

# Attitude of final year physical therapy students towards plagiarism studying in Peshawar; a cross sectional survey

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## ABSTRACT

**Introduction:** Plagiarism is obtained from Greek word 'PLAGIARIUS' which stands for word 'KIDNAPPER'. Plagiarism is often described as an unauthenticated use of someone else's words, beliefs, ideas and methods without giving the due credit to actual writer or author. Many scientific researchers are of the view that plagiarism is expanding and becoming common from the last decade. Amid different reasons of plagiarism, the perception of plagiarism among students is significant on their plagiarist behavior. Therefore, the objective of this study was to evaluate the perception of final year physical therapy students towards plagiarism.

**Materials & Methods:** This cross-sectional study was conducted among a sample of 126 final year students of total population 186 in five physical therapy institutes in Peshawar through simple Random Sampling technique during the months of November 2018 to April 2019. A validated version of ATP questionnaire was used to collect data. Permission was obtained from all heads of institutes and a consent form was also signed by students. There was no exclusion criterion. Data was analyzed using SPSS version 22.

**Results:** A total of 126 students were enrolled in this study among which 73(57.9%) were females and the rest 53 (42.1%) were males. More than half of the students 106 (84.1%) had not taken any class or seminar on plagiarism. Majority of the respondents 100 (79.4%) had never been involved in research writing before. On ATPQ scoring, 63 (50.0%) students had high score, 33 (26.2%) had moderate score and 30 (23.8%) had low score.

**Conclusion:** The current study results show positive and approving attitude of most of physical therapy students towards plagiarism. This suggested their lack of complete awareness and knowledge about plagiarism and its consequences that can affects them in future as professionals.

**Keywords:** Academic dishonesty, plagiarism, plagiarist behavior

The authors declared no conflict of interest and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All authors contributed substantially to the planning of research, questionnaire design, data collection, data analysis and write-up of the article as part of a student research team at Rehman College of Rehabilitation Sciences. The research work was supervised by Dr. Bilal Khan (PT) Assistant Professor Rehman College of Rehabilitation Science.

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## INTRODUCTION

Scientific writing is filled with constructed guidelines and rules regarding scientific misbehavior which are implemented and adopted by different institutions and medical journals across the world.<sup>1, 2</sup> Among their rules and codes of conduct the most important and complicated one is plagiarism.<sup>3</sup> Plagiarism is the most common consequential form of scientific misconduct which is often neglected and goes unnoticed by students.<sup>4</sup> Plagiarism is obtained from Greek word 'PLAGIARIUS' which stands for word 'kidnapper'.<sup>5</sup> It is often described as an unauthenticated use of someone else's words, beliefs, ideas and methods without giving the due credit to actual writer or author.<sup>1, 6, 7</sup> It is one of the common types of scientific misconduct amidst falsification and fabrication.<sup>8, 9</sup>

Many scientific researchers are of the view that plagiarism is expanding and becoming common from the last decade.<sup>10, 11</sup> This is an alarming situation for all researchers about the falsification of scientific researches.<sup>12</sup> Plagiarism is termed as an educational misconduct which involves deceitfulness, dodging, scientific dishonesty and ethical disintegration.<sup>13</sup> Plagiarism has a

pessimistic impact on educational integrity, which is the core of educational life and scientific advancement.<sup>14</sup> Amid different reasons of plagiarism, the perception of plagiarism among students is considered to be of significant importance on their plagiarist behavior or actions.<sup>15</sup> Many students do not understand the importance of refraining from plagiarism and some believed that plagiarism is only a deliberate dishonesty of authorship thus they failed to identify that they unintentionally plagiarized.<sup>11, 16</sup> A large number of investigatory studies have been conducted in various institutions all over the world to investigate different aspects of academic dishonesty, among which plagiarism is the most common.<sup>13</sup> Studies have been conducted to evaluate prevalence and attitude towards plagiarism especially in developing countries like India, Pakistan, Iran and Croatia.<sup>8, 13, 17-21</sup> A study conducted to compare plagiarism in Chinese and Australian university students reported that 30% prevalence of plagiarism was found among students.<sup>22</sup> An alarming frequency of plagiarism was found among health sciences students: nurses, pharmacy and medical, as they were not aware of plagiarism as a dishonest behavior.<sup>23, 24</sup> In India high prevalence of plagiarism was

