Awareness and Perception towards Dental Ethics and Ethical Dilemmas among Dental Professionals - A Cross-Sectional Study

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ABSTRACT

Dentists are one among the medical professionals who often encounter complex ethical issues. Playing the role of a health professional, business enterpriser and academician they often run into specific and conflicting ethical demands in practice and research. This cross-sectional study was conducted among dental professionals attached to educational institutions and private practitioners. A total of 95 participants, including private practitioners, faculty members, and post-graduate students, were recruited. A pre-validated, questionnaire containing questions related to awareness and perception in dental ethics was administered. Descriptive statistics was done to report the level of awareness and perception of dental professionals. About 65% of post-graduate professionals had awareness in clinical ethics when compared to undergraduate professionals who had 58% awareness. However, 75% of undergraduate professionals had awareness in research ethics compared to post-graduate professionals with 70% awareness. There was no difference in the perception level among graduate and post-graduate professionals. The awareness of dental ethics varied among dental professionals. There is a need to introduce specific continuing dental educational (CDE) programs to promote knowledge on dental ethics and dental jurisprudence to save dentist and their patients from encountering uneventful situations.

INTRODUCTION

The word “ethics” is derived from the Greek word “ethos”, which means character or conduct (Meese et al., 2010). It is often interchangeably used with the word “moral”. Ethics is an unwritten code of conduct that encompasses both professional conduct and judgement. Ethics helps to support autonomy and self-determination and to protect the vulnerable, and promote welfare and equality of human beings. Dental ethics involves moral duties and obligations of dentists towards their patients, professional colleagues and society (Humphris, 2003). Now a day’s dentists face more complex ethical issues than those faced earlier. Being a health professional, business enterpriser and academician they often encounter specific and conflicting ethical demands in practice and research. On avoiding professional paternalism, today dental professionals are confronted with ethical dilemmas in making a decision on best treatment options and respecting the choice of treatment of the patient (Beemster-
A dilemma is a complex situation necessitating a choice between two equally undesirable alternatives which arise from fundamental conflicts among ethical beliefs, duties, principles and theories (Mitchell, 1990). It is an apparent mental conflict between moral imperatives, which means obeying one would result in transgressing another. Since moral philosophy paradox plays an essential role in debates on ethics, an ethical dilemma can also be called as an ethical paradox (Beemsterboer, 2016; Porter and Grey, 2002). As dentist often faces situations with varied ethical considerations and complexities, ethical dilemmas can be part of dental science (Ozar and Sokol, 2017).

Due to the development and growing use of advanced technology with greater complexity in dental practice, there is a need to address and educate dental students and dental health professionals on clinical ethical values (Acharya, 2005). Also, the scope for oral health research is augmenting every day among faculties, undergraduate and postgraduate students in a fist full of dental institutions. Thus limelight on ethical research values should also be placed. Concerns among research observers arise as there is no improvement in the individual and institutional research ethics capacities and capabilities in developing countries (Deolia et al., 2014). Ethical dilemmas in research converge on three topics such as protection of human study participants, conduct and management of research, including conflict of interest; and investigator integrity (Ellen and Singleton, 2008). Thus to assess the awareness and perception of dental professionals towards clinical and research ethical principles, the present study was contemplated to include dental practitioners, academicians, and post-graduate students.

MATERIALS AND METHODS

A cross-sectional study was conducted among various dental colleges and private practitioners in Chennai from August 2019 to February 2020. This study was executed after obtaining ethical clearance from the institutional review board of Saveetha Dental College and Hospital, Chennai.

A total of 95 subjects, including private practitioners, faculty members, and post-graduate students from four dental institutions in Chennai were recruited using a non-probability purposive sampling method. The list of the private practitioner with their contact details had been obtained from Indian Dental Association (IDA); Madras branch. Prior permission and voluntary informed consent from the institutions and the participants were obtained after explaining the purpose of the study. A self-developed, self-administered questionnaire containing close-ended questions was given. The questionnaire contained ten questions, with eight clinical and two research ethical scenarios. This questionnaire was subjected to validation among dental public health stalwarts for face, content and constructs validity. The kappa value obtained was 0.77, which represents a good agreement between them. On fabricating a few corrections suggested by the stalwarts, the questionnaire was then implemented to the study participants. As an overview of the ethical principles, the questionnaire contained a brief explanation of each principle in the beginning. The ten scenarios with their accompanying questions were presented in Appendix ??.

