

Original research article

Perception of Plagiarism Amongst Medical Faculty and Postgraduates: A Cross-Sectional Study

Dr. Samata Padaki¹, Dr. Amrut Dambal²

¹Professor, Department of Physiology, Gadag Institute of Medical Sciences, Gadag

²Professor, Department of Biochemistry, JGMMC, Hubli

Corresponding Author: Dr. Amrut Dambal

Abstract

Introduction: In scientific research and publication, sometimes the research thoughts, work or ideas may resemble the previous work or the previous work may be quoted as a reference or someone else's work may be depicted as one's own, causing plagiarism.

Objective: To assess the level of perception of plagiarism amongst medical faculty and postgraduates.

Methodology: Perception of plagiarism was done using Attributes towards Plagiarism (ATP) questionnaire in 35 medical teachers and 7 postgraduates with a three point Likert scale [(agree coded as 3), (neutral coded as 2) and (disagree coded as 1)] and feedback was taken and analyzed as percentage. Participants' information like age, designation, number of publications, years of experience in medical education, information regarding formal training in medical research and awareness regarding plagiarism in scientific writing was taken.

Results: Out of 35 medical teachers, 8 were Professors, 9 Associate Professors, 18 Assistant Professors and 7 were postgraduates. Minimum years of experience were 1 year and maximum was 21 years. Minimum research publication was 2 and maximum was 40. 26 participants were trained in research methodology and 16 were untrained. 34 participants were aware of Plagiarism and 8 absolutely unaware of it. The general attitudes of participants regarding plagiarism as assessed by ATP were, not approving plagiarism. 50% considered it as serious offence, 40% considered that plagiarism is not necessary, 52% could write scientific research paper without plagiarizing.

Conclusion: Training in medical writing and research ethics as part of faculty development and post-graduate medical curriculum is needed. Faculty should keep updated about the latest policies regarding plagiarism.

Key words: Plagiarism; Attributes towards Plagiarism; Scientific writing.

Introduction

Scientific research is one of the important ways towards developing skills and attributes and improvising knowledge serving the mankind. It is the most essential tool that helps the generation to adapt to the changing needs and necessities. Once a research is made it needs to be published in order to share the knowledge and create awareness with fellow scholars, which is called as scientific writing. It also needs to be validated by repeated trials. Ultimately its purpose is to serve the community. In that process sometimes it so happens that the research thoughts, work or ideas may resemble the previous work or the previous work may be quoted

as a reference. This may lead to plagiarism, which usually may not be on purpose. Thus, plagiarism could be defined as “the deliberate or reckless use of someone else’s thoughts, words or ideas as one’s own, without clear attribution of their source”.^{1,2,3} There has been an increase in the number of manuscripts published on plagiarism in the last one decade.^{4,5} It is a serious offense in academics and a major ethical concern which has received a lot of global attention in biomedical scientific writing. In recent years, most faculty members all over the world are involved in research. They lead a project, or participate in scientific writing of an article. However, it is not clear if they are familiar with scientific misconduct, issues such as plagiarism. Hence, a study was taken up to assess the perception of plagiarism amongst medical faculty.

Aim and Objective

To assess the level of perception of plagiarism amongst medical faculty and postgraduates.

Methodology

This was taken up as an ACME Research project in 2018. A cross sectional study was conducted involving 35 medical teachers and 7 postgraduates from Gadag Institute of Medical Sciences, Gadag after obtaining ethical clearance from the Institutional Ethical Clearance Committee. We employed convenience sampling technique considering 50 participants out of which 42 participants responded by giving their feedback. All the participants were explained regarding the purpose of the study and informed consent in the form of signature on the consent form was obtained. The study was conducted between October 2018 to March 2019. The questionnaire was distributed to the participants and the completed proformas were collected back. The study consisted of two sections. Section 1 included participants’ information like age, designation, number of publications, years of experience in medical education, information regarding formal training in medical research and awareness regarding plagiarism in scientific writing. Section 2 involved a pre-validated Attributes Towards Plagiarism (ATP)⁵ questionnaire with a three point Likert scale [(Agree coded as 3), (Neutral coded as 2) and (Disagree coded as 1)] and the feedback was taken and analyzed based on percentage analysis using Likert 3 point scale.