found among medical and dental students i.e. 55.7% and 87.0% respectively.<sup>5</sup> A study conducted among pharmacy students stated that 62% students can not define plagiarism properly, which showed their lack of knowledge and unawareness.<sup>23</sup> A local study conducted among medical students showed that about 86% of students were not aware of plagiarism.<sup>21</sup> One of the local study identified that about 64.43 % unawareness of plagiarism was found among post-graduate medical students.<sup>25</sup> Studies also report lack of awareness among undergraduate students about various types of plagiarism such as self-plagiarism, whereas about 56% students do not take self-plagiarism as a serious offense.<sup>26</sup>

Different types of plagiarism have been identified from different studies which include active plagiarism, inadvertent plagiarism, self-plagiarism and cyber-plagiarism.<sup>3, 6</sup> Self-plagiarism gets very less attention and is often described as using one's own words to complete the current work or project without citing that was used previously.<sup>27-29</sup> A multi universities study stated that only 37% of the students were clear about the definition of self-plagiarism.<sup>30</sup>

Another study concluded that 87.8% students are on the view that self-plagiarism is not a serious educational offense and 77% stated that it is mostly caused due to lack of knowledge and instructions about self-plagiarism.<sup>31</sup> Deliberate or active, plagiarism is indirectly using someone else's information without recognizing the origin<sup>6</sup> which is the most common form of plagiarism.<sup>21</sup>

Inadvertent plagiarism is a type, which is defined as a weak referencing majorly caused by lack of skills.<sup>32</sup> A vast number of studies have shown students copying from online resources is considered as cyber-plagiarism or online plagiarism.<sup>3</sup>

In recent time, one of the main cause of plagiarism is the easy accessibility of internet from where students can copy and paste using online websites to complete their projects.<sup>15</sup> Another cause is that students are unaware or have less knowledge about the penalties of plagiarism.<sup>3, 33</sup> Lack of writing skills and paraphrasing skills is also one of its common cause.<sup>34</sup> Different studies showed that lack of knowledge about coping of words and citation can also result in deliberate or active plagiarism intentionally or unintentionally.<sup>35, 36</sup> Inadequate knowledge of English language and lack of support from supervisors or mentors are also reasons for students plagiarism.<sup>37</sup> Verbal, cultural and psychological aspects also play a vital role in this.<sup>38</sup> Lack of policies against plagiarism in journals is often directed to large number of online publishing of completely copied and unrestricted papers.<sup>39</sup> Similarly different reasons that have been noted by teachers are students' laziness, lack of self-productiveness, low academic performances and mismanagement of time.<sup>40</sup>

Lately from few decades, reconstructing of words and verbatim matching has been evolved in the perspective of manual and software form.<sup>37</sup> Reuse of words is a basic type of duplication which can be followed either by manual quests through Google or by software testing<sup>41</sup>, while trying to refine their journal morals, editors are progressively utilizing a more reachable anti-plagiarism programming software for checking the menu content.<sup>37</sup> Due to plagiarism detection software such as Turnitin and SafeAssign, plagiarism is found at a considerably higher rate than earlier, though these software are not guaranteed and can oversight plagiarism.<sup>42</sup>

iThenticate is another example of an anti-plagiarism check software, which is used by many leading journals.<sup>43</sup> It has an access to substantial number of scholarly material including 226,000 journals and more than 1300 publisher around the world.<sup>37</sup> The attempt of copying words and replacing them with possible synonyms to dodged anti-plagiarism software in detecting of coping words, is known as rogeting.<sup>37</sup>

Currently, students from various physical therapy universities around the world are connecting with research. They direct a research project or are involved in writing an article. Though at the same time, plagiarism is still not easily recognized as a part of scientific misconduct amongst students. Similarly, it is not clear that what is their attitude towards plagiarism due to which a large population of the students strive in their research projects which can impact student's professionalism. There is a scarcity of evidence on such important issue, hence this study will help generate data regarding the trends of attitude towards plagiarism in physical therapy students. Therefore, the objective of this study was to evaluate the attitude of final year physical therapy students towards plagiarism and to find an association between ATPQ score and independent variables including age, gender and selected institutes.

