



Pharmacology

KNOWLEDGE, ATTITUDE AND AWARENESS ON PLAGIARISM AND PUBLICATION ETHICS AMONG MEDICAL AND PARAMEDICAL STUDENTS IN A TERTIARY CARE HOSPITAL - A QUESTIONNAIRE-BASED STUDY

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ABSTRACT **Introduction:** Inappropriate authorization of another's work, ideas, methods, results or words without acknowledging the source and original author is plagiarism. Studying the prevalence of plagiarism among students will contribute to the development of basis for university guidelines on responsible studying. Plagiarism as well as other forms of misconduct should be recognized. A study conducted in India showed that 52.2% of participants were a victim of plagiarism.

Aim and Objective: To assess the knowledge, attitude and awareness on publication ethics and plagiarism among medical and paramedical students in a tertiary care hospital.

Methodology: This cross sectional study was done on 175 medical interns and medical and paramedical post graduate students from Saveetha Medical College and Hospital. The participants were assessed using a pre-tested semi-structured questionnaire containing 30 questions on publication ethics and plagiarism.

Results: Out of the 175 participants, nearly 95% were aware of plagiarism and publication ethics but lacked basic knowledge on details like the existence of COPE, data falsification and fabrication. Attitude towards plagiarism showed satisfying results proving that plagiarism is a crime and its existence has affected many people. This study throws light into the awareness about plagiarism and publication ethics among students who are the future researchers.

KEYWORDS :

INTRODUCTION:

The rapidly rising incidence of plagiarism among students throughout the world requires attention. Unauthorised appropriation of another's work is plagiarism. Studying the prevalence of plagiarism among students will contribute to the development of basis for university guidelines on responsible studying. Plagiarism as well as other forms of misconduct should be recognised and not tolerated. Just teaching and learning are not enough. Promotion of the principles of academic integrity among students is required. Ethical standards for publication exists to ensure high quality publications, public trust in scientific findings and that people receive credits for their ideas. It is important to avoid data falsification and fabrication. Data fabrication is making up ideas and data falsification means the researcher did the work but changed the data. COPE (committee on publication ethics) is a charity registered in the UK. It is concerned with the integrity of peer reviewed publication in science particularly biomedicine .A study conducted in India showed that 52.2% of participants were a victim of plagiarism. The main purpose of this study is to investigate about the attitude towards plagiarism and publication ethics among students.

METHODOLOGY:

The present cross sectional study was conducted at saveetha medical college and hospital, Chennai with the aim to study the knowledge, attitude and awareness on plagiarism and publication ethics. 175 CRRIs and PG medical students and PG paramedical students (92 medical and 83 paramedical) from Saveetha medical college and hospital were given a pretested semi-structured questionnaire containing 30 questions on plagiarism and publication ethics. CRRIs and PG's were chosen as participants because they would have had exposure to research atleast once. Every possible measure was taken so as to uphold the confidentiality that was promised to the participants in the first place. No personal information regarding the participants was let out. IRB Approval of the Institutional Review Board was obtained before initiating the study. A written informed consent was also obtained from all the participants..

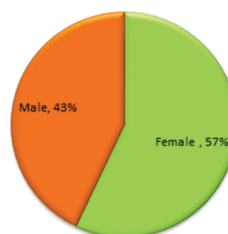
RESULTS:

In total, 175 medical and paramedical students were studied of age 21-38 years

S.No	Parameters		Percentage
1.	Age (in years)	21 -25	93%
		26 – 30	5%
		>30	2%
2.	Sex	Male	43%
		Female	57%

3.	Qualification		
	CRRi		42%
	MD		8%
	MS		1.7%
	BPT		38%
	MPT		7%
	M.SC		2%

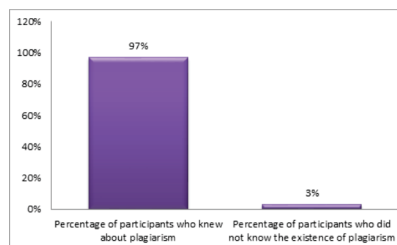
57% females and 43% males took part in the study.



KNOWLEDGE ABOUT PLAGIARISM

Out of 175 participants, 97% participants knew what plagiarism is but 3% participants did not know the existence of plagiarism.(Fig.1).