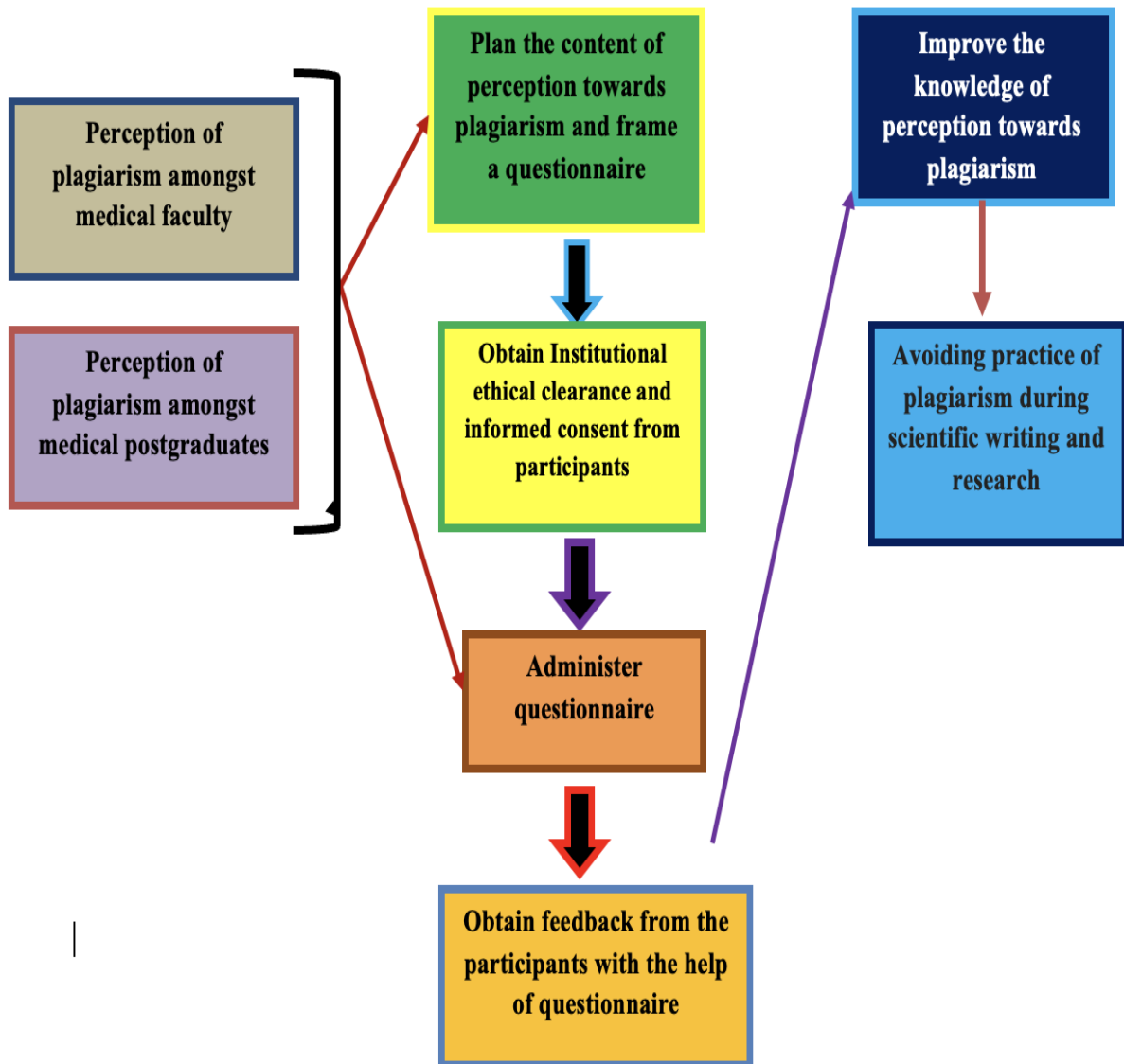
Table 1: OUTCOME MODIFIED LOGIC MODEL

Outcome	Indicators	Data Source	Data Collection Method
Short term: Knowledge regarding perception of plagiarism	Percentage of medical teachers and postgraduates in favor of good professional conduct and against plagiarism	Medical teachers and postgraduates	Questionnaire
Intermediate Outcome Avoiding practice of plagiarism during scientific writing and research	Percentage of medical teachers avoiding plagiarism in research and writing a scientific paper	Medical teachers and postgraduates	Questionnaire
Long Term Outcome Incorporation of knowledge regarding plagiarism along with research methodology	Improvement in professional conduct by avoiding practice of plagiarism in research and writing a scientific paper	Medical teachers and postgraduates	Observation of the scientific writings using plagiarism assessing software

Table 2: EVALUATION BY KIRKPATRICK MODEL

Evaluation	Evaluation question	Indicators	Data source	Data collection method
Level 1 (Reaction)	To assess the level of perception of plagiarism amongst medical faculty and postgraduates.	Percentage of medical teachers and postgraduates in favor of good professional conduct and against plagiarism	Medical teachers and postgraduates	Questionnaire
Level 2 (Learning)	Avoiding practice of plagiarism during scientific writing and research	Percentage of medical teachers avoiding plagiarism in research and writing a scientific paper	Medical teachers and postgraduates	Questionnaire

CONCEPT MAPPING



RESULTS

Section 1: Out of 35 medical teachers, 8 were Professors, 9 were Associate Professors, 18 were Assistant Professors and 7 were postgraduates. Minimum years of experience were 1 year and maximum was 21 years. Minimum research publication was 2 and maximum was 40. 26 participants were trained in research methodology and 16 were untrained. 34 participants were aware of Plagiarism and 8 were absolutely unaware of it.

Section 2: Attributes towards Plagiarism questionnaire

Table 3:

Sl. No	Questions	Disagree (1)	Neutral (2)	Agree (3)
1.	Since plagiarism is taking other people's words rather than tangible assets; it should NOT be considered as a serious offence.	50%	26.19%	23.8%
2.	Sometimes, it is necessary to plagiarize.	38.08%	21.42%	40.46%