## MATERIALS & METHODS

This was a cross sectional survey completed in a duration of six months (November 2018 to April 2019). The study was conducted on the final year students of physical therapy institutes of Peshawar including Rehman college of Rehabilitation sciences (RCRS), Institute of Physical Medicine and Rehabilitation (IPMR), Northwest Institute of Health Sciences (NWIHS), Mehboob Medical Institute (MMI) and NCS University System. The total sample size was 126 which was calculated through an online calculator (openepi.com) with 95% confidence interval. Data was collected from participants through simple random sampling. For data collection a modified version of ATPQ was used. It has been validated to use in Pakistan. The ATP questionnaire consists of 22 questions, the response categories were based on three-point Likert scale (agree 3, neutral 2 and disagree 1). The total score is the sum of all 22 questions, ranging from high (>48), moderate (43-47), low (<42). Higher score on ATPQ means higher tendency towards plagiarism. All the scoring was in positive direction. After the approval of research proposal from graduate committee, permission was obtained from head of Physical Therapy institutes. Questionnaires were distributed and collected personally. Purpose of the study and questionnaire was explained to each student. Students who were willing to participant were included in the study. Data was analyzed using SPSS version 22 descriptively by mean, median and mode. Percentages and frequencies were used to present answers and graphically presented by bar chart. ANOVA was used to find association between independent variables and ATPQ score.

**RESULTS**

A total of 126 students were enrolled in this study among which, 73(57.9%) were females and 53 (42.1%) were males with mean age of 23.26 ±0.86(mean±s.d) years. Most of the students were from Institute of Physical Medicine and Rehabilitation 49 (38.9%), followed by NCS University System 29 (23.0%), Mehboob Medical Institute 20 (15.9%), Rehman College of Rehabilitation Sciences 18 (14.3%) and the least were from Northwest Institute of Health Sciences 10 (7.9%). More than half of the students 106 (84.1%) had

not taken any class or seminar on plagiarism among which 55 (51.9%) students were having highest scoring (>48) on ATPQ, whereas there were only 20 (15.9%) students who took classes or seminar on plagiarism among which 8 (40.0%) students scored highest. Among the total included students, only 26 (20.6%) were involved in medical research writing before and 100 (79.4%) respondents had never been involved in research writing before (for further details see table 1).

On ATPQ scoring, 63 (50.0%) students had high score, 33 (26.2%) had moderate and 30 (23.8%) had low score (for further details see figure 1).

Variable		Results
Gender	Male	53 (42.1%)
	Female	73 (57.9%)
Institute	IPMR	49 (38.9%)
	NCS	29 (23.0%)
	MMI	20 (15.9%)
	RCRS	18 (14.3%)
	NWIHS	10 (7.9%)
Have you ever taken any class or seminar on plagiarism?	Yes	20 (15.9%)
	No	106 (84.1%)
Have you been involved in medical research and writing?	Yes	26 (20.6%)
	No	100 (79.4%)

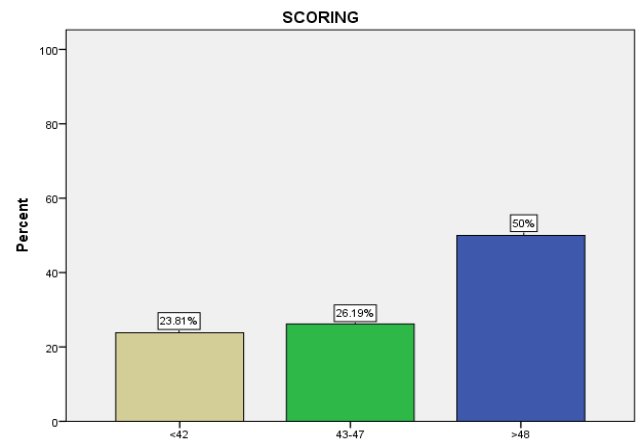


Figure 1. Figure showing ATPQ Score

By using ANOVA, there was no association found among students of different institutes and ATPQ scoring (for further details see table 2)

	Total	Low < 42	Moderate 43-47	High > 48	p-value
Institute	126	30 (23.8%)	33 (26.2%)	63 (50.0%)	
IPMR	49	14 (28.6%)	8 (16.3%)	27 (55.1%)	
NCS	29	6 (20.7%)	9 (31.0%)	14 (48.3%)	0.112
MMI	20	2 (10.0%)	6 (3.0%)	12 (60.0%)	
RCRS	18	5 (27.8%)	4 (22.2%)	9 (50.0%)	
NWIHS	10	3 (30.0%)	6 (60.0%)	1 (10.05%)	

Also, no association was found between ATPQ score and age (P= 0.241), gender (P=0.237), There and those who took class or seminar on plagiarism (P= 0.179).