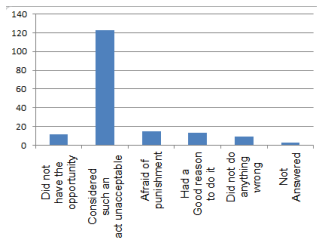
Fig. 1



ATTITUDE TOWARDS PLAGIARISM

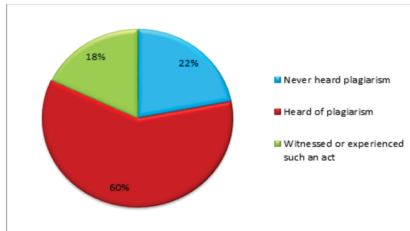
The response to the question whether the participants have done anything similar to this act showed no as the major answer as 70% participants did not have the opportunity to do such an act, 70% participants considered such an act unacceptable, 7% participants were afraid of punishment. 22 participants accepted that they have plagiarised with 9% participants agreeing that they had a good reason to plagiarize and 5% participants said they didn't do anything wrong and 2% participants never answered the question (Fig. 2).

Fig. 2



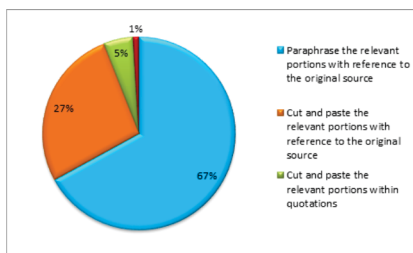
When participants were asked if they knew anything about a similar act taking place in reality, 22% participants have never heard of such an act taking place in reality 60% participants have heard of a similar act taking place in reality 18% participants have witnessed or experienced such an act (Fig. 3).

Fig. 3



5% participants agreed to cut and paste the relevant portions within quotations, 27% participants chose to cut and paste the relevant portions with reference to the original source. 1% participant chose to paraphrase a relevant portion within quotation and 67% participants chose to paraphrase the relevant portions with reference to the original source when asked about accessing information from internet based source (Fig. 4).

Fig. 4

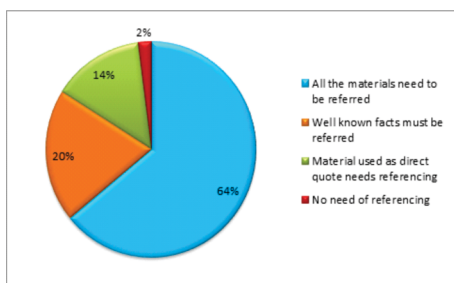


Violet – Paraphrase the relevant portions with reference to the original source
 Red – Cut and paste the relevant portions with reference to the original source
 Blue - Cut and paste the relevant portions within quotations
 Green – Paraphrase the relevant portion within quotations

AWARENESS ON PLAGIARISM

When questioned regarding what all materials requires to be referred in a paper 64% participants answered that all the materials used need to be, 20% participants answered that well known facts must be referenced, 14% participants answered that the material that is used as direct quote needs referencing and 2% participants answered that since a paper is for an institutional use only there is no need for referencing (Fig. 5).

Fig. 5

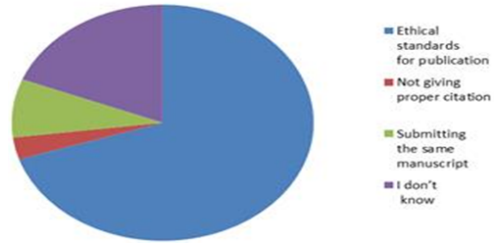


- All the materials need to be referred
- Well known facts must be referred
- Material used as direct quote needs referencing
- No need of referencing

KNOWLEDGE ABOUT PUBLICATION ETHICS

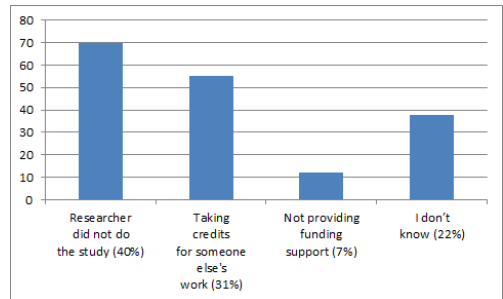
Out of 175 participants only 70% participants chose the write meaning of Publication ethics. 3% participants chose not giving proper citation, 8% participants chose submitting the same manuscript as their answers and 19% participants chose I DON'T KNOW as their answer (Fig. 6).