Table 1 shows the socio-demographic details of the study participants. Most of the participants (62.1%) belonged to 20-30 years age group. Females (70.5%) participated more when compared to males. About 69.5% of the participants have completed post-graduation (MDS). Most of them (67.4%) played a dual role as an academician and clinician. About 57.5% of the participants were young graduates with ≤ five years of experience.

RESULTS AND DISCUSSION

Table 2, for scenario 1, 71.2% post-graduates and 65.5% undergraduates answered correctly. About 57.6% post-graduates and 51.7% undergraduates answered correctly for scenario 2. Similarly, for scenario 3, the correct ethical principle was opted by 65.2% and 62.7% post-graduates and undergraduates, respectively. For clinical scenario 4, about 56.1% of post graduates and 48.2% undergraduates answered correctly. Among the participants, 44.8% undergraduates and 37.8% post graduates opted correctly for scenario 5. The correct answer for scenario six was given by 72.7% post-graduates and 65.5% under-graduate participants. About 63.3% post-graduated and 51.7% under-graduated opted
### Table 1: Socio-demographic profile of the participants

| Variables          | Categories   | Frequency | Percentage |
|--------------------|--------------|-----------|------------|
| Age                | 20-30 years  | 59        | 62.1%      |
|                    | 31-40 years  | 27        | 28.4%      |
|                    | 41-50 years  | 9         | 9.47%      |
| Gender             | Male         | 28        | 29.5%      |
|                    | Female       | 67        | 70.5%      |
| Degree             | BDS          | 29        | 30.5%      |
|                    | MDS          | 66        | 69.5%      |
| Professional Excellence | Clinician | 15        | 15.8%      |
|                    | Academician  | 16        | 16.8%      |
|                    | Both         | 64        | 67.4%      |
| Years of Experience| ≤ 5 years    | 55        | 57.9%      |
|                    | > 5 years    | 40        | 42.1%      |

### Table 2: Awareness of clinical ethics among study participants

| Scenarios | Options   | Post graduates (%) | Under graduates (%) |
|-----------|-----------|--------------------|---------------------|
| Scenario 1| Autonomy  | 4.5                | 20.5                |
|           | Non-Maleficence | 71.2          | 65.5                |
|           | Beneficence      | 24.2            | 13.8                |
| Scenario 2| Justice     | 18.2              | 37.9                |
|           | Veracity     | 57.6              | 51.7                |
|           | Autonomy     | 24.2              | 10.3                |
| Scenario 3| Beneficence  | 15.2              | 13.7                |
|           | Justice      | 65.2              | 62.7                |
|           | Veracity     | 19.7              | 24.1                |
| Scenario 4| Autonomy    | 12.1              | 10.3                |
|           | Beneficence  | 31.8              | 41.3                |
|           | Veracity     | 56.1              | 48.2                |
| Scenario 5| Justice     | 37.8              | 44.8                |
|           | Autonomy    | 30.3              | 31.1                |
|           | Veracity    | 31.8              | 24.1                |
| Scenario 6| Autonomy    | 12.1              | 17.2                |
|           | Non-Maleficence | 15.1          | 17.2                |
|           | Justice      | 72.7              | 65.5                |
| Scenario 7| Justice     | 7.5               | 13.7                |
|           | Beneficence  | 28.7              | 34.4                |
|           | Non-Maleficence | 63.6          | 51.7                |
| Scenario 8| Beneficence  | 9.1               | 6.8                 |
|           | Autonomy     | 74.2              | 62.1                |
|           | Justice      | 16.6              | 31.1                |
Table 3: Awareness of participants towards research ethics

| Scenarios   | Options        | Post graduates (%) | Under graduates (%) |
|-------------|----------------|--------------------|---------------------|
| Scenario 9  | Justice        | 15.1               | 6.8                 |
|             | Autonomy       | 63.6               | 82.7                |
|             | Beneficence    | 7.5                | 6.8                 |
|             | Non-Maleficence| 13.6               | 3.4                 |
| Scenario 10 | Justice        | 56.1               | 58.6                |
|             | Autonomy       | 21.2               | 34.4                |
|             | Beneficence    | 12.1               | 6.8                 |
|             | Non-Maleficence| 10.6               | 0                   |