## DISCUSSION

According to our knowledge this study is first of its kind carried out to assess attitude of physical therapy students towards plagiarism in our country. Our study concluded that half of the students fall in high score range on ATPQ which shows that they have a positive attitude towards plagiarism and this signifies their support of plagiarism which is an alarming situation for the advancement of Physical Therapy as a profession based on evidence. Our results are in similar to results of a previous study conducted among medical students in which 55% of students showed positive attitude towards plagiarism.<sup>18</sup> These studies were conducted among undergraduate students and majority of them do not have any formal training about plagiarism, this could be one of the reasons for their positive approval of plagiarism.

There was no association found between gender and ATPQ score in our study which is contrary to another study conducted locally showed significant results in which male ( $p=0.04$ ) do more plagiarism as compared to females.<sup>44</sup> Also, no association was found between those who took class or seminar on plagiarism and ATPQ score ( $P=0.179$ ) which was opposite to our assumption that pre-knowledge and education about plagiarism have an impact on the plagiarist behavior of students, who are just learning about research. This assumption was based on knowledge of a previous study which concluded that educational interventions could significantly affect perception of students towards plagiarism.<sup>45</sup> Studies showed significantly positive change in the behavior of participants after a delivery of a workshop on scientific misconduct mainly focusing plagiarism.<sup>1, 46</sup>

About 40.5% students responded that short deadlines of research give them the right to plagiarize. This result is inconsistent to the result of a study, in which 33% students give the same response.<sup>47</sup> In contrast to this, another study conducted in a developed country showed that majority of the students does not make short deadlines a reason for plagiarism and only 5.6% of students were agreed with this statement.<sup>26</sup> About 34.9 % students responded that they could not write a scientific paper without plagiarizing. In contrast to our result another study showed that only 12 % agreed to this.<sup>47</sup>

A study on perception of pharmacy students towards plagiarism shows that the majority of the students (70%) considered plagiarism as stealing<sup>23</sup>, whereas our findings were in contrast, where only 26.2% of students considered plagiarism as a serious offense. This lack of seriousness about plagiarism among students may be due to lack of awareness.

Most of the students (39.7%) showed lenient behavior towards novice researchers by agreeing that they should receive milder

punishment for their plagiarist behavior. Similar response was showed by majority of Canadian university students where 34.0 % agreed that young researchers should receive milder punishments.<sup>26</sup> Another issue that was identified in this study was of poor citation knowledge as half of the students (50.0%) agreed that one can copy words without citing the source. This finding was in consistent to the findings of other studies which suggests that poor referencing and citation skills also cause plagiarism intentionally or unintentionally.<sup>18, 48</sup> In the present study most of the students agreed that self-plagiarism should not be punishable as it is not harmful. Similar behavior was shown by students in a study conducted in India among medical students where majority of the students agreed that self-plagiarism should not punishable.<sup>49</sup> This showed that the students receive lenient punishments in response of self-plagiarism which make them take it very casual to copy from their own work.

## CONCLUSION

The results of current study showed positive and approving attitude of most of physical therapy students towards plagiarism. This suggested their lack of complete awareness and knowledge about plagiarism and its consequences as it will affect them in future as professionals. Students responded that short deadlines give them right to plagiarize. However, students also agreed that mild punishments should be given for plagiarist behavior.

## RECOMMENDATION

As research is a base for an advancement of any field as a profession. Therefore, at the present there is a need for proper, uniform and well disclose policies by institutions against plagiarism. Students are most of the time unaware of the consequences of dishonesty during their research projects so formal training regarding research ethics and research writing should be arranged prior to their research projects. There is also need for highlighting this issue in curriculum and separate workshops should be arranged. If these kinds of steps are not taken there will be only repetition of evidence and originality of the research will be lost.

## LIMITATION

This study includes only undergraduate students whereas in future post-graduate students could be evaluated to determine perception of plagiarism among them along with usefulness of anti-plagiarism intervention.

