INTRODUCTION

The foundation of medical ethics was laid at the Hippocrates School (400-300 BC) and since then the idea has revolutionized through different stages. The contemporary medical ethics and bioethics today, began after the 2nd world war as a result of contemptible issues in medical research and medical interventions. In current daily practice, medical specialists and the dentists come across common ethical issues. The core issues in medical ethics are the ethics of the doctor- patient relationship, patient’s confidentiality and the need to obtain informed consent, whereas bioethics deals with encompassing moral issues in medicine and biomedical sciences.

In the developed countries, medical ethics appeared as recognizable academic discipline and became a compulsory part of medical curriculum in 1993. In developing countries this need is being recognized, and is gaining its importance as a separate discipline in medical curriculum for undergraduates.

In Pakistan bioethics is being taught as part of “Behavioral Sciences” curriculum. The existing didactic teaching and the examination system has failed to
inculcate completely the ethical values into the stu-
dents, who learn it through their own experience and
develop moral attitudes passively through observation
and intuition. However significant part of ethics
education occurs passively through osmosis in the true
spirit of apprenticeship mode of medical education.

Most likely the present infrastructure in Medical &
Dental Colleges is not sufficient to deal with the
problems. To design a curriculum on bioethics it is
necessary to assess the knowledge and attitudes of the
students who are at the initial stages of ethical prac-
tice.

With this background in mind the present study
was an attempt to assess the perception of medical and
dental students about common ethical issues encoun-
tered in relation to health care.

METHODODOLOGY

This cross-sectional descriptive study was con-
ducted at Fatima Memorial Hospital, College of Medi-
cine & Dentistry during early 2011. The self adminis-
tered structured questionnaire was distributed at one
point in time to all the participants of third year. They
had studied the Bioethics course in first and second
year of their degree programme. The respondents
were encouraged to answer all the questions in ‘yes’ or
‘no’ regarding all options given against different ethical
issues. The data was entered into SPSS version 15 and
was analysed.

RESULTS

In the third year class, 114 volunteered to partici-
pate in the study. There were 106 students who re-
turned the completed questionnaire making the re-
sponse rate of 92.98%. The age of all respondents
ranged between 20.3 and 21.6 years with mean of 20.8
years. The response of the participants is given in
detail in table 1.

The possible options provided were ‘Yes’ or ‘No’ for
the twenty scenarios given in the questionnaire. Almost 36% of students had never heard of ‘bioethics’
while 96% knew about informed consent. Majority
(92.5%) declared informed consent to be obtained in
clinical practice.

The high correct response rate (80% or more), where the need and use of informed consent was
recognized, included taking permission before surgery, giving importance to patient’s opinion, describing bene-
fits of procedures, informing cost to patient, protecting rights of both doctor and the patient, benefits, side
effects, success or failure rate and risks involved in the
treatment. The areas where the correct response were
almost equal to incorrect response, included; differenti-
tiating between ‘Verbal” and “Written” consent, taking
consent from prisoners and sex workers, getting con-
sent for research, prescribing drugs to a proxy patient
to cover reimbursement and disclosing information to
the relatives. Issuing fake certificate for granting rest,
and not providing medical record to patient due to an
unpaid bill. The areas where majority (60% or more)
gone wrong included: proceeding for life saving re-
search, dealing with psychiatric patient, applying treat-
ment against patient’s wishes, informing patients about
mistakes made by the doctor, allowing a male doctor to
examine the breast of anaesthetized patient who had
refused earlier, and fully understanding the term ‘non
maleficent’.

DISCUSSION

The role of ethics has become a moral, legal and
medical need for almost all stages of clinical practice.
The present study however identified some of the
major and important gaps of knowledge and attitude in
recognizing the importance of using ‘Informed Con-
sent’ in clinical practice and performing some ethical
procedures.

