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A Review of the Scientific Misconduct Inquiry Process, Ankara Chamber of Medicine, Turkey

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Abstract

The aim of this study is to review the inquiry process used in scientific misconduct cases in the Ankara Chamber of Medicine between the years 1998 and 2012. The violations of the “Disciplinary Regulations of the Turkish Medical Association” have been examined by keeping the names of the people, institutions, associations and journals secret. In total, 31 files have been studied and 11 of these files have been identified as related to scientific misconduct. The methods of inquiry, the decisions about the need for an investigation process, the types of scientific misconduct, and the adjudication processes have all been reported. Furthermore, the motives of researchers who made allegations, the study approaches of investigators, and the objections to the decisions about guilt and innocence have also been examined. Based on the findings obtained, the reasons for scientific misconduct and the distribution of responsibilities among the people in the inquiry process have been discussed. A major conclusion is the need to standardize the process of conducting inquiries about scientific misconduct cases for the regional chambers of medicine in Turkey.

Keywords

Ankara Chamber of Medicine; Scientific misconduct; Plagiarism; Medical ethics; Responsible conduct of research

Introduction

Science should be produced in an environment based on trust (Resnik 2011; Shamoo and Resnik 2009). The research environment can be structured so that the researchers and all other participants of the research community adhere to the principles of honesty and integrity. Most scientists and research funding agencies assume that the scientific community follows the rules of responsible conduct of research. However, there are more exceptions to this assumption than most people expect. Attempted violations of research ethics principles cause damage to the reliability of the research process (Steneck 2006).

These attempts that are damaging to good scientific practice are considered to be scientific misconduct (Beisiegel 2010). The types of scientific misconduct; or in other words, the types of irresponsible conduct of research can be classified according to the type action. Authorship infringements, fabrication, slicing, plagiarism, duplication, (in some cases self-plagiarism), scientific bias and even failure to acknowledge a funding agency are all different types of possible scientific misconducts. Throughout these, plagiarism, which is the usage of ideas that have been previously published without appropriate citations; falsification, which is using non-existing data/results during the publication process (desk research/dry lab.); and fabrication which is using materials, devices or methods in research so as to give different results are instrumental in producing much more harmful results. Especially fabrication is critically dangerous in the field of the health research area; which is research malpractice; in terms of causing ineffective treatments to be considered as safe and effective.

According to our study, most of the scientific misconduct cases are discovered by allegations. The inquiry process is very important because the respondents are considered as innocent until and unless proven guilty. Research misconduct policies should assume that researchers accept the primary responsibility for reporting and investigating allegations of misconduct. This assumption is also strongly related to the assumption that research is a profession and the profession should regulate its own conduct (ORI 2007). This does not mean that there is no need for standards and regulations; but this assumption means that researchers are aware of all the regulations about scientific misconduct; and they know that they should stay in the borders of responsible conduct of research. On the other hand, if the allegation is substantiated, then there needs to be a way to penalize or take action against the perpetrator who committed the misconduct. The penalties for the substantiated scientific misconduct cases will serve as a deterrent for similar crimes. However, if the final decision of the investigation process is that the case was caused because of honest error, or honest differences in interpreting or judging data, then there should be no penalties, maybe, except a warning.

In Turkey, the Turkish Medical Association (TMA) is one of the main organizations that monitor the clinical and research activities of physicians. It was founded in 1953 with the law bearing the number 6023 (TMA Law 1953). There are four main agencies under TMA: the local chambers in 65 provinces in Turkey; the Council of TMA; the Honorary Committee; and the Grand Congress. The Ankara Chamber of Medicine (ACM) is one of the 65 local agencies and has more than 13,000 members who are physicians living in the province of Ankara. The main responsibilities of local chambers can be listed as follows (ACM 2014):

1. To protect the rights of the physicians.
2. To speak and comment on any field of medical education.
3. To protect the medical ethics values and morals of the profession; to impose appropriate penalties on the physicians who committed irresponsible conduct of treatment or research (scientific misconduct).
4. To give advice on existing and proposed health policies.

5. To protect, improve and promote the public health conditions of Turkey.

The main responsibility for the ethical standards of the profession is controlled by the local chambers, such as the application of Medical Deontology Regulations, to professional practice and behavior. As can be seen from the main responsibilities of the local chambers list, the third responsibility is directly related to ethical issues in research and publication.

For research and publication ethics, according to the Turkish Medical Association (TMA) Disciplinary Regulations, scientific misconduct conditions that are considered grounds for temporary discontinuation from the profession are as follows (TMA 2004):

Ignoring the scientific truths while analyzing scientific data for the publication, giving authorship credit to people who did not do substantial contributions for any step of the research process, using others people's ideas or data without proper citation, and similar irresponsible ways of conducting research. Conducting research in a way that is not consistent with the specified ethical values for medical research, or not consistent with the international regulations adapted by TMA and/or the Grand National Assembly of Turkey.