## REFERENCES

- Rathore FA, Fatima NE, Farooq F, Mansoor SN. Combating Scientific Misconduct: The Role of Focused Workshops in Changing Attitudes Towards Plagiarism. *Cureus*. 2018; 10.
- Luksanaprukpa P, Millhouse PV. Guidelines on what constitutes plagiarism and electronic tools to detect it. *Clinical spine surgery*. 2016; 29:119-20.
- Chen Y, Chou C. Are we on the same page? College students' and faculty's perception of student plagiarism in Taiwan. *Ethics & Behavior*. 2017; 27:53-73.
- Stapleton P. Writing in an electronic age: A case study of L2 composing processes. *Journal of English for Academic Purposes*. 2010; 9:295-307.
- Singh HP, Guram N. Knowledge and attitude of dental professionals of North India toward plagiarism. *North American journal of medical sciences*. 2014; 6:6.
- Lynch J, Everett B, Ramjan LM, Callins R, Glew P, Salamonson Y. Plagiarism in nursing education: an integrative review. *Journal of Clinical Nursing*. 2017; 26:2845-64.
- Yadav S, Rawal G, Baxi M. Plagiarism-A serious scientific misconduct. *Int J Health Sci Res*. 2016; 6:364-6.
- Mavrinac M, Brumini G, Bili Zulle L, Petrove ki M. Construction and validation of attitudes toward plagiarism questionnaire. *Croatian medical journal*. 2010; 51:195-201.
- Masic I. Plagiarism in scientific publishing. *Acta Informatica medica : AIM : journal of the Society for Medical Informatics of Bosnia & Herzegovina : casopis Društva za medicinsku informatiku BiH*. 2012; 20:208-13.
- Bati S. Plagiarism as a form of deviant behavior in the scientific research. *Bezbednost, Beograd*. 2011; 53:115-33.
- Gullifer J, Tyson GA. Exploring university students' perceptions of plagiarism: A focus group study. *Studies in Higher Education*. 2010; 35:463-81.
- Maruši A, Maruši M. Can small journals provide leadership? *The Lancet*. 2012; 379:1361-3.
- Singh N. Level of awareness among veterinary students of GADVASU towards plagiarism: a case study. *The Electronic Library*. 2017; 35:899-915.
- Heneghan E. Academic dishonesty and the internet in higher education. *Educ 300: Education Reform, Past and Present*. 2012.
- Jiang H, Emmerton L, McKaugh L. Academic integrity and plagiarism: a review of the influences and risk situations for health students. *Higher Education Research & Development*. 2013; 32:369-80.
- Adam L, Anderson V, Spronken-Smith R. 'It's not fair': policy discourses and students' understandings of plagiarism in a New Zealand university. *Higher Education*. 2017; 74:17-32.
- Javeed A, Khan A, Shafiqat Husnain Khan D, Khan S. Perceptions of plagiarism among undergraduate medical students in Rawalpindi, Pakistan 2019.
- 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; 3:e1031.
- Ramzan M, Munir MA, Siddique N, Asif M. Awareness about plagiarism amongst university students in Pakistan. *Higher education*. 2012; 64:73-84.
- Ghajarzadeh M, Norouzi-Javidan A, Hassanpour K, Aramesh K, Emami-Razavi SH. Attitude toward plagiarism among Iranian medical faculty members. *Acta Medica Iranica*. 2012:778-81.
- Javeed A, Khan AS, Khan SH, Ghauri SK. Perceptions of plagiarism among undergraduate medical students in Rawalpindi, Pakistan. *Pakistan Journal of Medical Sciences*. 2019; 35.
- Ehrich J, Howard SJ, Mu C, Bokosmaty S. A comparison of Chinese and Australian university students' attitudes towards plagiarism. *Studies in Higher Education*. 2016; 41:231-46.
- Mohamed ME, Mohy N, Salah S. Perceptions of undergraduate pharmacy students on plagiarism in three major public universities in Egypt. *Accountability in research*. 2018; 25:109-24.
- Ewing H, Mathieson K, Anast A, Roehling T. Student and faculty perceptions of plagiarism in health sciences education. *Journal of Further and Higher Education*. 2019; 43:79-88.
- Javeed A, Chaudhry Z, Hina S, Malik MN, Yaseen M. Perception and Prevalence of Plagiarism among Postgraduate Medical Students in Twin Cities of Pakistan. *South Asian Journal of Emergency Medicine*. 2019; 2:18-23.