3.	It is justified to use previous descriptions of a method because the method itself remains the same.	9.52%	28.56%	61.88%
4.	Self-plagiarism is not punishable because it is not harmful (one cannot steal from oneself).	21.42%	21.42%	57.12%
5.	Plagiarized parts of a paper may be ignored if the paper is of great scientific value.	40.46%	16.66%	42.84%
6.	Self-plagiarism should not be punishable in the same way as plagiarism is.	14.28%	33.32%	52.36%
7.	Young researchers who are just learning the ropes should receive milder punishment for plagiarism.	33.32%	38.08%	28.56%
8.	I could not write a scientific paper without plagiarizing.	52.36%	26.18%	21.42%
9.	Short deadlines give me the right to plagiarize a bit.	42.84%	35.7%	21.42%
10.	It is justified to use one's own previously published work without providing citation in order to complete the current work.	54.74%	23.8%	21.42%
11.	Authors say they do NOT plagiarize, when in fact they do.	7.14%	52.36%	40.46%
12.	Plagiarists do not belong to the scientific community.	35.7%	40.46%	23.8%
13.	The names of the authors who plagiarize should be disclosed to the scientific community.	26.18%	49.98%	23.8%
14.	In times of moral and ethical decline, it is important to discuss issues like plagiarism and self-plagiarism.	4.76%	9.52%	88.06%
15.	A plagiarized paper does no harm to science.	40.46%	30.94%	28.56%
16.	Sometimes one cannot avoid using other people's words without citing the source, because there are only so many ways to describe something.	21.42%	16.66%	61.88%
17.	If a colleague of mine allows me to copy from her/his paper, I'm NOT doing anything bad, because I have his/her permission.	35.7%	28.56%	35.7%
18.	Those who say they never plagiarized are lying.	7.14%	49.98%	42.84%
19.	Sometimes I'm tempted to plagiarize, because everyone else is doing it (students, researchers, physicians).	47.6%	23.8%	28.56%
20.	I keep plagiarizing because I haven't been caught yet.	73.78%	14.28%	11.9%
21.	I work (study) in a plagiarism-free environment.	19.04%	59.5%	21.42%
22.	Plagiarism is not a big deal.	61.88%	19.04%	19.04%
23.	Sometimes I copy a sentence or two just to become inspired for further writing.	30.94%	30.94%	38.08%
24.	I don't feel guilty for copying verbatim a sentence or two from my previous papers.	23.8%	21.42%	54.74%
25.	Plagiarism is justified if I currently have more important obligations or tasks to do.	49.98%	28.56%	21.42%

