PLAGIARISM

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Abstract

Plagiarism is a serious form of scientific misconduct that results from "the failure to attribute words, ideas, or findings to their true authors" which can either be unintentional or intentional. Reasons for it could broadly be divided into Individual factors, Institutional factors and Contextual factors. Production of plagiarism-free scientific writing is a shared responsibility for any medical institution and the researchers, and they must keep themselves updated about the new rules and instruction regarding it.

Introduction

The term known as "Plagiarism" was first coined in English around the year 1601 by the dramatist Ben Jonson, in order to characterize someone committing theft in literary. The term plagiarize is taken from the Latin word plagiary to kidnap. So a plagiarist is the one committing plagiarism.

Plagiarism is a serious form of scientific misconduct that results from "the failure to attribute words, ideas, or findings to their true authors" Specifically, the World Association of Medical Editors (WAME) defines plagiarism as "the use of others' published and unpublished ideas or words without attribution or permission, and presenting them as new and original rather than derived from an existing source"(1, 2)

Plagiarism may also be referred to as "adopting someone else's words, work or ideas and passing them off as one's own". Considered as the most prevalent form of scientific dishonesty discovered in research papers (3)

Committee on Publication Ethics (COPE): The COPE (4) defines plagiarism as follows: "Plagiarism ranges from the unreferenced use of others' published and unpublished ideas, including research grant applications, to submission under "new" authorship of a complete paper, sometimes in a different language. It applies to print and electronic versions.' To simplify it World Association of Medical Editors (WAME) states that plagiarism implies when 6 or more consecutive words are copied, in a continuous set of 30 words. However, the seriousness of the crime depends on the extent of the text plagiarized. (5)

History of Plagiarism is very old, In astronomy, David King (a British professor of the history of science) noticed that most theories and models proposed by the famous Polish astronomer Nicolaus Copernicus in his famous book (On the Revolutions of the Celestial Spheres) were virtually adopted from Arab scientist, Ibn-Elshatir's book. Writing reports and articles about plagiarism dates to late 1800s when the first article written by Halsted G.B was published in "Science" in 1896 titled "Complement or plagiarism" (4) From that time on, more than five hundred articles discussing plagiarism related issues have been published in "Medline" databases (6).

In an editorial, Satyanarayana says, "plagiarism begins very early in science". It perhaps starts with the student's seminar presentations done early during their professional studies. Most of the dissertations submitted by medical students are

copied from previously published material. A Croatian study showed that over 90% of medical students in their second year plagiarized to some extent when asked to write essays on given topics. (5)

The **AIM** of the present review is to provide a thorough account of plagiarism to builds awareness about all dimensions of plagiarism and the measures that a Scientific Researcher can adopt to avoid plagiarism

Magnitude of the Problem:

More than 7.1 million researchers worldwide are passionately competing to get their research published in over 25,000journals. These researchers are tense to get their work published in prestigious journals. When this pressure accompanies with insufficient time, no research skills and easily accessing information and articles available on the internet, plagiarism rate rises. In 2010 Nature Publishing issued a report on an alarmingly growing plagiarism level. Twenty-three percent of the submitted articles have been turned down due to plagiarism (3) As the intention says, plagiarism can either be unintentional or intentional. The former form of plagiarism is usually observed among students and young researchers. The latter one basically results from unawareness of the limits related to getting other sources' data and pieces of writing. No distinction can be made between intentional and unintentional plagiarism forms; both incur legal or financial penalties and can ruin a writer's prestige. Thus, it is imperative for the person to appreciate how unintentional plagiarism occurs and what measures to take to be protected against it. Any one going to submit their work has to check it in advance. (3)

Reasons of Plagiarism

As per McCabe et al. (7) reasons could broadly be divided into following factors

1. Individual factors (e.g. gender, average grade, work ethic, self-esteem),

2. Institutional factors (e.g., faculty response to

cheating, sanction threats, honorcodes) and

3. Contextual factors (e.g., peer cheating behaviors, peer disapproval of cheating behaviors, perceived severity of penalties for cheating) influence cheating behavior

Newstead et al. suggested that gender differences (plagiarism is more frequent among males), age differences (plagiarism is more frequent among younger students), and academic performance differences (plagiarism is more frequent among lower performers) are specific factors for plagiarism. (8)

One of the factors influencing plagiarism could be that researchers do not have a clear understanding of what constitutes plagiarism and how it can be avoided. According to Hansen, students don't fully understand what constitutes plagiarism. Some researchers plagiarise unintentionally, when they are not familiar with proper ways of quoting, paraphrasing, citing and referencing and/or when they are unclear about the meaning of `common knowledge' and the expression `in their own words'(8)

