

Questionable Research Practices Among Dentists

UROOJ WASEEM¹, SHEHRYAR AWAN², KHIZAR ANSAR MALIK³, DANISH JAVED⁴, SANA ZAFAR⁵, FASIH AHMAD KHAN⁶, AMINA TARIQ⁷

¹Postgraduate Resident, Department of Science of Dental Materials, Postgraduate Medical Institution, Lahore

²Demonstrator, Islam Dental College, Sialkot

³Assistant Professor, Department of Medical Education, University College of Medicine & Dentistry, University of Lahore

⁴Associate Professor, Department of Oral Pathology, Islam Dental College, Sialkot

⁵Associate professor, Department of Oral Biology, Islam Dental College, Sialkot

⁶Demonstrator, Department of Physiology, Islam Dental College, Sialkot

⁷Research coordinator, Research cell, University College of Medicine & Dentistry, University of Lahore

Corresponding author: Amina Tariq, Email: aminatariq8@gmail.com

ABSTRACT

Objective: The objective of the study is to explore the frequency of mal-practicing in terms of giving and accepting honorary authorships among dentists in private dental colleges of Lahore

Method: This descriptive cross-sectional study was conducted to collect data from dentists working in private dental colleges of Lahore regarding plagiarism practices. Three private dental colleges were targeted from where data of 95 dentists was obtained. Data was collected using questionnaire to assess the questionable research practices.

Results: Refusal on data sharing with legitimate colleagues was never practiced by majority of participants (46.1%). Addition of author(s) to a research paper who have not contributed in study was sometimes practiced by majority of participants (27.9%). Majority of participants reported that they occasionally accept honorary authorship for which you did not qualify (26.26%). Majority of participants reported that they never demanded any honorary authorship (48.41%). Refusal to give authorship to the person who had worked in the study was never practiced by majority of participants (62.11%). Majority of participants reported that they never submission without taking consent from other authors of a manuscript or grant application (65.26%). Majority of the participants reported that they never do a submission of single manuscript to more than one journals at one time (56.84%).

Conclusion: Among dentist, mal-practicing in terms of collaboration and authorship is quite low as compared to in other health professional education as per literature.

Keywords: Dental education, Ethical policies, Honorary authorships

INTRODUCTION

Scientific practices are based on the conduction of research in an accountable way.^{1,2} Adoption of a described way of conducting research is highly accountable for understanding the phenomenon which should be unbiased and accurate as it becomes a guideline for others to understand same phenomenon.³ Therefore, fabrication of data misguide the audience that fall under unethical practices of research which frequently raised a question to research practices along with developing the rationalization towards unethical practices cause self-deception as well.⁴

As a result, dubious research practices have a high prevailing rate which is quite harmful to science causing damage to the reputation.⁴⁻⁸ Eventually, dubious research practices causes the resources depletion while offering a discriminating benefit to some investigators over others, and setting a discriminated illustration for rest of investigators, particularly research students.⁷

Health professional education is not resistant of the detrimental consequences of malpractices in research. In the context of health professional education, concept of honorary authorship is prevailing which fall under questionable research practices along with other problems.^{7,9-11} Even after making the ethical committees and adding the course of ethics as a subject in curriculum, this malpractice in research is prevailing in health professional education. Hence, there is a need to explore this mal-practicing in dental education in Lahore, Pakistan. Therefore the objective of the study is to explore the frequency of mal-practicing in terms of giving and accepting honorary authorships among dentists in private dental colleges of Lahore.

METHODOLOGY

This descriptive cross-sectional study was conducted to collect data from dentists working in private dental colleges of Lahore regarding plagiarism practices. Three private dental colleges were targeted. Data of 95 dentists was obtained after briefly introducing the purpose of study to the participants. Data was collected using convenient sampling technique. Written consent was also get signed by all the participants. Dentists who were working in academia were targeted. Data was collected using questionnaire to assess the questionable research practices. Collected data was entered in SPSS version 25. Frequencies and percentages were calculated to assess the questionable research practices among dentists

RESULTS

Refusal on data sharing with legitimate colleagues was never practiced by majority of participants (46.1%). Addition of author(s) to a research paper who have not contributed in study was sometimes practiced by majority of participants (27.9%). Majority of participants reported that they occasionally accept honorary authorship for which you did not qualify (26.26%). Majority of participants reported that they never demanded any honorary authorship (48.41%). Refusal to give authorship to the person who had worked in the study was never practiced by majority of participants (62.11%). Majority of participants reported that they never submission without taking consent from other authors of a manuscript or grant application (65.26%). Majority of the participants reported that they never do a submission of single manuscript to more than one journals at one time (56.84%).

Table 1: Authorships and Collaboration practices among dentists

Collaboration and Authorship	Never	Once	Occasionally	Sometimes	Frequently	Almost always	Not applicable
Have you ever refused to share research data with legitimate colleagues	46.1%	22%	13.4%	11.5%	4%	2%	1%
Have you ever made addition of author(s) to a research paper who have not contributed in study?	10.9%	3%	25.9%	27.9%	20.6%	9.4%	2.3%
Have you ever accepted any honorary authorship for which you did not qualify	24.27%	9.47%	26.26%	21.05%	11.58%	3.16%	4.21%
Have you ever demanded honorary authorship for which you did not qualify	48.41%	5.26%	18.95%	14.74%	2.11%	6.32%	4.21%