Even in areas where a very high satisfactory
knowledge was recognised, it cannot be assumed that
it was due to curriculum coverage. Probably there was
some cultural osmosis, peer learning and media ef-
fects, that had transgressed into the minds of the
students. The fact remains that the gaps in their
knowledge and attitude could easily be ascribed to the
deficiencies in curriculum. The content, duration, mode
of training in medical ethics requires a standardized
module for evaluating their knowledge and attitudes.
Bioethics has close links with local culture, myths, and
the value system. The curriculum therefore has to
identify answers to the wrong pre-conceived notions.

Studies conducted in Pakistan have identified simi-
lar key areas which need to be addressed. In a similar
type of study carried out in Islamabad, 110 medical
personnel (including doctors with post graduate quali-
TABLE 1: KNOWLEDGE OF UNDERGRADUATE STUDENTS ABOUT THE ETHICAL ISSUES

<table>
<thead>
<tr>
<th>Sr No</th>
<th>Questions</th>
<th>Yes %</th>
<th>No %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have you ever heard about bioethics?</td>
<td>64.2</td>
<td>35.9</td>
</tr>
<tr>
<td>2</td>
<td>Do you know what informed consent is?</td>
<td>96.2</td>
<td>3.8</td>
</tr>
<tr>
<td>3</td>
<td>Do you know the difference between verbal and written consent?</td>
<td>48.1</td>
<td>51.9</td>
</tr>
<tr>
<td>4</td>
<td>Is it absolutely essential that the doctor takes an informed consent in clinical practice?</td>
<td>92.5</td>
<td>7.5</td>
</tr>
<tr>
<td>5</td>
<td>Doctor may proceed with surgical procedure without patient’s informed consent. Do you agree?</td>
<td>7.6</td>
<td>92.4</td>
</tr>
<tr>
<td>6</td>
<td>For life saving research, can the doctor use patients as subjects without their informed consent?</td>
<td>84.0</td>
<td>16.0</td>
</tr>
<tr>
<td>7</td>
<td>Is it necessary all the time to take consent from?</td>
<td>59.6</td>
<td>40.4</td>
</tr>
<tr>
<td></td>
<td>a) Prisoners</td>
<td>59.6</td>
<td>40.4</td>
</tr>
<tr>
<td></td>
<td>b) Sex workers</td>
<td>60.4</td>
<td>39.6</td>
</tr>
<tr>
<td></td>
<td>c) Psychiatric patient</td>
<td>21.7</td>
<td>78.3</td>
</tr>
<tr>
<td>8</td>
<td>Do you think that necessary medical treatment can be done against patient’s wishes?</td>
<td>42.4</td>
<td>57.6</td>
</tr>
<tr>
<td>9</td>
<td>Do you think importance should be given to patient’s opinion before deciding treatment?</td>
<td>87.7</td>
<td>12.3</td>
</tr>
<tr>
<td>10</td>
<td>Do you think patients should be given information regarding?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Nature of proposed treatment</td>
<td>97.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>b) Procedure of proposed treatment</td>
<td>88.7</td>
<td>11.3</td>
</tr>
<tr>
<td></td>
<td>c) Benefits or taking treatment</td>
<td>98.1</td>
<td>1.9</td>
</tr>
<tr>
<td></td>
<td>d) Side effects of drugs</td>
<td>94.3</td>
<td>5.7</td>
</tr>
<tr>
<td></td>
<td>e) Success and failure rate</td>
<td>92.4</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>f) Risk of taking no treatment</td>
<td>97.2</td>
<td>2.8</td>
</tr>
<tr>
<td>11</td>
<td>Do you think it is important to highlight the cost involved before taking consent for procedure?</td>
<td>88.7</td>
<td>11.3</td>
</tr>
<tr>
<td>12</td>
<td>Should the patient be informed about any mistake made by the doctor?</td>
<td>37.6</td>
<td>62.4</td>
</tr>
<tr>
<td>13</td>
<td>If necessary, should the doctor disclose information to relatives?</td>
<td>37.4</td>
<td>62.6</td>
</tr>
<tr>
<td>14</td>
<td>Should the doctor give equal time for counseling of paying as well as non paying patients?</td>
<td>93.4</td>
<td>6.6</td>
</tr>
<tr>
<td>15</td>
<td>Can the doctor refuse to provide a copy of medical record to the patient because of an unpaid bill?</td>
<td>35.3</td>
<td>64.7</td>
</tr>
<tr>
<td>16</td>
<td>Informed consent is important for:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) Protecting the right of the patient</td>
<td>97.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>b) Protecting the rights of the doctor</td>
<td>85.8</td>
<td>14.2</td>
</tr>
<tr>
<td></td>
<td>c) For research purpose</td>
<td>65.1</td>
<td>34.9</td>
</tr>
<tr>
<td>17</td>
<td>Should a physician give a medical certificate of leave from work to a person who is not really sick and needs time off?</td>
<td>33.9</td>
<td>66.1</td>
</tr>
<tr>
<td>18</td>
<td>Is it morally acceptable to allow male medical students to do breast examination on a female patient with breast cancer under general anesthesia who have initially refused examination by male in the clinic?</td>
<td>12.6</td>
<td>87.4</td>
</tr>
<tr>
<td>19</td>
<td>Non-maleficent means actions that intend to benefit the patient?</td>
<td>90.6</td>
<td>9.4</td>
</tr>
<tr>
<td>20</td>
<td>Is it morally acceptable if a physician prescribes expensive medicines on one person’s company account for another patient who is not an employee of that company but in dire need?</td>
<td>61.3</td>
<td>30.7</td>
</tr>
</tbody>
</table>
Perception of ethical issues

