

## Research Article

ISSN 2471-657X

## Dental Ethics (A KAP Study)

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### Abstract

**Background:** Dental health care professionals are trained for ethics as part of Dental school curriculum but it is not usually taught as a subject on whole. Conventional training methods usually don't prepare clinicians well enough for ethical dilemmas encountered routinely. Proper ethical awareness and attitudes are of paramount significance for better dental care, patient satisfaction and maintaining professional environment of the institution.

**Objective:** This study aims to analyze ethical awareness, practices and perceptions on the ethical climate of the institution, among Undergraduates and recent dental Graduates.

**Methodology:** A questionnaire based cross-sectional study was carried out on a total of 300 students from 3rd year, Final year and House officers (Recent dental graduates) of Dr Ishrat UL Ebad Khan Institute of Oral Health Sciences Karachi, DOW university of health sciences Karachi- Pakistan. The questionnaire was a 20 item self-administered questionnaire which comprised of closed ended questions only. Returned questionnaires were then analyzed Using SPSS version 16.0. Sample size of 339 was calculated by applying the formula  $n = (Z_2 * p * q) / d_2$ . Questionnaires were distributed among 300 candidates. Descriptive analysis was carried out for all collected data and Chi squared test was applied

**Results:** The response rate in this study was 95% as 285 out of 300 questionnaires were returned for analysis. The study population was female dominant ( $n=179$ ) (62.8%). The results revealed that there was an overall lack of knowledge regarding ethics in the sample, and that further incentives needed to be made to improve the situation. In contrast, Attitudes of the candidates were found to be positive, indicating overall goodwill and loyalty of the students to their profession which is a significant finding and can be used as base to conclude that any changes made will be followed wholeheartedly by the population. Moreover there was a good approach observed regarding practices related to dental care ethics.

**Conclusion:** There needs to be more investment made in favor of our Dental students regarding teaching of Dental Ethics in institutions, since students have demonstrated a good attitude towards their profession and ethical dentistry.

**Keywords:** Dental Ethics, Ethical Dilemmas, Professional ethics

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**Citation:** Dr Yusra Tus Saleha Siddiqui et al. (2020), Dental Ethics (A KAP Study). Int J Dent & Oral Heal. 6:3, 48-53

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**Received:** February 05, 2020

**Accepted:** February 15, 2020

**Published:** March 07, 2020

### Introduction

Dental Ethics can be described as moral responsibilities of a Dentist towards his patients, fellow colleagues and society. With advancements in oral health care, new ethical dilemmas are also being encountered which has inflamed problems and requires professionals to deal them with sensitivity and professionalism<sup>[1,2]</sup> However, Despite having all rules and regulations regarding professional conduct, there are still increasing reports of ethical misconduct of Dental students and dentists with patients and fellow colleagues<sup>(1)</sup>. Pakistan Medical and Dental council has its own code of Medical and Dental ethics suited for dilemmas encountered at Pakistani setups but lack of regulatory authorities and low public awareness may be factors exacerbating misconduct<sup>[1,2,4]</sup>.

Underlying the debate for Effectiveness of dental ethical education, there has been some uncertainty about the topics taught<sup>[5]</sup>. Topics such as informed consent have been agreed upon and are taught in Dental schools, but other topics such as measures to take when an eyewitness to misconduct by a senior dentist with patients and staff, identifying and reporting crime related to practice by any staff member and protocol for Institutes to be alerted when unprofessional conduct is practiced by a staff member. Other than that, profession-

al conduct with colleagues, staff and patients, importance of work documentation for patients and patient confidentiality are not taught as part of course and are teacher/ school or hospital dependent<sup>[4,5]</sup>. It is needless to say when educated and informed about the consequences regarding ethical protocols and boundaries, Dentists are better prepared to tackle routine practice dilemmas and unusual situations. This research was conducted to assess Knowledge, attitude and Practice regarding Dental Ethics in recent Graduates and undergraduates.

### Methodology

Consent was taken from a total number of 300 participants from Dr Ishrat UI Ebad Institute of Oral Health Sciences, DUHS, Karachi, who took part in the research. Printed questionnaires were handed out to each participant after their compulsory lectures, to ensure maximum participation. House officers were handed questionnaires after OPDs. The questionnaire itself comprised of 20 self-administered closed ended multiple choice questions which took almost 3 minutes to answer (time determined by pre testing). Sample size of 339 was calculated

using the formula  $n = (Z_2 * p * q) / d^2$ . Nevertheless, 300 questionnaires were handed out to candidates in their 3rd year, Final Year and to recent Graduates (House officers).

