

Assessment of knowledge and attitude regarding plagiarism among faculty members and dental post graduate students in Sri Ganganagar city.

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Abstract

Context: Plagiarism is the deliberate use of someone else’s thoughts, words or ideas as one’s own, without clear attribution of their source.

Aim: To assess the knowledge, attitude and practices amongst the faculty members and dental post graduate students in Sri Ganganagar city.

Settings and Design: A cross-sectional survey carried out among postgraduate students and faculty member in dental institutes.

Material and Methods: A convenience sample of 129 dental postgraduates and faculty members of the dental college. The present cross-sectional study was conducted among faculty members and dental post graduate students in Sri Ganganagar city during February 2020 to March 2020. A self-structured questionnaire comprising of 22

questions which measures attitude and knowledge towards plagiarism before and after implementation.

Statistical analysis used: The data were compiled or statistically analysed by using IBM SPSS. The chi-square or fisher exact test used with the level of significance which was set at P value <0.05.

Results: In pre phase 97.6% of faculty members and 90.8% postgraduate students and in post phase 100% faculty members and 96.6% postgraduate students heard about the term plagiarism, results are found to be statistically significant (p = 0.0001).

Conclusions: There were significant positive changes in the level of knowledge of the participant's after implementation of lecture. This topic should be discussed in the study so the increase in the level of seriousness and awareness with which plagiarism is perceived.

Keywords: Dentist, faculty members, plagiarism, postgraduate students.

Key Message: Plagiarism is a well-known and growing issue in the academic world. A survey carried out among dentists in dental institutes to measures attitude and knowledge towards plagiarism before & after implementation. There were significant positive changes in the level of knowledge of the participant's after implementation of lecture.

Introduction

Ethics and morals relate to right and wrong conduct. These morals and ethics are interwoven in the values developed by an individual in a society, academic institute hold the primary responsibility to inculcate the right values in to the students. Scientific misconduct has been the focus of interest in the recent year's, it can seriously damage people's health and even life, which usually includes fabrication, falsification, plagiarism, and other unethical behavior in professional scientific research.^[1]

Out of these, plagiarism is the most frequent type of misconduct.^[2]

The word "plagiarism" in the English language dates back to the 1600s. It is derived from the Latin word "*plagiare*" which means to "kidnap." The World Association of Medical Editors (WAME) defines plagiarism as "*the use of others' published and unpublished ideas or words (or other intellectual property) without attribution or permission, and presenting them as new and original rather than derived from an existing source*"^[3]

Plagiarism is a major problem for research. Plagiarism is a well-known and growing issue in the academic world. Additional form of plagiarism is complete, source based, direct and mosaic, self-plagiarism etc. Self- plagiarisms i.e. duplicate publication which is the publication of all or parts of one manuscript in separate journals. Given that plagiarism is perceived as a considerable problem for the research community, spelling out in some detail what is to count as plagiarism becomes a matter of pressing concern.^[4]

Plagiarism is commonly seen among postgraduate students who borrow ideas for their thesis papers after searching through earlier research papers. Faculty members at some institutes quite often do not mind such practices and there have been instances where the student has been asked by his/her guide to pick up a thesis that is over 4 to 5 years old and present the study as a new one.^[3]

The point of the definition that we present is not to identify the essence or 'real nature' of plagiarism (we doubt that there is such a thing), but rather to extract one that is useful for the purpose of clarifying normative issues related to plagiarism, while being true to common uses of the term. Second, part is focused on discuss plagiarism normatively, by taking a closer look at different aspects of it. In order to evaluate an explication of "plagiarism" in relation to the present purpose, we first

need to identify a set of conditions for adequacy. Although we will not systematically test suggested definitions against these conditions, they show what requirements our definition is intended, and believed, to meet to a reasonable extent.^[4]

Thus, the current study is undertaken to gain a better understanding about plagiarism in the local context and to explore perceptions about various stakeholders on the issue.^[5] Hence, the aim of this study was to assess the knowledge and attitude towards plagiarism among dental postgraduate students and faculty members of dental collage Sri Ganganagar, Rajasthan.

Subjects and methods

The present cross-sectional study was conducted among the Postgraduates students and faculty members of dental collage Sri Ganganagar, Rajasthan during the month of February 2020 to March 2020. Ethical approval to conduct the study was obtained from the ethical committee of Institute. Written informed consent was obtained from the participants after explaining them the aim and objectives of the study.

A self-administered structured questionnaire was developed and tested among a convenience sample of 10 dentists, who were interviewed to gain feedback on the overall acceptability of the questionnaire in terms of length and language clarity. Based on their feedback, the questionnaire did not require any corrections. Cronbach coefficient was found to be 0.80, which showed an internal reliability of the questionnaire on the opinions expressed by a panel of five academicians.

The questionnaire was divided into two sections—Section A was “General section” containing sociodemographic details and professional background information of the participants. Section B comprised of 22 closed ended questions in which 7 question were scaled as 1-yes or 2-no and remaining question were scaled as 5-point Likert scale

i.e. graded 1 – strongly disagree to 5 – strongly agree for each statement. All the questions under each attitudinal factor were haphazardly arranged in order to avoid response bias.