Students were interviewed. In this study some specialized situations were raised like aborting a pregnancy with congenital defects, forcing parents to continue treatment in infants & elderly and 95% agreed to disclose errors during surgical procedures. This study also identified a great degree of difference in the knowledge and attitudes of the doctors in medical ethics.

In an editorial of JAMA, it was suggested that the teaching of bioethics should be started in first year, integrating it vertically throughout the five years.

In a study in Karachi, 122 students responded and their results differed very much from our results; for example 87% thought that false medical certificate was unethical and 40% later changed their opinion, if the reason was genuine. Ninety three percent considered giving fake prescription as unethical, 83% agreed to allowing male doctors to examine the breast in state of anesthesia although it was not allowed by the patient in conscious state. The author of this study also desired the development of separate essential modules in building students capacity in ethical context.

In a study in Nigeria, among 126 final year medical students, 80.5% highlighted that there was insufficient training in “bioethics” and they desired a formal teaching and training in this discipline.

In a Global Bioethics Blog 2010, it was raised that since research was becoming a global coordination, it was important to have uniform standards of bioethics.

A study on doctors and nurses in Barbados, 159 subjects were assessed, 52% of them were found to know little of the law pertinent to their work. Most of the knowledge of historical background and nursing practices were considered in-efficient.

A study in Canada, reported 108 clinical students indentified some of the ethically problematic situations like; conflict between the priorities of medical education and patient care, responsibilities beyond student’s capacity and sub standard patient care. This study also identified the need of early training in bioethics.

A study of UK in 2005, continued debate on previous publications relevant to ethics since 1987 and 22 out of 28 schools responded to the questionnaire. While identifying gaps of perceptions, a clear concern was raised about development of the staff.

Limitations: The study included only third year students, who did not have enough clinical exposure to use bioethical principles. The subjects had learnt bioethics in first and second year an introductory course, which they did not consider as an element of examination. The study also did not compare the gender differences in the response.

Recommendations: On the basis of results of present study in comparison with other studies, it is reasonable to mention not there is a diverse need of knowledge, attitude and practice developments at under graduate level. It may be hard to develop a unified module of curriculum and its modes of training, but the essentials have to be prescribed and uniformly covered for medical professionals.

REFERENCES