In our current day and age, information is easily accessed through new technologies. Internet grants easy access to an enormous amount of knowledge and learning materials. This provides an opportunity for researchers to easily cut, paste, download and plagiarise information. It has been observed that that researchers with performance goals were more likely to indulge in plagiarism behaviours than researchers who wanted to achieve mastery of a particular subject. Anderman and Midgley observed that a relatively higher performance-oriented climate increases cheating behavior; while a higher mastery-oriented classroom climate decreases cheating behavior (8) S Ï prajc etal. agreed that students are under an enormous amount of pressure from family, peers, and instructors, to compete for scholarships, admissions, and places in the job market Franklin-Stokes and Newstead found another six major reasons given by students to explain cheating behaviours: the desire to help a friend, a fear of failure, laziness, extenuating

circumstances, the possibility of reaping a monetary reward, and because `everybody does it'

Another common reason for plagiarism is the poor preparation of lecture notes, which can lead to the inadequate referencing of texts. S ï prajc et al. found out that too many assignments given within a short time frame pushes students to plagiarize. Poor explanations, bad teaching, and dissatisfaction with course content can also drive students to plagiarize. Some students cheat because they have negative attitudes towards assignments and tasks that teachers believe to have meaning but that they don't. Cheating tends to be more common in classes where the subject matter seems unimportant or uninteresting to students, or where the teacher seemed disinterested or permissive

Park mentioned students' academic skills (researching and writing skills, knowing how to cite, etc.) as another reason for plagiarism. Researchers whose first language is not English need to transition to the research culture by understanding the necessity of doing research, and the practice and skills required to do so, in order to avoid unintentional plagiarism

According to Park to some researchers, plagiarism is a tangible way of showing dissent and expressing a lack of respect for authority (9)

Some students deny to themselves that they are cheating or find ways of legitimizing their behavior by passing the blame on to others.

Other factors influencing plagiarising are temptation and opportunity. It is both easier and more tempting for students to plagiaries since information has become readily accessible with the Internet and Web search tools, making it faster and easier to find information and copy it.

In addition, some people believe that since the Internet is for all and a public domain, copying from the Internet requires no citation or acknowledgement of the source.

To some students, the benefits of plagiarising outweigh the risks, particularly if they think there is little or no chance of getting caught and there is little or no punishment if they are indeed caught.(8)

One of the factors influencing plagiarism could be also higher institutions' attitudes towards plagiarism, that is, whether they have clear policies regarding plagiarism and its consequences or not. The effective communication of policies, increased student awareness of penalties, and enforcement of these penalties tend to reduce dishonest behavior

Types of Plagiarism

Because some academic cultures may not teach about plagiarism, a few researchers genuinely do not understand the ins and outs of plagiarism this is unintentional plagiarism and understanding the types of Plagiarism will help researchers understand and avoid plagiarism.

As per Steven S. H. Chang etal (9) plagiarism is described under four headings: quotation, paraphrase, idea, and translation.

1. Quotation Plagiarism - Plagiarism in the form of direct quotation is the most obvious type, and therefore, most easily detected (and avoided). When a text is copied word for word without either a reference or quotation marks, it is plagiarism. Citing verbatim the work of another requires not only that one give credit to the source, but also that one enclose those words (phrases or sentences) in quotation marks, or present them in block quotation form, if more than a few lines (i.e. a paragraph length quotation).

2. Paraphrase Plagiarism - Plagiarism by paraphrase is trickier and probably more common. There is a variety of paraphrase-type plagiarism since a paraphrase may vary in its resemblance to the original. Thus, on the one hand, it is nearly a direct quotation, with one or two changed words. On the other hand, a more subtle form of paraphrase plagiarism occurs when a little more effort has gone into changing the original words and sentences, and the outcome more closely resembles a good

summary.

3. Idea Plagiarism -- This occurs when a writer passes off ideas, thoughts or theories from a source as if they were his own. This type of plagiarism, too, has a range, from the deliberate "borrowing" of ideas from obscure sources (readily available on the Internet!) to the omission of credit to the pioneers of a particular idea because the student does not know about them. The latter would probably be excused as "bad research" at the undergraduate level. It would not be excused at the postgraduate level. Furthermore, a reference to the original pioneers of a particular idea is unnecessary if it is considered "common knowledge" in a particular research field. Failure to cite the original source of such ideas would not be considered plagiarism. Generally, however, the arguments and finer points of a research paper do not rest on common knowledge.

4. Translation Plagiarism - In non-western settings, plagiarism is complicated further when translation is involved. For example, most students do not consider a translation of foreign words to be a direct quotation. Thus, they may justify leaving out the quotation marks. However, it is good practice to enclose translated texts in quotation marks if the translation relates the full and accurate meaning of the words and sentences in question. Translations, which are more paraphrased, may also involve plagiarism when the understanding of the original is superficial and little effort is made to express the material in one's own words, even if they are words in another language.

