**Informed consent in dental practice among dental professionals in Karnataka**

Health care ethics reside in the realm of human values, morals, individual culture, intense personal beliefs and faith.1 Medical and dental practice today is not simple with the global change; growing technology in health care and patient access to the information has influenced the very basic foundation of doctor patient relationship and mutual trust.

A valid informed consent is not only ethical but legal compulsion to protect the patient’s right and autonomy and the validity of the consent is not proved unless legally challenged. 2

The legal doctrine of informed consent has developed over time from legal cases in common law countries such as England, America, Canada and Australia.3 In Indian Article 21 law. No one has the right to touch let alone treat another person, any such act done without permission is classified as battery. 4

Valid inform consent requires standard discloser of patient information, comprehensive understanding by patient about the proposed treatment, its pros and cons of the treatment, competent decision making and voluntary consent. 5-8

The nature of informed consent does not mean that patients would expect to be signing a contract confirming their willingness to receive treatment but rather that they have been given a fair and balanced assessment of the situation. According to the bioethicists, informed consent is “providing the patient information related to a treatment procedure, the risk and benefit involved. Information should be provided to the patient level of understanding.” 9

It is on the dental professional to ensure that the patientunderstands the diagnosis and prognosis of the disease. This could be challenging because the terminologies and risks involved is very exhaustive and some patients demand more information and few illiterate patients relay upon the dentists decision of what is right treatment .

However a valid and well documented informed consent provides evidence to protect dental practitioners from malpractice and potential litigation from dissatisfied patients. 10

Given this scenario adequate knowledge and positive attitude regarding informed consent and how routinely it is adopted in practice is very essential to protect him/her from right or wrong proceedings of law as well as the rights of the patient.

The studies regarding knowledge attitude and practice in India has shown adequate knowledge among dentist but attitude and practice were shown to be dissatisfactory.11-13 The drawbacks of these studies are it is done in small cities on small sample of practitioners and does not discuss any influencing factors of knowledge attitude and practice.

On the backdrop of this our aim is to assess the knowledge, attitude and practice of informed consent in dental practice and its associated factors among dental professionals in Karnataka.

**Methodology**

This cross-sectional study was conducted after obtaining institutional ethical clearance on dental professionals who are currently practicing dentistry in Karnataka.

Karnataka State for has been divided into 4 administrative divisions as Bangalore Division, Belgaum Division, Kalaburagi Division, and Mysore Division.

For the purpose of the study from each administrative division 2 districts were randomly selected. Tumkur, and Shivmoga Bangalore division, Belgaum and Bijapur from Belgaum division was selected, from Kalaburagi division Kalaburgi and Bellary and from Mysore division Mysore and Dakshina kannada was selected respectively. Additionally to achieve representativeness Bangalore Urban was included as it is the major hub for dental practice not only in Karnataka but the largest in south India.

List of dentists was obtained from different sources like dentist registered under Karnataka state private medical establishment act, Teaching institution in Karnataka, list of dentist registered in Indian dental association, dentist working in government hospitals, dentist registered in Karnataka state dental council, Karnataka state dental directory and other reliable advertisement sources. Compiling all the sources total numbers of dentists practicing in Karnataka were 23397.

The sample size was determined considering the prevalence of 50% of knowledge of ethics, confidence interval of 0.50, design effect 2 and 10% error. Considering the 10% non response rate, it was estimated to be 845 as the minimum sample required. Form each of this districts the dentist were proportionately selected assuring the randomness for the study.

**Data collection**

Data was collected on structured Performa consisting of two parts. First part consists of demographic details like age, gender, geographical location of practice, type of practice, and location of dental practice, nature of practice, practice duration, professional organization membership, and state dental registration details. The second part of the Performa consisted questions related to informed consent. Knowledge, attitude and practice of the dental professionals were assessed using 5, 2 and 2 questions respectively., “ the key step to prevent your dental practice from legal action is valid inform consent”, “ informed consent is required only for operations not for tests and medication”, “in case of emergency situation informed consent is not required”, “Children should not be treated without the consent of parents /guardian”, “Consent is valid only when it is documented and understood by the patient”, “It is not practical to obtain the informed consent for every procedures we do”, “I am scared of losing a patient if I inform the risk involved in the invasive procedures”. Practice was assessed asking them about their frequency of taking written informed consent and nature of recording the consent in their practice. These statements of knowledge and attitude were assessed using a 5-point Likert Scale: strongly agree, agree, don’t know, disagree, and strongly disagree. For analysis purpose of practice the questions were given the weight between 0 - 2. Positive answers were given higher weights. The questionnaire was tested for validity and reliability with the Cronbach’s alpha of 0.72.