During pilot study, it was found that 90% of the dentist doesn't have knowledge about plagiarism from these results sample size estimation was done. The sample size comprises of 139 dentists' for the study in which 129 dentist given consent to participate in study among those 81 postgraduate students and 48 faculty member of the dental college.

Data collection was done by single examiner 2 week before the lecture on plagiarism, in which the forms were distributed to each department among postgraduate students and facility member, to eradicate bias the forms was requested to fill in front of the examiner. After 2-week the invitation was being sent to all the postgraduate students and faculty members to attend a session or lecture. The lecture was conducted to give awareness and knowledge about the study topic in front of postgraduate students and faculty members. Then the subsequently the forms were again given to them so that we can checked the alteration in the knowledge and attitude regarding the plagiarism. The scores for the questions were summed up separately. Then the mean of the scores for the questions under each category was calculated separately for postgraduate students and faculty members.

The data were statistically analysed by using IBM SPSS (VERSION 20.0.Armonk, NY: IBM Corp).The statistical analysis was determined by the chi-square test, fisher exact test with the level of significance which was set at P value <0.05.

Results

The distribution of faculty members and postgraduate (Pg) students, among those males are 34.1% and 65.9% are female's. The 44.2% of participants having both types of

experience along with the 28.7% have Academic & 27.1 % Clinical experience [Table 1].

When asked have you heard about the term plagiarism, in pre phase 97.6% of faculty members and 90.8% postgraduate students have heard and in post phase 100% faculty members and 96.6% postgraduate students know about the term, in second statement Do you think it is important to discuss issues like plagiarism in research ethics in pre phase 97.6% faculty members and 97.7% postgraduate students was agree to discuss issues on plagiarism, in post phase 100% and 96.6% postgraduate students were said to yes to discuss issues on plagiarism and results are found to be statistically significant ($p = 0.0001$). In next statement 26.2% faulty members and 57.5% postgraduate students were believed work in a plagiarism free environment in pre phase and in post phase 26.2% faulty members, 43.7% postgraduate students were believed work in a plagiarism free environment [Table 2].

The result shows that, in pre phase 45.2 % faulty members was strongly agree and 50.6% postgraduate students agreed to state that they have never plagiarized are lying and result are found to be statistically significant ($p = 0.003$). In post phase 47.6% faulty members and 57.5% postgraduate students were said that they have never plagiarized are lying, results are statistically not significant. In next statement, if one cannot write well in a foreign language (e.g., English), it is justified to copy parts of a similar paper already published in that language, in pre phase observed that 40.5% faulty members strongly disagree and 28.7% postgraduate students agreed, results are not statistically significant & in post phase 33.3% faulty members strongly disagree and 29.9% postgraduate students agreed to believe. So, the results are found to be statistically significant ($p = 0.004$) [Table 3].

Discussion

Plagiarism is the usage of ideas, text, data, etc. without acknowledgment of the owner of the intellectual property. The common types of plagiarism include use of data from an earlier publication, publish similar data repeatedly, publish same/similar article in a local and also in an international journal with same/different authorship. Studies of academic dishonesty amongst students have often focused on the types of behaviours and practices they are likely to engage in, but study to assess their knowledge and attitude are sparse.^[1] That's why a cross-sectional observational study, with a self-structured, close ended pretested and self-administrated questionnaire was used to assess the knowledge and attitude regarding plagiarism among faculty member's dental post graduate students in Sri Ganganagar city.

In our study findings showed that before the lecture almost half of participants have least knowledge about plagiarism. The low level of plagiarism knowledge was seen among the faculty members and post graduate students Findings of the current study hence, agree with studies by Introna et al. (2003)^[6], Ma, Lu, Turner and Wan (2007)^[7] as well as Yeo (2007)^[8] who conducted their studies on postgraduate students' understanding of the concept of plagiarism is still limited.

After implementation of the lecture again the questions were distributed and notice's that still some participants were unable to give complete answers of plagiarism. This finding is not surprising as still the concept of plagiarism is new for them and requires more elaboration. Also, plagiarism was not introduced in their whole educational life either as students in the college or even a faculty member responsible of providing research under proper practice. The same was found by Foltýnek et al. (2013)^[9] who noted that academics struggle to identify plagiarism in particular circumstances. Since, the present study

showed that faculty members had more knowledge about plagiarism as compared to postgraduate students in knowledge-related questions. This can be justified by the more exposure of faculty members to the world of publications as compared to postgraduate students.^[10]

The present study showed that there was no significant difference in the attitudes towards plagiarism amongst faculty members and postgraduate students. Because, today's the attitude of everyone is to "publish or perish" scenario among academicians and research scholars, everybody is in a hurry to publish their articles by hook or by crook and hence, they succumb to scientific misconduct such as falsification, fabrication and plagiarism.^[10]

Postgraduate students showed more attitude's as compared to faculty members which reflect Postgraduate students' approval toward committing plagiarism. Majority of the Postgraduate students considered plagiarism as a necessity instead of a punishable offense which depicts their positive perception toward plagiarism as compared to staff members. Similar results were observed in the studies conducted previously among dental faculty and postgraduate students in India.^[11]