Another way of looking at plagiarism types could be in the list below (10):

1. CLONE–Submitting someone else's work, which is just transcribed, as his/hers own;

2. CTRL-C–Contains most of the text from a single source, without alterations;

3. FIND–REPLACE–Changing key words and phrases, but retaining a substantial part of the content of the primary sources;

4. REMIX–Paraphrasing multiple sources which are so arranged that complement each other;

5. RECYCLE–The use of their own work (if the article is already published somewhere and not cited);

6. HYBRID–Combine perfectly cited sources with the copied without citation;

7. MASH UP–Blending the copied material which is taken from multiple sources;

8. ERROR 404–Includes quoting non-existent or inaccurate source;

9. AGGREGATOR–Include proper citation of sources, but contains almost nothing of their own work;

10. RE–TWEET–Includes proper citation, but with too much text used from the original

How to prevent / stop Plagiarism

Production of plagiarism-free scientific writing is a shared responsibility for any medical institution. COPE (11) has provided guidelines for dealing with scientific misconduct including plagiarism. If the manuscript is a pure copy and paste material, then editors have the right to reject it uprightly. In such cases, the editors must inform and seek response from the head of the department and the institution in which the research was conducted. In the wake of plagiarized content being received from eminent researchers and reputed institutions, such authors should be blacklisted, and their work in future should be scrutinized with extra effort. If the manuscript is worth publishing, in terms of new ideas but with a major amount of plagiarism, the author is encouraged to rewrite and resubmit. In the case of joint publications as in manuscripts with multiple authors, all the authors are held responsible for the misconduct.

The responsibility lies on the three main pillars of the institution (12): the students/junior researchers, the experts/senior staff and the institution itself. Here are some

recommendations for each group that may be helpful in solving the increasing problem of plagiarism:

1. For students and junior researchers:

To avoid plagiarism, source credit (i.e., mentioning references) should be given whenever another person's idea, opinion, theory, facts, statistics, graphs, drawings or any piece of information is used in one's own research. If exact words from another source are to be included in a piece of writing, these words should be put in between quotation marks" "followed by crediting the source. When a scientific fact is taken from an original article, it should be written in the author's own words, not an exact copy of the paragraph from the source. This is called "paraphrasing" and does not change scientific facts. Even after paraphrasing another author's writings, the source should be credited.

2. For experts and senior researchers:

Writing an article, particularly for new junior researchers, is a difficult task, Supervisors, tutors and mentors should help their junior researchers to draw an outline for the entire writing subject. The subject can then be broken into multiple small pieces. Supervisors can then agree with the students/juniors to set a deadline for each piece and discuss it with the student/junior researcher to improve writing with each next piece.34 Scholarly writing is a skill like any other skill, and particularly for junior researchers, it requires training and practice, and for senior experts, it requires patience and time.

3. For institutions

The first essential step in preventing plagiarism is ensuring that students and researchers within the institution have enough knowledge about plagiarism, its forms, types, consequences and how to avoid committing it. It was found that students and researchers will understand the entire issue of plagiarism and will appreciate its seriousness better if it is delivered to them in interactive workshops and seminars rather than in lectures, oral advice or warnings

Several plagiarism-detection services and software programs have become available. These are helpful tools for both students and experts. Such services are very helpful in decreasing the rate of plagiarism within institutions. Plagiarism-detection software is a tool that helps to find sources that contain text similar to the submitted work.

Some commonly available software (both free and paid) are listed below

Some Plagiarism Checker Tools Available Today		
Free		**Paid**
• DupliChecker. • Grammarly. • Paperrater. • Plagiarism • Search Engine Reports	• PlagTracker • Plagium. • CopyLeaks. • Plagscan • Unplug Checker • Dustball.com	• Copyscape.com. • Grammarly.com Winner "Accuracy" • Writecheck.com. • Plagscan.com • Turnitin.com • Plagium.com • Scanmyessay • PWA Editor • Grammar and Plagiarism Checker

Conclusion

Plagiarism is a serious form of scientific misconduct that results from "the failure to attribute words, ideas, or findings to their true authors". Reasons could broadly be divided into 3 main factors - Individual factors, Institutional factors, and Contextual factors. Plagiarism is described under four headings: Quotation, Paraphrase, Idea, and Translation. We conclude that Production of plagiarism-free scientific writing is a shared responsibility for any medical institution. COPE (11) has provided guidelines for dealing with scientific misconduct including plagiarism that must be followed. We have listed a few Plagiarisms detecting software that a research can use to detect intentional and unintentional Plagiarism. A deeper understanding of the concept of Plagiarism is needed by the researcher and he must keep himself updated about the new rules and instruction regarding it.

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