**Statistical Analysis**

The data was analyzed using SPSS software version 21. The responses were then assessed for descriptive statistics like frequency, percentage and mean.. The difference between the mean scores was analyzed using t test, ANOVA and linear regression was used. Also to know the relationship between knowledge, attitude and practice correlation coefficient was used. All the level of statistical significance was set at P ≤ 0.05

**Result**

In the present study 865 dental professionals participated in the study, among them, majority of the study participants were male 528 (61%) compared to females. The age of the participants ranged from 22 to 63 year olds with a mean age of 36.25+5.91 with 56.3% of them belonging to 31-40 years. 79.3% were urban practitioners, 65.3% had minimum of 1-10 years of experience in dental practice with 65.3% practicing the general practice. Also 65.0% of the practitioners practice less than 5 hrs and 57% of participants attended continuing dental education on ethics. Table 1

Assessment if knowledge among the 865 dental professionals interviewed showed majority of the participant’s i.e 94.8% of the participants agreed that the key step to prevent one’s practice from legal action isvalid informed consent. 67.1% agreed that informed consent is required only for invasive procedures not for tests. 85% of the participants agreed children should not be treated without parents or guardians consent. 90.9 % of the participants agreed that consent is valid only when it is understood by the patient. However only 45.3% agreed that in emergency situation consent is not required. Regarding the attitude 59.5% and 80.9 % of the participants disagree that it is not practical to obtain informed consent and that they are scared that they might lose patients if they disclose the risk involved in the procedure respectively. Table 2

Regarding the practice 55% of the participants used take consent only for special cases and 57% used to maintain written records. Fig 1 and 2.

When the mean scores were used for analysis the total knowledge, attitude and practice scores for the participants were 19.01±2.61, 7.07±1.45 and 1.49±0.50 respectively. There was a significant difference between gender and location for knowledge scores with males having better scores compared to females and urban dentists having better score compared to semi urban and rural. Table 3

Similarly, for attitude scores 31-40 year old dental professionals were having better scores compared to younger age group, male compared to females, general practitioners compared to specialty practice and those who attended the CDE programme had better attitude score compared to their counterparts. This was statistically significant. To confirm the significance stepwise linier regression was performed for attitude and socio demographic variable, gender geographic location and CDE showed the significance in the final model. Table 4 and 5

For practice scores, only geographical location where urban dentists had better practice score 1.60±0.51compared to rural and semi urban which was statistically significant.

We wanted to test the relationship between the knowledge, attitude and practice score. The present study showed significant correlation between knowledge and attitude with r value 0.09 but not correlated with practice scores with r value -0.013.

**Discussion**

The present cross-sectional study was conducted to assess the knowledge, attitude and practice of informed consent in dental practice among dental professionals in Karnataka. Assessment of knowledge, attitude and practice helps to measure the extent of a known ethical situation and provide new tangent of a situation’s reality. It helps in suggesting an intervention strategy that reflects specific local circumstances and the cultural factors that influence them. The strength of the present study is that to our knowledge no work on informed consent has been done involving such a large population and tested its association with the practice predictors. Totally 865 dental practitioners from 8 districts of Karnataka were interviewed to assess the knowledge, attitude and practice of informed consent in their day to day practice.

The present study showed better knowledge of informed consent among the dentist. Item wise percentage of agreement was good for all the knowledge items except the consent requirement in the case of emergencies. It is noteworthy that Section 92 of the IPC offers legal immunity to a registered medical practitioner to proceed with appropriate treatment even without the consent of the patient in an emergency when the victim is incapable of understanding the nature of the treatment or when there are no legal heirs to sign the consent. This is further supported by the case of TT Thomas Vs Mrs. Elis and others where the doctor was held guilty of negligence for not operating on a patient with life-threatening emergency condition. There was a clear ambiguity related to this issue among the dentists in the present study. Nevertheless overall mean knowledge score was better among this population.10