Research Interests

Along with the definitions and rules mentioned above, the Ankara Chamber of Medicine (ACM) can be considered the main regional chamber where the investigations of the violations of research regulations occur. The reason for this primary position of ACM is the rich medical environment in Ankara, in which the diversity of this environment is big enough to represent the whole country. Therefore, we decided to target scientific misconduct inquiries carried out by the ACM between 1998 and 2012 (a 15-year time-frame). During the disciplinary investigation process of the Regional Chambers of Medicine in Turkey; the investigation process of every different file of complaints; one or more of the members of Chamber is/are assigned as investigators. As usual, the investigator should collect all the evidence, pro and against. At the end of the investigation process, the investigator submits his file about the inquiry to the Executive Committee; and when the Committee finds the file appropriate; the file is forwarded to the Honorary Committee to adjudicate the case.

In this study, **our main goal** is to draw an inclusive view of the state of violations of research ethics principles in the medical field in Turkey. We were also interested in finding the most common types of misconduct and the reasons and rational given for these types of misconduct. **As a final goal**, we intend to offer suggestions for ways to prevent scientific misconduct cases and improve the inquiry process of the ACM.

Methods

In this study, we used a retrospective approach. In order to calculate the number of inquiries of scientific misconduct during the time period selected, all the investigation files on cases between the years 1998 and 2012 were examined. After obtaining the necessary permission for examination of the investigation files at the ACM, an archives screening was performed.

Results

Figure 1, below, shows the proportions of all reasons for inquiries carried out by the ACM during 1998–2012. There were 11 inquiries each for the violation of an advertisement ban and a violation of publication ethics. The distribution of 11 inquiries for the violation of publication ethics was as follows: nine of them were about plagiarism, one of them was about slicing and the other one was about impropriety of authorship. Among the nine inquiry files about plagiarism, the final decision for the five of them was that there was no need for an investigation process. The final decision for two of the files about plagiarism was that the allegation was judged to be wrong; and for the other two files about plagiarism there was only a warning penalty. Moreover, for the files about slicing and impropriety of authorship, it was also decided to end up with warning penalties. Apart from the violation of publication ethics, the nature of allegations of physicians were about violation of the advertisement ban, unjust gains, financial interest shared with industry organizations, refusal to provide treatment, violation of professional cooperation, unfair business practices and operations outside expertise.

On the other hand, the number of inquiries carried out by the ACM in each year differs from each other. It is evident that there is an increase in the number of inquiries between the years 2003 and 2007. Six files in 2003; 7 files in 2004, three files in 2005, six files consecutively in 2006 and 2007; totally 28 files among 31 files distributed between the years 2003–2007.

Among the total of 31 inquiries, the highest number of inquiry files of the ACM between the years 1998–2012, concerned inquiries of the violation of the advertisement ban and the violation of publication ethics. For almost 1/3 of all the allegations, it was determined that there was not sufficient evidence for possible research misconduct to warrant an investigation. In addition, there was no need to apply any criminal proceedings for 10 out of the 31 inquiries. Moreover, 11 out of 31 inquiries concerned the violation of publication ethics, which suggests that more than 1/3 of the allegations over 15 years were issues of research ethics. For five of these 11 inquiries, it was determined that there was insufficient evidence of possible research misconduct to warrant an investigation, and there was no need to pursue any criminal proceedings for two of the 11 inquiries. For four of the 11 publication ethics inquiries, it was decided that the respondents would be given a warning as a punishment. The most severe punishment for publication ethics violations was a warning by the ACM.

As indicated before, plagiarism was the most common type of scientific misconduct among the inquiries related to the violation of publication ethics. Nine of the 11 inquiries concerned plagiarism. Consequently, the allegations of plagiarism were examined on their own.

The findings concerning the inquiry files reported above led to the consideration of the reasons for the differences between the inquiries of the various types of the violations of publication ethics. The differences between the allegations of violations of publication ethics and the differences between the final decisions of the inquiries were also considered. In addition, the possible effects of the objections of the respondents, and sometimes the complainants, on the final decision of the inquiries were considered. Moreover, the

triggering factors for the complainants to make allegations were examined. Finally, some suggestions for standardizing the inquiry processes carried out by the ACM, for both the process steps and the criteria for the investigators, have been listed.

Firstly, the similarities between the basis of the behaviors of complainants and the perpetrators during the violations of publication ethics cases in the study yielded the criteria listed below:

- Honesty in scientific communication
- Reliability in the research process
- Objectivity
- Ability to make independent decisions
- Responsibility
- Fairness
- Respect for other scientists

Researchers, whether as a reporter of a scientific misconduct or as a performer of the misconduct, face the same barriers to conducting a responsible research study. According to the inquiry cases examined at the ACM, objectivity and respect for other scientists are the most ignored ethical principles.