Table 4: Perception of clinical ethics among study participants

| Scenarios   | Post graduates (%) | Under graduates (%) |
|-------------|--------------------|---------------------|
|             | yes                | No                  | Yes | No |
| Scenario 1  | 1.5                | 98.5                | 0   | 100 |
| Scenario 2  | 9.1                | 90.9                | 10.3| 89.7 |
| Scenario 3  | 13.6               | 86.4                | 13.8| 86.2 |
| Scenario 4  | 1.5                | 98.5                | 0   | 100 |
| Scenario 5  | 22.7               | 77.3                | 6.9 | 93.1 |
| Scenario 6  | 6.1                | 93.9                | 10.3| 89.7 |
| Scenario 7  | 4.5                | 95.5                | 3.4 | 96.6 |
| Scenario 8  | 3.0                | 97.0                | 6.9 | 93.1 |
| Scenario 9  | 18.2               | 81.8                | 24.1| 75.9 |
| Scenario 10 | 7.6                | 92.4                | 3.4 | 96.6 |

correct ethical principle. For scenario 8; 74.2% of post-graduated and 62.1% of under graduated selected the correct moral principle.

Table 3 shows the attitude of participants towards research ethics. The correct ethical principle for scenario nine was provided by 63.6% post-graduated and 82.7% of under-graduated participants. For scenario 10; 56.1% post-graduated and 58.6% under-graduated opted correctly. Table 4 shows the perception of the participants towards the ethical principles for the same clinical and research scenarios. There found to be no difference in the perception for above-stated scenarios among under graduated and post-graduate professionals. They all perceived that the dentist had done unethical practice in those scenarios.

Table 4 For scenario 1, 98.5% post graduates and 100% undergraduates answered what the doctor did was wrong. About 90.9% post graduates and 89.7% undergraduates answered NO for scenario 2. Similarly, for scenario 3, 86.4% and 86.2% post graduates and undergraduates answered what the doctor did was wrong. For clinical scenario 4, about 98.5% of post graduates and 100% undergraduates answered correctly. Among the participants, 93.1% undergraduates and 77.3% post graduates opted NO for scenario 5. The correct answer for scenario 6 was given by 93.9% post-graduates and 89.7% under-graduate participants. For scenario 7, about 95.5% post-graduated and 96.6% under-graduated opted NO. For scenario 8; 97% of post-graduated and 93.1% of under graduated selected the correct option of what the doctor did was wrong.

The answer NO for scenario 9 was provided by 81.8% post-graduated and 75.9% of under-graduated participants. For scenario 10; 92.4% post-graduated and 96.6% under-graduated opted correctly. There found to be almost no difference in the perception for above-stated scenarios among under graduated and post-graduated professionals except for scenario 5 and scenario 9, wherein for scenario 5 most undergraduates found that what the dentist did was wrong. In contrast, for scenario 9, the majority was among post graduates who found what the dentist did was wrong.

The day-to-day decisions made by dental professionals in practice have a significant influence on the oral health of the population. New codes of practice direct dentists to provide patients with all the necessary information and to offer them guid-
The responses of the dental professionals regarding the dilemma, it is better to breach the principle of truthfulness and beneficence. To overcome the dilemma, it is better to breach the principle which will be a benefit for the patient.

In the dental profession, it is difficult at times to decide which principle to follow. Ethical principles are meant to guide the healthcare provider to serve humanity. As there is a hairline difference between the various principles, the following one can mean violating another. This results in moral distress, which has been defined as knowing the ethically correct thing to do but feeling unable to act (Berg et al., 2001; Moayyeri et al., 2011; Jameton, 1984)

CONCLUSION

The survey explores the ethical dilemmas encountered by dentists in clinical practice in Chennai. The responses of the dental professionals regarding awareness towards ethical problems varied. However, many of the under-graduated practitioners with fewer years of experience were unaware of the principles. This necessitates providing a deep understanding and education not only towards ethical principles but also towards dental jurisprudence which will save the dentist and their patients from any uneventful situations.

Conflict of Interest
The authors declare that they have no conflict of interest.

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