Our observations revealed better knowledge and attitude score for male dentists. We could not cite any study for comparison with regard to gender but This is in line with Kohlberg’s theory of moral development which suggests that women tend to emphasize the moral principle of care, while men tend to emphasize the moral principle of justice, according to Kohlberg's stage-theory, women will be consistently found to be behind men in terms of moral development. This theory is well argued by Gilligan.14 Also literature has shown that ethical differences are rarely correlated with gender in studies of health professionals, although males tend to express greater confidence in their ability to make sound ethical judgments. This difference could be the result from differences in current life situations rather than from stable gender characteristics. Males tend to view ethics in terms of justice and rights whereas females in terms of compassion and relationships. However females are generally reported as being more scrupulous in respecting ethical principles.15, 16

Similarly urban dentists had better knowledge and attitude score as well as practice score compared dentists practicing in the rural and semi urban areas. Study done by Kress.G.C et al showed no difference between urban, suburban and rural practicing dentists. In urban areas patient are well aware of their health and expect standard of care and dentists in urban areas should be well prepared and have to make conscious effort to meet the expectation of the patient.17

On the other hand The rural communities are widely diverse, limited economic resources, shared values, reduced health status, limited availability of and accessibility to healthcare services, overlapping professional–patient relationships these may pose the dentist to newer ethical dilemmas which our urban-based ethical training would not fit realm of rural dental practice. This might have contributed to the lower scores among rural dentists.

Continuing dental education and vocational training is necessary to nurture the professional ethical attitude, in the present study the dentists who attended the continuing dental education programmes related to ethics showed better scores than those who didn’t attend the training. This is supported by the study of Anup et al. Since the Attitude is not mere physical posture rather it is mental posture and is influenced by the personal experience, Self reflection, and Pursuance and group interactions. Influence of Continuing Dental education Training should be considered judiciously.18

We also observed that only 55% of the dentist took informed consent routinely on every patient. This is in line with the study of Vijayalakshmi S et al where 63.6% of General Dental Practitioners reported that they obtained written consent. 36.4% of general practitioners took only oral consent and in Study by V Gupta et al showed only 48% of dentists take informed consent only for surgical procedures. 11, 19

The research showed that the dental professionals in Karnataka had overall good knowledge and attitude there practice did not coincided with it. Though the dentist believed in taking informed consent. Consent in practice is not taken routinely. There is need to sensitize the dentists regarding the informed consent routinely to encourage the patients to take informed decisions and to save dentist from frivolous complaints.

**References**

1. Raymond S. Edge John Randall Groves. Ethics of Health Care: A Guide for Clinical Practice. Delmar Publishers, 1998; 2nd Edition.
2. Satyanarayana Rao KH. Informed Consent: An Ethical Obligation or Legal Compulsion? Journal of Cutaneous and Aesthetic Surgery. 2008;1(1):33-35. doi:10.4103/0974-2077.41159.
3. King Jennifer. informed consent: Does Practice Match Conviction? Journal of American college of dentists. American Society for dental ethics. 2005; 72(1): 27-31.
4. Trehan SP, Sankhari D. Medical professional, patient and the law: the institute of law and ethics in medicine. 2nd ed. Bangalore: National Law School of India University; 2002. 57–68.
5. Hartshorne J, Hasegawa TK Jr. Overservicing in dental practice – Ethical perspectives. SADJ 2003;58:364-9.
6. Colleen E. O’Lear. Informed Consent. Principles and Practice. American society of anesthologist. 2010;74(2):20-45.
7. Story RD. Medico-legal aspects of dental treatment of the ageing and aged patient. Australian Dental Journal. 2015; 60(1): 64-70.
8. Devadiga Arishka. Informed Consent and the Dentist. Online Journal of Health Ethics 2012; 8(1): 5.
9. Kemparaj VM, Panchmal GS, Jayakumar H L, Kadalur UG. Qualitative assessment of ethical issues in dental practice: An expert opinion. J Educ Ethics Dent 2016;6:20-26
10. Thomas.  I (1987) ACC 445, AIR 1987 Ker 52. <https://indiankanoon.org/doc/600254/> accessed on 01.06.18 2.00pm
11. Vivek V. Gupta Nagesh Bhat, Kailash Asawa, Mridula Tak, Salil Bapat, Knowledge and Attitude Toward Informed Consent Among Private Dental Practitioners in Bathinda City, Punjab, India. Osong Public Health Res Perspect 2015; 6(2):73 - 78.
12. Purohit Ankita Gupta and Abhishek. Perception of Informed Consent among Private Dental Practitioners of Bangalore South - A Kap Study. Biomedical journal of scientic and technical research. 2018:2(1):1-6.
13. Khare A, Saxena V, Jain M, Sharva V, Singh P, Dayma A. Knowledge and attitude toward informed consent in medical and dental practitioners, of Bhopal City, India. J Dent Res Rev 2017;4:17-20
14. Gilligan, C and Attanucci, J. The Moral Principle of Care two moral orientations: Gender differences and similarities. Merrill-Palmer Quarterly.1988; 34: 223-37.
15. Nancy A. Clopton, Gwendolyn T. SorellGender Differences in Moral Reasoning: Stable or Situational? Psychology of the women. 1993; 17(1): 85-101.
16. Porter SAT. Ethical dilemmas confronting dentists in Queensland, Australia. Australian Dental Journal 2002;47(3):241-248.
17. Kress GC A survey of ethical dilemmas and practical problems encountered by practicing dentists. J Am Dent Assoc1995;126(2):1554-1562.
18. Dr.Anup.N, Dr.Himanshu Kumawat, Dr.Gautam Biswas, Dr.Sonia Pareek, Dr.Swasti Tambi. Knowledge, attitude and practices regarding Ethics and law amongst medical and dental professionals in Rajasthan - A Questionnaire study. Journal of Dental and Medical Sciences May 2014; 13(5)102-109.
19. Vijayalakshmi S Kotrashetti. Informed consent: a survey of general dental practitioners in Belgaum city. Indian Journal of Medical Ethics. 2010;7 (2):90-94.