Mean age of the sample was 22 years as the age range was found to be from 20 -24 years. Students in their First year and second year were exempted from the sample considering they are amateurs to the profession.

The response rate was very good, 95%, as 285 out of 300 samples were returned for analysis and IBM statistical package for social sciences (SPSS) software v.17 was used for descriptive statistics and frequency analysis of the gathered Data and Chi squared test was applied.

### Results

Out of a total of 300 participants, the response rate was 95% and 285 questionnaires were returned for analysis. Male, female percentages and status percentages are displayed in fig 1. Population was female dominant (62.8%) while the no of male participants was n=106. 3rd year students were n=115 (37.8%), 4th year and house officers were n=64 (22.5%) and n=106 (37.2%).

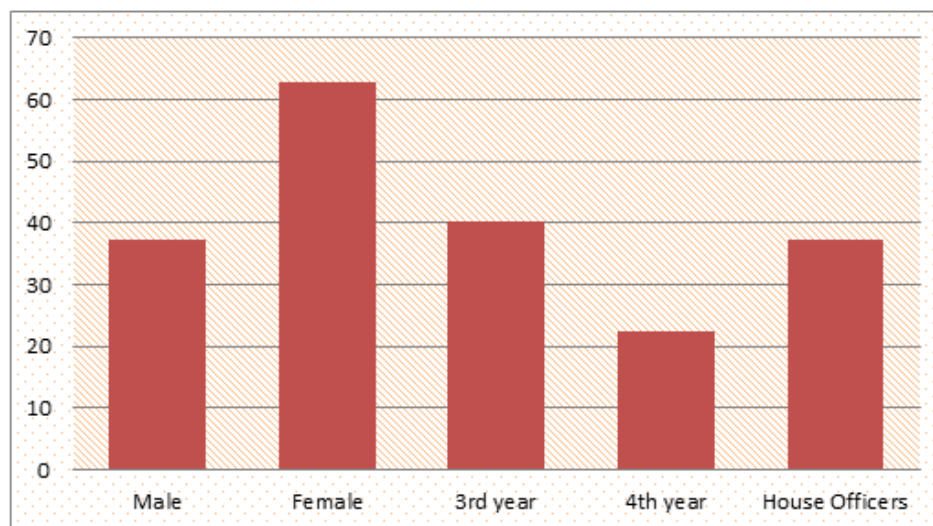


Fig 1

Regarding knowledge, almost all (95.8%) undergraduates and graduates were familiar with the term “Dental Ethics”. Only 59.6% of the candidates were aware about the Pakistan medical and Dental code of ethics and 40.7% were aware about the international code of ethics. An alarming number of candidates (53.3%) and (73.4%) were unaware about the “Hippocratic oath” and institutional (DUHS) “ethics policies”.

When asked about the rules regarding PMDC “warning”, “Temporary Suspension” and “lifelong expulsion” only 23% candidates were familiar. The rest of majority (76.5%) were unfamiliar.

Also, a huge majority (58.6%) was found uninformed about the penalties regarding infamous conduct towards patients but, more than half (57.2%) were aware about Moral principles such as “veracity”, “beneficence”, “Non maleficence” and “autonomy”.

Almost majority (88.8%) were aware about informed consent in dental practices, which was no surprise.

Regarding attitude, almost 92% agreed on informing the patient if he/she himself/ herself had a communicable disease. 62% discussed ethical problems encountered, with their supervisor and 30% did not discuss their ethical problems encountered with their supervisor. When asked if they had learned about dental ethics in their curriculum, majority (66%) replied with a “yes” while 30% replied with a “No”.

Regarding practices, almost 94% practiced Honesty, compassion, Kindness, fairness and integrity. 88.8% practiced informed consent. Almost 69% referred patients to another facility if they lacked skill in particular department. A vast majority (93.7%) took care of patient’s privacy and confidentiality. A majority (60%) had thorough and clear work documentation for all patients, but the rest (39.3%) did not, which is unfortunately still a huge number.