Fig. 6



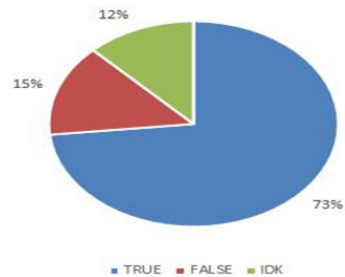
Data fabrication's definition was given with 3 other options and the participants were asked to choose the right option and only 40% participants chose the correct meaning of data fabrication. 31% participants chose taking credits for someone else's work as their answer, 7% participants chose not providing funding support as their answer. 22% participants accepted that they do not know the meaning of data fabrication (Fig. 7).

Fig. 7



73% participants answered true to the question " data falsification means the researcher did the work but changed some of the data. Is the statement true or false?" 15% participants answered false and 12% dint know about data falsification

Fig. 8



ATTITUDE TOWARDS PUBLICATION ETHICS

Table 1

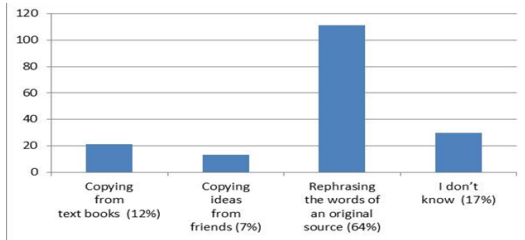
QUESTIONS	YES	NO	I dont know
One cannot write a paper without plagiarizing ?	25	33	42
Self plagiarism is not punishable because it is not harmful?	27	23	50
We can copy previous descriptions of a method because method itself remains the same?	41	24	35
Plagiarized parts of a paper maybe ignored if the paper is of great scientific value?	35	27	38

Should a paraphrased text be cited?	57	10	33
Do you know what ghost authorship is?	11	27	62

AWARENESS ON PUBLICATION ETHICS

Out of 175, 64% participants chose rephrasing the words of an original source, as their answer which is the correct answer when questioned about paraphrasing. 12% chose copying from textbooks, 7% chose copying ideas from friends and 17% chose I DON'T KNOW as their answers (Fig. 9).

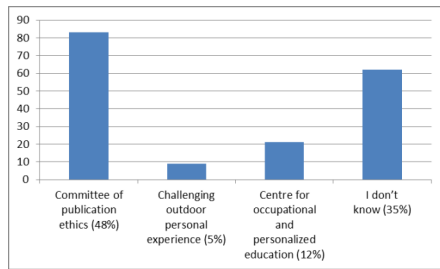
Fig. 9



When participants who answered yes to "do you know what ghost authorship is" were asked to explain it only 12 chose to explain and some of them were wrong answers. The remaining never answered.

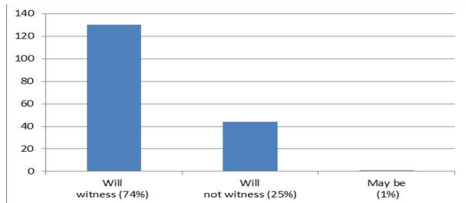
To the question "COPE stands for" 48% chose committee of publication ethics, 5% challenging outdoor personal experience, 12% chose centre for occupational and personalized education and 35% chose I DON'T KNOW clearing showcasing their lack of knowledge on the existence of COPE.

Fig. 10



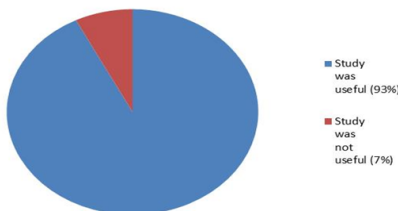
74% participants agreed to report if they witness such an act (Fig. 11).

Fig. 11



93% participants found this study useful (Fig. 12).

Fig. 12



DISCUSSION:

Plagiarism and rise in its incidence has gained attention from all parts of the world. Studies are being done to spread awareness and find out the incidence. A study conducted by Harris, 2004; Saulnier, 2005 believed that the internet makes it easier for students to plagiarize. A study was conducted Rijeka University of medicine, Croatia. In that study a questionnaire containing questions on awareness, attitude towards plagiarism was given to students. The results proved that students were aware of plagiarism and supported the fact that