Table 1: Socio demographic variables and the distribution of the participating Dentists

|  |  |  |
| --- | --- | --- |
|  | Frequency | Percent |
| **Age** |  |  |
| 22-30 Years | 219 | 25.3 |
| 31-40 Years | 487 | 56.3 |
| 41-50 Years | 145 | 16.8 |
| 50 and Above Years | 14 | 1.6 |
| **Gender** |  |  |
| Male | 528 | 61.0 |
| Female | 337 | 39.0 |
| **Geographic Location** |  |  |
| Urban | 686 | 79.3 |
| Rural | 70 | 8.1 |
| Semi Urban | 109 | 12.6 |
| **Experience in years** |  |  |
| 1-10 Years | 565 | 65.3 |
| 11-20 Years | 256 | 29.6 |
| 21-30Years | 44 | 5.1 |
| **Type of practice** |  |  |
| Specialist | 295 | 34.1 |
| General | 570 | 65.9 |
| **Hours of Practice** |  |  |
| <5hrs | 562 | 65.0 |
| >5hrs | 303 | 35.0 |
| **CDE** |  |  |
| Yes | 493 | 57.0 |
| No | 372 | 43.0 |

Table: 2 Item Wise Percentage Distributions of Responses from the Study Participants

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Agree | | Disagree | | Neutral | |
|  |  |  |  |  |  |
| Knowledge items | n | % | n | % | n | % |
| The key step to prevent your practice from legal action is valid inform consent | 820 | 94.8 | 35 | 4.0 | 10 | 1.2 |
| Informed consent is required only for operations not for tests and medication | 580 | 67.1 | 279 | 32.3 | 6 | 0.7 |
| In case of emergency situation informed consent is not Required | 392 | 45.3 | 467 | 54.0 | 6 | 0.7 |
| Children should not be treated without the consent of parents /guardian | 736 | 85.1 | 120 | 13.9 | 9 | 1.0 |
| Consent is valid only when it is documented and understood by the patient | 786 | 90.9 | 76 | 8.8 | 3 | 0.3 |
| Attitude Items | | | | | | |
| It is not practical to obtain the informed consent for every procedure we do. | 334 | 38.6 | 515 | 59.5 | 16 | 1.8 |
| I am scared of losing a patient if I inform the risk involved in the invasive procedures | 146 | 16.9 | 700 | 80.9 | 19 | 2.2 |

Table 3: Item wise and total Mean Score (knowledge) and socio demographic factors