- Bokosmaty S, Ehrich J, Eady MJ, Bell K. Canadian university students' gendered attitudes toward plagiarism. *Journal of Further and Higher Education*. 2019; 43:276-90.
- Bruton SV. Self-plagiarism and textual recycling: Legitimate forms of research misconduct. *Accountability in Research*. 2014; 21:176-97.
- Helgesson G, Eriksson S. Plagiarism in research. *Medicine, Health Care and Philosophy*. 2015; 18:91-101.
- Halupa CM, Breitenbach E, Anast A. A self-plagiarism intervention for doctoral students: A qualitative pilot study. *Journal of Academic Ethics*. 2016; 14:175-89.
- Halupa CM. Exploring Student Self-Plagiarism. *International Journal of Higher Education*. 2014; 3:121-6.
- Halupa C, Bolliger DU. Student perceptions of self-plagiarism: A multi-university exploratory study. *Journal of Academic Ethics*. 2015; 13:91-105.
- Keçeci A, Bulduk S, Oruç D, Celik S. Academic dishonesty among nursing students: A descriptive study. *Nursing Ethics*. 2011; 18:725-33.
- Beasley EM. Students reported for cheating explain what they think would have stopped them. *Ethics & Behavior*. 2014; 24:229-52.
- Heitman E, Litewka S, editors. *International perspectives on plagiarism and considerations for teaching international trainees*. Urologic Oncology: Seminars and Original Investigations; 2011: Elsevier.
- Gourlay L, Deane J. Loss, responsibility, blame? Staff discourses of student plagiarism. *Innovations in Education and Teaching International*. 2012; 49:19-29.
- Guraya SY, Guraya SS. The confounding factors leading to plagiarism in academic writing and some suggested remedies: A systematic review. 2017.
- Gasparyan AY, Nurmashev B, Seksenbayev B, Trukhachev VI, Kostyukova EI, Kitas GD. Plagiarism in the context of education and evolving detection strategies. *Journal of Korean medical science*. 2017; 32:1220-7.
- Hu G, Sun X. Institutional policies on plagiarism: The case of eight Chinese universities of foreign languages/international studies. *System*. 2017; 66:56-68.
- Jansen PA, Forget P-M. Predatory publishers and plagiarism prevention. *Science*. 2012; 336:1380-.
- Dias PC, Bastos ASC. Plagiarism phenomenon in European countries: Results from GENIUS project. *Procedia-Social and Behavioral Sciences*. 2014; 116:2526-31.
- Rathore FA, Farooq F. Plagiarism detection softwares: useful tools for medical writers and editors. *JPMA The Journal of the Pakistan Medical Association*. 2014; 64:1329.
- Halupa C, Bolliger DU. Faculty perceptions of student self plagiarism: An exploratory multi-university study. *Journal of Academic Ethics*. 2013; 11:297-310.
- Kleinert S. Checking for plagiarism, duplicate publication, and text recycling. *The Lancet*. 2011; 377:281-2.
- Shakeel S, Iffat W, Quds T, Tanveer N, Hassan S. Pervasiveness of scholastic duplicity and plagiarism among the pharmacy students in Pakistan. *International Journal of Sciences: Basic and Applied Sciences*. 2013; 12:167-75.
- DeGeeter M, Harris K, Kehr H, Ford C, Lane DC, Nuzum DS, et al. Pharmacy students' ability to identify plagiarism after an educational intervention. *American journal of pharmaceutical education*. 2014; 78:33.
- Eldin YKZ, Ela L. Implementing plagiarism awareness workshop to nursing faculty members, Damanhour University. *J Nurs Educ Pract*. 2017; 7.
- Pupovac V, Bilic-Zulle L, Mavrinac M, Petroveckii M. Attitudes toward plagiarism among pharmacy and medical biochemistry students—cross-sectional survey study. *Biochimica medica: Biochimica medica*. 2010; 20:307-13.
- 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; 60:269.
- Kirthi B, Pratap K, Padma TM, Kalyan VS. Attitudes towards plagiarism among postgraduate students and faculty members of a teaching health care institution in Telangana: A cross-sectional questionnaire based study. *International Journal of Advanced Research*. 2015; 3:1257-63.