientific writing and how they evaluate the ethical behaviour of their colleagues.

## Methods

Twenty-two candidates attending a workshop/course on ethics, research and scientific writing were given a questionnaire to answer. There were 19 doctors and 3 allied health professionals. The questionnaire was in 3 sections. Section A was

composed of two questions, both of which were geared towards the meaning of ethics.

### Section A

Q1: Try to give a definition to ethics.

Q2: What do you understand from medical ethics?

The answers were considered relevant if the candidate tried to mention any combination of the following: moral, conscious, set of principles, confidentiality, justice, honesty, good behaviour, beneficial harmless care, and respect to self and others.

Section B was for assessment of their knowledge concerning the ethics of research, authorship and writing. It was composed of three questions:

### Section B

Q1: Write a few statements on ethics of medical research.

Q2: Who should be included as an author when reporting on research?

Q3: Write a few statements on ethics of scientific writing.

The answers were considered relative if they included some of the criteria explained in the introduction (Calanan 1976).

Section C was to assess how the candidates evaluate their colleagues from the ethical point of view. It was composed of one question:

### Section C

Q1: Give the percentage of what you consider ethical residents and ethical consultants in your department.

The percentages presented are from the replies of the candidates. Candidates were requested to record their posts and the number of years since qualification from university.

## Results

Twenty candidates (17 doctors and 3 allied health professionals) completed the questionnaire and handed it back at the lunch break.

### Section A

Nineteen candidates responded to this section of the questionnaire. The answers of 17 of them were considered relevant.

### Section B (Table 1)

B1: Eight candidates wrote statements on ethics of research in medicine. The answers of six of them were considered relevant.

B2: 18 candidates responded to the authorship. Nine answers were considered relevant.

B3: 12 candidates gave comments to the ethics of writing. The comments of seven of them were considered relevant. None of the candidates mentioned the impact of current changes and future expectations on ethics.

**Table 1:** Response of 20 candidates to ethics in research, authorship and scientific writing.

Candidate No	B1	B2	B3
01	NR	NR	NR
02	R	R	R-r
03	R-r	R-r	NR
04	R-r	R	NR
05	NR	R-r	R-r
06	NR	R	R-r
07	R-r	R	R-r
08	NR	R-r	R
09	R	R-r	R
10	R-r	R-r	NR
11	NR	R-r	NR
12	NR	R	R
13	NR	R	R
14	NR	R-r	R-r
15	R-r	R-r	R-r
16	NR	R	R
17	NR	R	NR
18	NR	R	NR
19	NR	NR	NR
20	R-r	R-r	R-r

B1: Research ethics.

R: Response

B2: Authorship.

NR: No response

B3: Writing ethics.

R-r: Relevant response

### Section C

Regarding ethical colleagues, the following replies were given by three different candidates: "cannot judge" (No: 3), "no comments" (No: 18) and "no response" (No: 17). One answer (No: 10) was not valid as the candidate gave the number of ethical colleagues without giving the total number of doctors in the department. Out of the remaining 16, there

were three allied health professionals (No: 11,12,13) who indicated a very high percentage of ethical doctors. The remaining 13 answers showed low percentages of ethical colleagues among the residents and much lower among consultants (see, Table 2).

**Table 2:** Response of the candidates to the percentage of ethical colleagues in their respective departments. (Residents = Res. Consultants = Cons)

Serial No	Years since qualification	Current post	Ethical %	
			Cons.	Res
01	06-10	Res	05	15
02	06-10	GP	10	40
03	00-05	GP	Cannot judge	
04	11-15	Cons	60	70
05	20+	Res	—	80
06	20+	Doctor	10	80
07	20+	Res	50	50
08	06-10	Res	05	10
09	00-05	Res	—	60
10	00-05	Res	Not valid (2 & 8)	
11	20+	Doctor	25	25
12	00-05	Allied	100	100
13	00-05	Allied	100	100
14	00-05	Allied	100	90
15	06-10	Res	17(1/6) 08 (2/25)	
16	00-05	Doctor	00	20
17	00-05	Res	No response	
18	00-05	Res	No comments	
19	11-15	Res	10	40
20	16-20	Doctor	10	10

### Discussion

In the current fast changing world, the response of health care professionals can put all of us under test and evaluation by the community. With the impressive advances of technology and knowledge, one would hope for uniform improvements of care to all sectors of the community. This is not always the case as recent advances in diagnostics and therapeutic methods have made health care very expensive. The rising cost of health care associated with budget constraints has caused an ethical challenge that may affect doctor-patient relationships (Siegler 1998; Pellegrino 1997). The ethical challenges are further complicated by the



revolution of communication that has helped people everywhere understand the changes that improve diagnostic and therapeutic facilities. Further challenges in the form of ethnic variations and different beliefs (Savulescu 1998) will be more difficult to deal with if medical practitioners lack the knowledge, changes and flexibility in the implementation of ethics.