Plagiarism can be avoided and provided that it is a shared responsibility of authors as well as institutions. It can be avoided by the use of plagiarism detection software, developing skills in foreign languages and scientific writing, giving sufficient time for manuscript writing, using own words and ideas for the information taken from other sources.^[11]

The higher number of publications of faculty members than Postgraduate students signifies that faculty members might have developed the better writing skills and thereby leading to decreased attitude towards plagiarisms. An Indian study revealed that lack of essence of writing in English is one of the reasons leading to plagiarism.^[11]

This study focused on shared attitudes and knowledge of the postgraduate students and faculty members for further studies should be conducted using qualitative and quantitative research to explore the rationale behind the selected attitudes and knowledge. Hence, serious and prompt steps need to be taken to raise the standards of scientific research and publications because it is on these that the future and advances of mankind depend on.^[10]

Some Limitations to the study as it was a cross sectional study done in a single city and hence results cannot be generalized with universal population of country. The generalizability of the results is limited by the use of a small size, non-probability, and convenience sample.

To conclude we would like to say that the results show moderate attitudes of post graduate students and faculty members towards plagiarism. Faculty members were relatively better informed and against plagiarism compared to post graduates. Since post-graduate students are going to become the future professionals in the health care field, the lack of awareness about plagiarism among them may have serious consequences. Dentists as they are themselves in the branch of health are more concerned, aware and have positive perception about this topic as compare to others branch of students. As a public health dentist, this topic would be discussed in the postgraduate study so that there will be increase in the level of knowledge and attitude among them with which plagiarism is perceived.

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Legends Tables

Table 1: Demographic characteristics and attitude toward plagiarism of study participants	
Demographic	N (%)
Gender	
Male	44(34.1)
Female	85(65.9)
Qualification	
Postgraduate (Pg)	87 (67.4)
Faculty	42 (32.6)
Experience	
Clinical	35 (27.1)
Academic	37 (28.7)
Both	57 (44.2)

Table 2: Awareness and perceptions about plagiarism among faculty members and postgraduate students in pre and post phase				
Questions	PRE-YES N (%)	POST-YES N (%)	Chi-square	P
Have you heard about the term plagiarism? If yes, do you understand this term?				
Postgraduate	79(90.8)	84(96.6)	52.321	.0001*
Faculty	41(97.6)	42(100)		
Do you think it is important to discuss issues like plagiarism in research ethics				
Postgraduate	85(97.7)	84(96.6)	37.669	.0001*
Faculty	41(97.6)	42(100)		
Do you believe you work in a plagiarism free environment?				
Postgraduate	50(57.5)	38(43.7)	5.233	.020
Faculty	11(26.2)	11(26.2)		
Have you ever plagiarized unintentionally due to lack of knowledge and learnt about it later?				
Postgraduate	44(50.6)	57(65.5)	0.158	.409
Faculty	27(64.3)	26(61.9)		
Would you take any action if you have noticed a colleague of yours plagiarize?				
Postgraduate	28(32.2)	44(50.6)	11.547	.001*
Faculty	13(31)	15(35.7)		

*=Statistically Significant $p < 0.05$

Table 3: Awareness and perceptions about plagiarism among faculty members and postgraduate students in pre and post phase								
	PRE				POST			
	Post Graduate N (%)	Faculty N (%)	F	P	Post Graduate N (%)	Faculty N (%)	F	P
Those who say they have never plagiarized are lying?								
Strongly Disagree	0	0	13.80	0.003*	5(5.7)	2(4.8)	5.49	.241
Disagree	20(23.0)	2(4.8)			9(10.3)	4(9.5)		
Neither Disagree	5(5.7)	5(11.9)			9(10.3)	2(4.8)		
Agree	44(50.6)	16(38.1)			50(57.5)	20(47.6)		
Strongly Agree	18(20.7)	19(45.2)			14(16.1)	14(33.3)		

If one cannot write well in a foreign language (e.g., English), it is justified to copy parts of a similar paper already published in that language?								
Strongly Disagree	18(20.7)	17(40.5)	13.30	.010	13(14.9)	14(33.3)	15.64	.004*
Disagree	25(28.7)	13(31.0)			19(21.8)	13(31.0)		
Neither Disagree	13(14.9)	0			15(17.2)	2(4.8)		
Agree	25(28.7)	12(28.6)			26(29.9)	13(31.0)		
Strongly Agree	6(6.9)	0			14(16.1)	0		
Sometimes I am tempted to plagiarize, because everyone else is doing it (students, researchers, physicians)?								
Strongly Disagree	7(8)	18(42.9)	30.16	.0001*	13(14.9)	16(38.1)	12.77	.012
Disagree	23(26.4)	14(33.3)			17(19.5)	10(23.8)		
Neither Disagree	6(6.9)	0			8(9.2)	0		
Agree	39(44.8)	10(33.8)			41(47.1)	13(31.0)		
Strongly Agree	12(13.8)	0			8(9.2)	3(7.1)		

*=Statistically Significant $p < 0.05$