Chi squared test was applied to compare status of the candidate with knowledge, Attitude and practices. The results are displayed in the following tables.

Knowledge	3 <sup>rd</sup> year		4 <sup>th</sup> year	House Officers	P- value
Meaning of ethics	Yes %	96.5	98.4	93.4	0.250
	No %	3.50	1.6	6.6	
PMDC code of ethics	Yes %	53.0	70.3	60.4	0.077
	No %	47.0	29.7	39.6	
International code of ethics	Yes %	31.3	56.3	41.5	0.005
	No %	68.7	43.8	58.5	
Hippocratic oath	Yes %	44.3	53.1	45.3	0.253
	No %	55.6	46.9	54.7	
DUHS/ institutional ethics policies?	Yes %	27.8	32.8	21.7	0.123
	No %	53.5	67.1	78.3	
Penalties regarding infamous conduct	Yes %	29.6	15.6	21.7	0.107
	No %	70.4	84.4	78.3	
Moral principles such as veracity, beneficence	Yes %	51.3	73.4	53.8	0.006
	No %	48.7	26.6	47.8	
Informed consent	Yes %	87.8	89.1	89.6	0.874
	No %	12.2	10.9	10.4	

<b>Attitude</b>	3 <sup>rd</sup> Year		4 <sup>th</sup> Year	House officers	P- Value
Do you refer patients to another facility?	Yes %	76.5	57.8	67.9	0.093
	No %	20.0	35.9	24.5	
	Does not apply %	3.5	6.25	7.5	
Do you think Dentist has a responsibility to inform patients if he/ she himself/herself has a communicable disease?	Yes %	93.0	92.2	91.5	0.846
	No %	7.0	7.8	8.5	
Do you discuss encountered ethical problems with clinical supervisor?	Yes%	67.8	59.4	58.5	0.594
	No%	32.2	40.6	41.5	

<b>Practices</b>	3 <sup>rd</sup> year		4 <sup>th</sup> year	House officers	P- Value
Do you practice Honesty, compassion, Kindness, integrity and fairness	Yes%	97.4	93.8	90.6	0.199
	No%	2.60	6.30	9.40	
Do you practice informed consent before every procedure?	Yes%	97.4	87.5	81.1	0.003
	No%	0.87	7.81	9.43	
	Sometimes %	1.74	4.69	9.43	
Do you take care of patient's privacy and confidentiality?	Yes%	96.5	93.8	90.6	0.448
	No%	0.87	3.13	3.77	
	Sometimes %	2.61	3.13	5.67	
Do you have thorough and clear work documentation for all your patients?	Yes%	65.2	59.4	56.6	0.754
	No%	34.8	40.6	43.4	

\* The "Don't know" category was merged with the "No" category in all three tables

Regarding climate about the dental hospital itself, two questions were asked and there were mixed answer results. Figure 2 and 3 display the results.

