Training on anti-plagiarism and referencing: A step toward sensitizing and improving scientific authenticity in medical literature writing among academicians

INTRODUCTION

Scientific writing skill is vital for individuals in academia for professional growth, originating with the Philosophical Transactions of the Royal Society in 1665. Over the years, publications have become indispensable being a prerequisite for promotions and recognition. The pressing culture of “publish or perish” has been forcing many to embrace unethical practices of transgression and plagiarism in scientific pursuits.

Plagiarism is derived from the Latin term “plagiary,” which factually means “kidnapper.” Association of Medical Editors (WAME) defines plagiarism as the use of published and unpublished ideas or words and or any other intellectual property without attribution while Committee on Publication Ethics extends it to use of unreferenced published and unpublished ideas, in research grant application apart from publication. Using proper referencing and citation circumvents plagiarism. Despite being viewed in negative light plagiarism continues to flourish. The readily available resources at fingertips via Internet have escalated the problem. Possible reasons are ignorance, unclear understanding of ethical issues, nonavailability of detection software, and a fear of perishing in an academic tussle. Postgraduates must undertake scientific research and submit dissertations but are not knowledgeable about the detrimental effects of academic misconduct. The current study documents our efforts to sensitize faculty and postgraduates about plagiarism and referencing.

MATERIALS AND METHODS

A total of five consecutive sessions of 3 hours training between June 2018 to July 2019 was held. Training was focused on issues such as diverse forms of scientific misconduct amounting to plagiarism and the selection of software from a wide variety of available tools to avoid plagiarism and styles/methods of referencing. The mean pretest and posttest scores were compared using the paired t-test using IBM SPSS (Chicago, Illinois, USA) version 23. Feedback was compiled as a percentage.

RESULTS

A total of 134 participants participated in five sessions. Mean pretest score of $12.23 \pm 4.5$ improved significantly after training as evident through mean posttest scores $17.28 \pm 3.56$ and this improvement in knowledge was found to be statistically significant ($P < 0.05$). The majority 102 (76%) were post graduates and 32 (24%) were faculty members. 117 (97%) participants considered the content of the program as good to excellent. About 127 (95%) participants expressed that the time accorded to training was adequate, 132 (99%) found the content useful, while 103 (77%) responded that there was an enhancement of skills after training. About 23% expressed that more elaboration is required for learning referencing software.

DISCUSSION

With technological advancement, sharing of information has become easier and faster. One of its negative effects is a rise in academic malpractice of plagiarism. Misra et al. in 2017, reported the identification of significant published articles and predominant (41.3%) reason being duplication of text, figures, or tables and 15.2% for duplication of the entire paper. A recent multicentric cross-sectional study conducted on 786 doctors and junior faculty from eleven institutions across India found that awareness of plagiarism on knowledge score was far from being satisfactory. Our study established that there was a significant improvement in knowledge after structured training, as mirrored previously. Academic institutions emphasize mainly on research methodology training and misses out on training in sound publication ethics and means to avoid plagiarism.

Critical thinking and construction of own statements, giving due acknowledgment to primary authors must be inculcated in academia. This could be facilitated through:
a. Promoting the use of plagiarism-detecting software
b. Emphasis should be on quality and not the quantity of publications
c. Training in issues related to plagiarism and creation of a central archive of academicians and scientific writers, to guide/monitor young researchers.

At present, curriculum of medical undergraduate and postgraduate does not explicitly mentions learning on plagiarism research ethics. Our study revealed such focussed short duration training can serve the purpose of sensitizing the individuals on this subject.

CONCLUSIONS

A low pretest score with the improvement of scores after training points toward the necessity to address this lacuna in knowledge through structured training on anti-plagiarism and referencing to eliminate scientific misconduct. This study would provide a reference for other institutions to develop similar efforts to overcome hurdles toward better and more authentic medical literature writing.

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Conflicts of interest
There are no conflicts of interest.

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