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Domain | Knowledge scores (Item Wise ) | | | | |  |
|  | 1 | 2 | 3 | 4 | 5 | Total |
| **Age** | Mean±SD | Mean±SD | Mean±SD | Mean±SD | Mean±SD | Mean±SD |
| 22-30 Years | 4.36±0.65 | 3.53±1.28 | 2.68±1.33 | 4.14±1.17 | 4.07±0.94 | 18.78**±** 2.54 |
| 31-40 Years | 4.37±0.76 | 3.43±1.26 | 2.80±1.32 | 4.19±1.05 | 4.30±0.86 | 19.09**±** 2.74 |
| 41-50 Years | 4.30±0.68 | 3.37±1.25 | 3.15±1.20 | 4.00±1.04 | 4.18±0.90 | 19.01**±** 2.32 |
| 50 and Above | 4.00±0.00 | 3.00±1.03 | 4.00±0.00 | 4.00±0.00 | 4.50±0.51 | 19.50**±** 1.55 |
| **Gender** |  |  |  |  |  |  |
| Male | 4.42±0.62 | 3.33±1.28 | 3.10±1.33 | 4.10±1.07 | 4.30±0.87 | **19.26± 2.59#** |
| Female | 4.24± 0.83 | 3.68±1.22 | 2.45±1.18 | 4.20±1.08 | 4.10±0.89 | **18.61± 2.59** |
| **Location** |  |  |  |  |  |  |
| Urban | 4.31± 0.72 | 3.65±1.14 | 2.80±1.29 | 4.24±0.92 | 4.17±0.90 | **19.19± 2.49#** |
| Rural | 4.57±0.49 | 2.62±1.41 | 2.62±1.38 | 3.71±1.40 | 4.34±0.86 | **17.89± 2.75** |
| Semi Urban | 4.46±0.76 | 2.60±1.36 | 3.29±1.34 | 3.75±1.49 | 4.49±0.76 | **18.56± 3.03** |
| **Experience Years** |  |  |  |  |  |  |
| 1-10 Years | 4.32**±** 0.75 | 3.53±1.26 | 2.69±1.29 | 4.16±1.11 | 4.16±0.93 | 18.88**±** 2.74 |
| 11-20 Years | 4.41**±**0.67 | 3.27±1.25 | 3.04±1.35 | 4.16±0.99 | 4.28±0.80 | 19.18**±** 2.36 |
| 21-30Years | 4.38**±**0.49 | 3.18±1.29 | 3.61±0.75 | 3.70±1.00 | 4.70±0.46 | 19.59**±** 2.14 |
| Type of practice |  |  |  |  |  |  |
| Specialist | 4.43**±**0.72 | 3.53**±**1.25 | 2.59±1.35 | 4.12**±**1.13 | 4.25**±**0.97 | 18.96**±** 2.81 |
| General | 4.31**±**0.71 | 3.38**±**1.27 | 2.97±1.27 | 4.15**±**1.04 | 4.21**±**0.84 | 19.03**±** 2.51 |
| Hours of practice |  |  |  |  |  |  |
| <5hrs | 4.34**±**0.76 | 3.44**±**1.29 | 2.86**±**1.35 | 4.20±1.07 | 4.25**±**0.83 | 19.12**±** 2.59 |
| >5hrs | 4.36**±**0.62 | 3.42**±**1.22 | 2.81**±**1.23 | 4.02±1.07 | 4.17**±**0.97 | 18.80**±** 2.64 |
| CDE |  |  |  |  |  |  |
| Yes | 4.37**±**0.64 | 3.34±1.21 | 2.99±1.29 | 4.09**±**1.07 | 4.26**±**0.81 | 19.07**±** 2.50 |
| No | 4.32**±**0.80 | 3.56±1.32 | 2.64±1.31 | 4.20**±**1.08 | 4.18**±**0.97 | 18.92**±** 2.76 |
| Total |  |  |  |  |  |  |