Have you ever removed a contributor even if he/she justified authorship	62.11%	5.26%	13.68%	12.63%	3.16%	1.05%	2.11%
Have you ever made submission without taking consent from other authors of a manuscript or grant application	65.26%	5.26%	11.58%	10.53%	4.21%	1.05%	2.11%
Have you ever made a submission of single manuscript to more than one journals at one time	56.84%	9.47%	15.79%	10.53%	4.2%	2.11%	2.11%

DISCUSSION

The findings of current study revealed a higher frequency of dentists have never practiced questionable research practices in terms of honorary authorships which was not in accordance with the findings of a similar study which reported a high rate of practicing give and take of unethical honorary authorships.¹²

Due to the unlawful credit to the person who did not qualify the authorship is the outcome of unethical honorary authorship offers and demand which falsely represent the services, he/she provided to the literature.¹³ The findings of the study are not in line with the existing literature in the field of health professional education which reported the higher prevalence of mal-practices in terms of give and take of unethical honorary authorships.¹³⁻¹⁵ It was found that 17.6% corresponding authors accepted of accepting honorary authors.¹³

Current study revealed that 18.95% dentists reported that they occasionally practice refusal of deserved contributors which is quite low as compared to the findings of a research reported 58.9% health professionals practice this.¹⁶ This mal-practicing has made the research journals to as for the authors contributions as well¹⁷ which is supportive at what level is still unknown.

The findings of current study reported that frequency of providing honorary authorship is 27.9% whereas the frequency of accepting honorary authorships is 26.26% in dental community which is almost same but not in line with the findings of previous research reported the frequencies of providing and accepting honorary authorships as 60.6% and 22.7% respectively.¹²

In conclusion, among dentist, mal-practicing in terms of collaboration and authorship is quite low as compared to in other health professional education as per literature.

REFERENCES

1. Steneck NH. Fostering integrity in research: definitions, current knowledge, and future directions. *Sci Eng Ethics*. 2006;12(1):53-74.
2. Martinson BC, Anderson MS, de Vries R. Scientists behaving badly. *Nature*. 2005;435(7043):737-738. doi:10.1038/435737a.
3. Steneck NH. Introduction to the Responsible Conduct of Research. <https://ori.hhs.gov/sites/default/files/rcrintro.pdf>.
4. John LK, Loewenstein G, Prelec D. Measuring the Prevalence of Questionable Research Practices With Incentives for Truth Telling. *Psychol Sci*. 2012;23(5):524-532. doi:10.1177/0956797611430953.
5. Tijdink JK, Bouter LM, Veldkamp CLS, van de Ven PM, Wicherts JM, Smulders YM. Personality Traits Are Associated with Research Misbehavior in Dutch Scientists: A Cross-Sectional Study. *Dorta-González P, ed. PLoS One*. 2016;11(9):e0163251. doi:10.1371/journal.pone.0163251.
6. Bouter LM, Tijdink J, Axelsen N, Martinson BC, ter Riet G. Ranking major and minor research misbehaviors: results from a survey among participants of four World Conferences on Research Integrity. *Res Integr Peer Rev*. 2016;1(1):17. doi:10.1186/s41073-016-0024-5.
7. Maggio LA, Artino AR, Picho K, Driessen EW. Are You Sure You Want to Do That? Fostering the Responsible Conduct of Medical Education Research. *Acad Med*. July 2017;1. doi:10.1097/ACM.0000000000001805.
8. Fanelli D. How Many Scientists Fabricate and Falsify Research? A Systematic Review and Meta-Analysis of Survey Data. *Trengenza T, ed. PLoS One*. 2009;4(5):e5738. doi:10.1371/journal.pone.0005738.
9. Brice J, Bligh J, Bordage G, et al. Publishing ethics in medical education journals. *Acad Med*. 2009;84(10 Suppl):S132-4. doi:10.1097/ACM.0b013e3181b36f69.
10. Eva KW. How would you like your salami? A guide to slicing. *Med Educ*. 2017;51(5):456-457. doi:10.1111/medu.13285.
11. ten Cate O. Why the ethics of medical education research differs from that of medical research. *Med Educ*. 2009;43(7):608-610. doi:10.1111/j.1365-2923.2009.03385.x.
12. Artino A, Driessen E, Maggio L. Ethical Shades of Gray: Questionable Research Practices in Health Professions Education. *Academic Medicine*. 2019;94(1):76-84.
13. Wislar JS, Flanagan A, Fontanarosa PB, Deangelis CD. Honorary and ghost authorship in high impact biomedical journals: a cross sectional survey. *BMJ*. 2011;343:d6128.
14. Kornhaber RA, McLean LM, Baber RJ. Ongoing ethical issues concerning authorship in biomedical journals: an integrative review. *Int J Nanomedicine*. 2015;10:4837-4846. doi:10.2147/IJN.S87585.
15. Vera-Badillo FE, Napoleone M, Krzyzanowska MK, et al. Honorary and ghost authorship in reports of randomised clinical trials in oncology. *Eur J Cancer*. 2016;66:1-8. doi:10.1016/J.EJCA.2016.06.023.
16. Eisenberg RL, Ngo L, Boiselle PM, Bankier AA. Honorary Authorship in Radiologic Research Articles: Assessment of Frequency and Associated Factors. *Radiology*. 2011;259(2):479-486. doi:10.1148/radiol.11101500.
17. Lundberg GD, Flanagan A. New Requirements for Authors: Signed Statements of Authorship Responsibility and Financial Disclosure. *JAMA J Am Med Assoc*. 1989;262(14):2003. doi:10.1001/jama.1989.03430140121037