As a result of the response to the questionnaire presented to medical practitioners who attended a course on medical writing including a session on ethics, it is important to discuss the following:

- 1- Where we stand as medical practitioners
- 2- Traditional ethics
- 3- Recent changes
- 4- Do we need to address the issue of ethics?

### 1-Where we Stand as Medical Practitioners

The response of the candidates to the questionnaire was encouraging by observing that 19 out of 20 tried to explain the meaning of ethics in health care. Although there is a place for improvement to understand ethics, 17 answers were considered relevant as some of the basic principles of ethics were mentioned. The responses to ethics of research, authorship and writing were not up to the expectation. The reply of less than 50% of the candidates was considered relevant. The percentages of ethical colleagues in the reply of the candidates were very alarming and upsetting. Small percentages of colleagues were evaluated as being ethical.

### 2-Traditional Ethics

The traditional ethics inherited from older generations were simple and straight to the point. The patient was the physician's priority and health was the essential consideration. Traditional ethics were concerned with confidentiality and ensuring that health care was delivered with respect, benefits, no harm, compassion and justice. With the long history of steady and slow progress in health care over several centuries the traditional ethics were extended to include honesty, loyalty, discipline, quality and unselfishness. Regardless of the social class, the voice of suffering patients must be heard and interpreted with respect, attention, compassion and a good attitude. Lessons from the history of medicine and traditional ethics could be of help for a better understanding of current problems in medical practice.

*Respect:* The importance and necessity for respect are self-evident. Respect should be understood, and its implementation should start by self-respect. Respect is usually an exchange of giving and receiving. Young doctors showing respect for themselves and others should be encouraged, supported and praised. When a fault is observed, one should not be faced with humiliation. He/she should be guided kindly and firmly to avoid future faults. Respect should extend to involve colleagues, patients, institutions and communities.

*Benefit and harmlessness:* Medical practitioners should make sure that treatment of their patients is beneficial. It is also important to be sure that no harm is taking place. It may appeal to someone to act similar to others who can get away with carrying out a faulty action. This is an unacceptable attitude. The act or advice that could weaken the physical, mental or emotional status of a human being should not be practiced.

*Compassion:* If a doctor is not sympathizing with his patient, both are missing an essential personal touch in medical practice that goes beyond the treatment process itself. Medical practitioners should be tolerant of all patients regardless of cultural differences, social background and ethnic beliefs.

*Justice:* Health care professionals should follow the laws and the regulations of their profession and treat all sectors of the community with fairness. Acts of some individuals in our profession, if critically observed, may demonstrate negligence.

Until recently, traditional ethics were enough to provide direction and support for health care professionals.

### 3-Recent Changes

Health care has faced increasing challenges in the last three decades. Recent advances in research, knowledge and technology have made medicine endure a very exciting time of changing diagnostic and therapeutics tools. Furthermore, developments are expected in the near future to include more implementation of cloning, gene manipulation, artificial organs and an endless list of expensive discoveries. With more exposure to the media and Internet, the public is aware of how recent developments are taking place. The new

developments reflect on research, health care expenses, utilization, quality and continuing medical education. Supported by knowledge, an integrated ethical framework is essential to achieve high quality care while controlling the cost (Piette *et al.* 2002; Lazaro and Azcona 1996; Tovey 1998). The ethical committees should be more concerned if the system favours the facilitation of research over the protection of the dignity and welfare of research participants (Cave and Holm 2002). The behaviour of committees is considered unethical in the presence of bias in the approval of research protocols and on reporting results (Savulescu *et al.* 1996; Rosenau 2000). The medical ethics of the new millennium will be fascinating and fast moving with emerging changes. For ethical guidelines to survive, they must be based on sound ethical principles and reasoning (Rajput and Bekes 2002; Parker and Lucassen 2002). The current confusing flurry of health care costs, resources and advances in medical technology raises new varieties of ethical issues (Anderson 1996). Besides the advances in knowledge and techniques, health care is challenged by further impacts from the public's higher expectations, an aging population, problems with priority setting, fairness in delivering services to all sectors of the community, changes in the relationships between patients and doctors, and the impact of different ethical values.

In comparison to the traditional ethics, modern changes have added complexity and confusion. Late in the year 2002, while searching for the issue of ethics at the Medline site on the Internet, it was very interesting to find about 90000 different titles on ethical related issues. The diversity of what is published on the subject confused me despite the fact that I was the principle investigator of two major research protocols on humans and animals (Malki *et al.* 1992). Those protocols required knowledge of basic ethics to get them approved by ethical committees. Nevertheless my previous knowledge did not help to appreciate the diversity of the numerous titles.