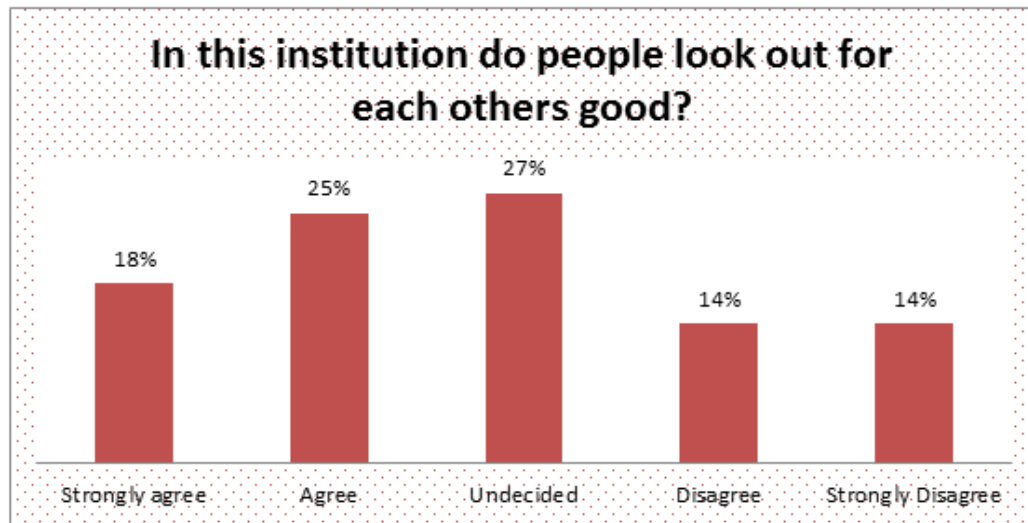


Fig 2

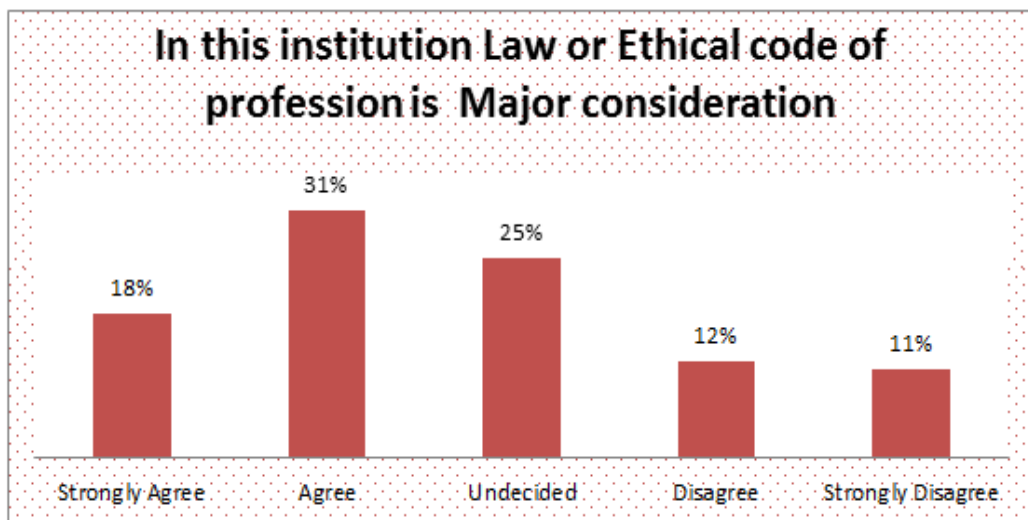


Fig 3:

Hence, mixed reviews regarding ethical climate of the institutions can be seen

## Discussion

There have not been many researches conducted on ethics in the field of Dentistry. All others have been inclusive of medical graduates too. This is probably the first research conducted among dentists and dental students only.

According to results of this study, there is a clear difference between knowledge and attitudes regarding ethics. There is a general lack of knowledge as compared to attitudes which are more positive. This has been proven by other studies in the past too.

In a study conducted in India by Janakiram C, it was surveyed that den-

tal graduates overall had less knowledge and did not consider learning of bio ethics as important as the medical graduates in the study did<sup>[2]</sup> Other than that, study participants had obtained their knowledge from elsewhere, like their postgraduate training and did not undergo formal ethical education.<sup>[2]</sup>

Another study at surgical wards in Karachi, by Shiraz B, concluded that the application of ethical knowledge is extremely poor in surgical wards and that doctors need more training regarding health care ethics and its implementation<sup>[3]</sup> it was also concluded that only 11 out of 101 candidates reported ethics being taught as students. In our research this number was significantly higher (66%) this may be subject

dependent as our population was relatively young and enrolled in Dental school.

Regarding ethical climate of the institution, a study by Shashidhar Acharya also demonstrated mixed reviews and concluded that senior members perceived ethical environment satisfactory as compared to junior members. A similar trend is observed in this study as population comprised of fresh graduates and Undergraduates, mixed reviews regarding institutional environment has been observed<sup>[17]</sup>.

It was concluded in another study, conducted in Pakistan that Fundamental changes need to be made to improve the quality of dental education, also the faculty needs to be trained to improve the standards<sup>[18]</sup>.

The results in our study are not very different from other studies conducted on medical and dental graduates, but our study provides a detailed insight into Ethical practices and awareness at a renowned Government run Dental University in Karachi.

Conclusion: According to the results of this study, it is concluded that general lack of Knowledge needs to be improved by designing a curricula that trains individuals about ethical dilemmas that they will encounter during practice. Attitudes were positive and practices were found to be very good too.

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