plagiarism is an inappropriate and an unjustifiable act. The questionnaire was also given to teachers and it was found that few teachers were victims of plagiarism. The study conducted at SMCH showed similar results. COPE provides leadership in thinking in publication ethics, practical resources to educate and support members and offers a professional voice in current debates. Over 20 years COPE has grown to support members worldwide from all academic fields, primarily editors but also publishers and related organisations and individuals. The sad part is that its existence is not known to many people despite being in operation for the past 20 years. Through the study conducted at SMCH, we came to know that existence and support of COPE has to be brought under limelight. Data falsification and fabrication continue to haunt people and victims of these two acts were found in studies conducted across the globe. Having said this, plagiarism needs to be prevented. Prevention is possible only by strong academic integrity and principles that emphasize the importance of plagiarism and publication ethics. The institution in which a student is studying has a major role in establishing a strong foundation for the principles of research integrity. The institution also should stress the drawbacks of plagiarism and if, they witness and such act, they should strongly condemn it and punishment must be severe to prevent its recurrence.

CONCLUSION:

Every research is done with so much effort and hence suitable recognition must be given. But there are people who just earn name by plagiarizing and so it is important to spread awareness on this rapidly rising crime and every research that is being done is of great value. So it must be published in a correct manner and for this the basis of publication ethics should be known.

REFERENCES:

- Ahmed SZ, Ahmad F, Merchant MS, Nazir MA. KNOWLEDGE AND PRACTICE OF UNDERSTANDING PLAGIARISM BY STUDENTS FROM BAQAI MEDICAL UNIVERSITY. *Pakistan Journal of Public Health*. 2017;7(3):169-73.
- Shirazi B, Jafarey AM, Moazam F. Plagiarism and the medical fraternity: a study of knowledge and attitudes. *JPMA. The Journal of the Pakistan Medical Association*. 2010 Apr 1;60(4):269.
- Guraya SY, Guraya SS. The confounding factors leading to plagiarism in academic writing and some suggested remedies: A systematic review. *JPMA. The Journal of the Pakistan Medical Association*. 2017 May;67(5):767-72.
- Comas-Forgas R, Sureda-Negre J. Academic plagiarism: Explanatory factors from students' perspective. *Journal of Academic Ethics*. 2010 Sep 1;8(3):217-32.
- Poorolajal J, Cheraghi P, Irani AD, Cheraghi Z, Mirfakhraei M. Construction of knowledge, attitude and practice questionnaire for assessing plagiarism. *Iranian journal of public health*. 2012;41(11):54.
- Rets I, Ilya A. Eliciting ELT Students' Understanding of Plagiarism in Academic Writing. *Eurasian Journal of Applied Linguistics*. 2018 Sep 27;4(2):193-211.
- Kumari R, Langer B, Singh P, Gupta RK, Sharma P, Gupta R. Exploring attitude toward research and plagiarism among faculty members and senior residents in a medical school of North India: A cross-sectional study. *International Journal of Medical Science and Public Health*. 2018 Apr 1;7(4):255-60.
- 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. *PeerJ*. 2015 Jun 18;3:e1031.
- Razera D. Awareness, attitude and perception of plagiarism among students and teachers at Stockholm University. Unpublished Master's thesis. Stockholm University, Sweden. Retrieved on August, 2011;30:2013.
- Jahanfar S, Molajnejad M, Izzat D. Knowledge and Perception of Students towards Publication Ethics: A Comparative Study in Two Academic Settings. *J Clin Res Bioeth*. 2017;8(306):2.
- Pupovac V, Bilic-Zulle L, Mavrinac M, Petrovecki M. Attitudes toward plagiarism among pharmacy and medical biochemistry students-cross-sectional survey study. *Biochemia medica: Biochemia medica*. 2010 Oct 5;20(3):307-13.
- Cross M. Policing plagiarism. *Bmj*. 2007 Nov 8;335(7627):963-4.
- Bilić-Zulle L, Frković V, Turk T, Azman J, Petrovečki M. Prevalence of plagiarism among medical students. *Croatian medical journal*. 2005 Feb 1;46(1).
- Mavrinac M, Brumini G, Bilić-Zulle L, Petrovečki M. Construction and validation of attitudes toward plagiarism questionnaire. *Croatian medical journal*. 2010 Jun 15;51(3):195-201.
- Anderson MS, Horn AS, Risbey KR, Ronning EA, De Vries R, Martinson BC. What do mentoring and training in the responsible conduct of research have to do with scientists' misbehavior? Findings from a national survey of NIH-funded scientists. *Academic Medicine*. 2007 Sep 1;82(9):853-60.