Discussion

Plagiarism which is a serious academic misconduct has now become a global concern. Lack of training in Research Methodology and Bioethics, inadequate information regarding ethical publication, ever-changing promotional criteria by the MCI now NMC are major key factors that lead to plagiarism. In a review article published by Mohammad Karami, Gholam Hassan Danaei,⁶ they described nearly eleven types of plagiarism namely plagiarism of ideas, text, structure, words, self-plagiarism, collusion, patch writing, intentional, unintentional and so on. In our study, the general attitudes of our participants regarding plagiarism as assessed by ATP were, not approving plagiarism. 50% considered it as a serious offence, 40% considered that plagiarism is not necessary, 52% could write a scientific research paper without plagiarizing. Most of the faculty members including postgraduates were clear about the definition, types and implications of plagiarism and unethical practices in medical writing and research.

Formal training in research methodology, medical and publication ethics at the faculty level is generally lacking. There is a lack of training in biomedical ethics and good practices in medical writing. We propose training in medical writing and research ethics as part of the faculty development and post-graduate medical curriculum. Faculty should keep themselves updated about the latest policies regarding plagiarism inside the country and abroad. Training the researchers in the use of plagiarism check softwares, avoids most of the misconduct.

Conclusion:

Training in medical writing and research ethics as part of faculty development and post-graduate medical curriculum is the need of the hour. Faculty should keep themselves updated about the latest policies regarding plagiarism.

Acknowledgments:

I heartily acknowledge DOME, JNMC, Belagavi for giving me the privilege to pursue ACME from their Nodal centre. I am grateful to the enthusiastic participation of esteemed teaching faculty and postgraduate medical students of GIMS, Gadag.

References

1. Office of Research Integrity. Accessed online at <http://ori/dhs/gov/plagiarism.shtml>
2. University of North Carolina at Chapel Hill. Plagiarism. Accessed online at <http://www.unc.edu/depts/wcweb/handouts/plagiarism.html>
3. Committee on Publication Ethics Guidelines. Accessed online at <http://www.publicationethics.org.uk/guidelines>.
4. Mason PR. Plagiarism in scientific publications. *J Infect Developing Countries* 2009;3(1):1-4.
5. Rathore FA, Waqas A, Zia AM, Mavrinac M, Farooq F. Exploring the attitudes of medical faculty members and students in Pakistan towards plagiarism: a cross sectional survey. *Peer J* 2015; DOI 10.7717/peerj.1031:1-12.
6. Karami M, Danaei G H. A brief review of plagiarism in medical scientific research papers. *Pharm Biomed Res* 2016; 2(2): 1-8.