# p <0.05, t Test and ANOVA

Table 4: Item wise and total Mean score (Attitude) and socio demographic factors

|  |  |  |  |
| --- | --- | --- | --- |
| Attitude score | | | |
|  | 1 | 2 | Total score |
| **Age** | Mean±SD | Mean±SD | Mean±SD |
| 22-30 Years | 3.16±1.24 | 3.64±0.96 | **6.80± 1.49** |
| 31-40 Years | 3.39±1.19 | 3.89±0.99 | **7.28± 1.43#** |
| 41-50 Years | 3.09±1.17 | 3.71±1.13 | **6.80± 1.38** |
| 50 and Above | 3.00±1.03 | 4.00±0.00 | **7.00± 1.03** |
| **Gender** |  |  |  |
| Male | 3.47±1.17 | 3.84±1.05 | **7.32± 1.41#** |
| Female | 2.95±1.19 | 3.72±0.93 | **6.68± 1.42** |
| **Location** |  |  |  |
| Urban | 3.12±1.17 | 3.86±0.93 | 6.98**±** 1.45 |
| Rural | 4.04±0.99 | 3.71±1.09 | 7.75**±** 1.26 |
| Semi Urban | 3.76±1.19 | 3.45±1.28 | 7.22**±** 1.42 |
| **Experience Years** |  |  |  |
| 1-10 Years | 3.20±1.23 | 3.79±1.00 | 6.99**±** 1.51 |
| 11-20 Years | 3.50±1.10 | 3.75±1.07 | 7.25**±** 1.32 |
| 21-30Years | 2.93±1.22 | 4.22±0.42 | 7.15**±** 1.23 |
| **Type of practice** |  |  |  |
| Specialist | 3.12±1.18 | 3.81**±**0.99 | **6.93± 1.46#** |
| General | 3.35±1.20 | 3.79**±**1.01 | **7.14± 1.44** |
| **Hours of practice** |  |  |  |
| <5hrs | 3.33**±**1.22 | 3.74±1.11 | 7.07**±** 1.50 |
| >5hrs | 3.17**±**1.15 | 3.90±0.75 | 7.07**±** 1.34 |
| **CDE** |  |  |  |
| Yes | 3.17±1.24 | 3.73**±**1.05 | **7.28±1.41** |
| No | 3.40±1.13 | 3.88**±**0.93 | **6.91±1.46#** |
|  |  |  | 7.07**±**1.45 |

# p <0.05, t Test and ANOVA

**Table 5:** Item wise and total Mean score (Practice) and socio demographic factors

|  |  |  |  |
| --- | --- | --- | --- |
| Practice score | | | |
|  | 1 | 2 | Total score |
| **Age** | Mean±SD | Mean±SD | Mean±SD |
| 22-30 Years | 0.65**±** 0.29 | 0.83**±**0.30 | 1.48**±** 0.50 |
| 31-40 Years | 0.65**±** 0.29 | 0.84**±** 0.29 | 1.49**±** 0.48 |
| 41-50 Years | 0.66**±** 0.31 | 0.83**±** 0.30 | 1.50**±** 0.54 |
| 50 and Above | 0.60**±** 0.34 | 0.82**±** 0.31 | 1.42**±** 0.54 |
| **Gender** |  |  |  |
| Male | 0.64**±** 0.30 | 0.83**±** 0.29 | 1.48**±** 0.50 |
| Female | 0.67**±** 0.28 | 0.84**±** 0.30 | 1.51**±** 0.49 |
| **Location** |  |  |  |
| Urban | 0.64**±**0.30 | 0.82**±**0.30 | **1.60± 0.51#** |
| Rural | 0.72**±**0.29 | 0.87**±**0.24 | **1.47± 0.44** |
| Semi Urban | 0.67**±**0.28 | 0.88**±**0.23 | **1.56± 0.44** |
| **Experience Years** |  |  |  |
| 1-10 Years | 0.65**±** 0.29 | 0.84**±** 0.29 | 1.49**±** 0.49 |
| 11-20 Years | 0.66**±** 0.31 | 0.84**±** 0.28 | 1.51**±** 0.50 |
| 21-30Years | 0.57**±** 0.34 | 0.77**±** 0.36 | 1.35**±** 0.61 |
| Type of practice |  |  |  |
| Specialist | 0.65**±** 0.29 | 0.83**±** 0.30 | 1.48**±** 0.49 |
| General | 0.65**±** 0.30 | 0.84**±** 0.29 | 1.49**±** 0.50 |
| Hours of practice |  |  |  |
| <5hrs | 0.66**±** 0.29 | 0.84**±**0.29 | 1.50**±** 0.49 |
| >5hrs | 0.64**±** 0.30 | 0.83**±** 0.30 | 1.47**±** 0.50 |
| CDE |  |  |  |
| Yes | 0.66**±** 0.31 | 0.84**±** 0.29 | 1.50**±** 0.51 |
| No | 0.64**±** 0.28 | 0.83**±** 0.29 | 1.48**±** 0.48 |
| Total |  |  | 1.49**±**0.50 |

# p <0.05, t Test and ANOVA

**Fig 1:** Percentage Distributions of Responses for practice questionnaire from the Study Participants

**Fig2:** Percentage Distributions of Responses for practice questionnaire from the Study Participants