The new developments may result in the profession facing disastrous consequences if the professionals do not seriously consider how to care for others without selfishness and discrimination. For future interest, it is important to make sure that the choices are fair for all members of the community. Senior members of the medical profession should realize that caring for young

medical practitioners would give them pride of satisfaction. The attitude of senior medical practitioners will influence the outcome and the future behaviour of the younger colleagues. The community needs more people who are trained and willing to participate in work for a good cause. A community without acceptable health care, education and social welfare is at great risk.

#### 4-Do we Need to Raise the Issue of Ethics?

The candidates who attended the workshop/course were characterized by the following:

- \* They registered early to secure a place
- \* They paid their own fees
- \* They attended the course over a weekend
- \* Most of them responded to the distributed questionnaires

In other words, they were candidates who showed a desire to learn. Their responses should not be ignored and should be evaluated with great consideration. The responses showed lack of enough knowledge concerning ethics in health care, deficiencies of information about ethics in research, authorship and writing, besides alarming evaluations of colleagues.

It is appealing to include ethics in medical education curricula (Culver *et al.* 1985). Teaching theoretical ethics to students and trainees may not be very effective. Whoever is teaching ethics cannot get the message through if he or she is not practicing ethics. Many of the consultants in our set up are teaching medicine to undergraduates and to residents in training programmes. They are required to be role models for their students and trainees. As role models, teachers influence the behaviour of future doctors (Wright *et al.* 1997).

Continuing medical education should practically and effectively expand beyond improving knowledge and skills. It should include compassion, integrity, commitment and accountability (Marco 2002). It should lead to the required development to meet the expectations of the profession and all sectors of the community. Education and implementation of ethics should be on the top of our priorities if we are hoping for a respectable position in the fascinating emerging future.

Integration of traditional ethics with medical education and training will influence the moral character of physicians and help them to practice good medical care with the gained knowledge and skills. Teaching ethics should be extended beyond the classroom to demonstrations in health care premises. The critical determinants of physician identity mature not within the formal curriculum but more with the less officially recognized hidden curriculum in the training process (Hafferty and Franks 1994). Research and clinical trials should satisfy the ethical regulations, statisticians, the public and doctors alike to be prepared for the growing demand of 21<sup>st</sup> century patients (Palmer 2002).

The percentage of ethical colleagues in the responses of the twenty candidates was very alarming. There is an urgent need to change our attitude positively towards our profession if we are keen to make the best of the current and future possibilities for the community and ourselves. If individuals are taking as much advantage as possible of the profession while others are kept aside, the result will be a divided and frustrated profession that cannot function up to the expectations. The need for position, money and authority are essential, but too much of these at the expense of others could backfire.

It should be realized and admitted that many of the young generation have got the motivation. By setting an example, guidance and support, the motivation would be reinforced and given the chance to be released.

Raising the ethical issue with constructive criticism from inside and outside the profession should not be considered a negative. It should be treated as a stimulus for required changes. Senior members of the profession cannot instruct others as to what they should do without practically demonstrating to them what should be done. If the senior members of the profession do not risk the pain of working out solutions and dealing with uncomfortable answers, then nothing of the required changes will take place. When the changes are taking place, improvement and regular evaluation should go hand in hand. The emerging strengths and weaknesses should be identified and dealt with.

### Conclusion and Recommendations

- 1- There is a need to improve our knowledge and understanding of ethics in health care and research.

- 2- Traditional medical ethics inherited from the older generations are straightforward and easy to understand.
- 3- New developments in research have influenced the preventive, diagnostic and therapeutic facilities.
- 4- The unlimited access to the media and the Internet has helped the public to be aware of how new discoveries are developed and implemented.
- 5- Different aspects of health care including ethics are facing complex varieties of challenges.
- 6- The spirit of traditional ethics should not be compromised. However, reform and prioritization are required to make them applicable to the fast changing world.
- 7- The issue and complexity of ethics in the presence of new scientific advances and policy changes should be raised among the suppliers and the users of health services.
- 8- Constructive criticism from inside and outside the profession should be received with tolerance and be considered as an invitation to better solutions.
- 9- Authorities can enforce some regulations. However, medical professionals should set their own framework of ethics that meet the fair expectations of their professional societies and that of the public. If the profession does not develop a well-defined framework of ethics, the medical practitioners will risk their future reputations in the community.
- 10- Teaching ethics to students and trainees without their practice and a lack of role models from the medical profession will not result in the required impact.
- 11- Young medical practitioners should be protected from the emerging confusing diversity of ethics in medical practice and research. They should be guided to essential ethics required for practice and basic research. Any further exposure has to be planned according to individual progress and need.



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