Table 1, below, summarizes the reason (s) for the allegations of plagiarism, which was the most common scientific misconduct type among the cases examined at the ACM.

In the allegation of plagiarism in file #20, it is hard to determine which of the articles quoted from the other when both are published at the same time. It is possible to make citations from the draft copy of the results of a study, or it is also possible to make citations from the draft copy of the article which has just been published. On the other hand, it was not clear in the allegation investigation by the ACM whether quoted anonymous information is an example of plagiarism or not. A composition or a piece of information should be named as anonymous when the owner, creator or writer of that composition/information is not known (TLS 2013), but of course the anonymity of the information should be specified. The definition of plagiarism is the usage of another person's ideas, processes, results, or words without giving appropriate credit (Bosch and Ross 2011). Consequently, the owner of the idea/process/result/word must be known if a complainant is making an allegation of plagiarism. On the other hand, especially in the most common cases of plagiarism, it is important to have a preponderance of evidence in order to prove that the crime at issue is more probably true than not. Thus, in the allegation of plagiarism in file #21, since there was insufficient information provided to allow a specific follow-up, so justifiably there was no need to initiate any inquiry process.

An important result of our study was the difference between the final decisions for files especially about plagiarism. For five out of 11 inquiries concerning violation of publication ethics cases, it was determined that there was insufficient evidence of possible research misconduct to warrant an investigation. The decision that there was no need for an

investigation is important because in such cases the Honorary Committee of the ACM does not have an opportunity to see these files. These five files concerned allegations of plagiarism. According to the Disciplinary Regulations of the TMA, the Executive Committee can decide that there is no need for an investigation in the case of an irrelevant allegation. An allegation should be considered irrelevant when it is a baseless and disprovable claim. In one of the allegations of plagiarism, the complainants reported that the author of a published article, who is the respondent, plagiarized his own statements. It is possible to prove or disprove this allegation because it is possible to examine the publication in question. As a result of such an examination, it is possible to identify the reason for the improper quotation, whether it was a result of an honest mistake or a conscious irresponsible act. According to the assignment of the duties of an inquiry, it is the investigators role to do this examination; however no investigators were assigned to this case. Moreover, the respondents should have a right to show by a preponderance of the evidence that an honest error or difference of opinion occurred. The defense of the alleged perpetrator is also important in terms of understanding their good will or willful misconduct. On the other side of this case, the notification letters that the ACM sent to complainants and respondents did not explain the reasons for the decision about not opening an investigation.

In the second example of an allegation of plagiarism that was determined not to need an investigation process, the complainant notified the ACM about a scientist's paper having no scientific content. However, the documents the complainant used as evidence of the allegation were some personal papers belonging to their personal conversations. Then, the Executive Committee of the ACM asked for a letter from the respondent explaining their defense. Instead, the respondent made a counter accusation about the complainant. As a result, the Executive Committee of the ACM did not assign any investigators and did not think that opening an investigation process was necessary. This allegation was thought to be a result of a personal "conflict of interest".

The third example of an allegation of plagiarism concerned two publications belonging to two different research groups working together in the same lab. Each of the two groups published their papers without informing each other and then made allegations about one another. This case is an example of sloppy research in which researchers inadvertently made mistakes during the steps of the research planning process. The reason for the sloppy research process is likely one or both of the following:

1. The research processes conducted in the same lab were not thoroughly reported.
2. The researchers responsible for the different steps of the research were also dealing with different responsibilities apart from the research such that there were gaps in the communication between the researchers.

In this case, the investigator stated in his report that the behaviors of both of the research groups were not an example of scientific misconduct, rather they were examples of sloppy research, and it was determined there was no need for an investigation. As a result, the Honorary Committee of the ACM did not see the file of this case. Nevertheless, the inquiry process followed appropriate procedures.

In the fourth example of alleged plagiarism, it was determined that an investigation process was not required because of lapsed time. According to the TMA Disciplinary Regulations, if the Executive Committee of the ACM does not decide to open an investigation within 2 years of the action, then no disciplinary proceeding should occur (TMA 2004). The action that was a subject of the allegation was performed in 1998, and the allegation was being made in 2006, more than 2 years later. No investigator was assigned to investigate this allegation, and the Honorary Committee of ACM did not see the file of this case, but the inquiry process followed appropriate procedures.

In the final example of alleged plagiarism in the Turkish Council of Higher Education (CHE) investigation, it was determined that no investigation needed to be opened. According to CHE's investigation, the paper by the author who was alleged to have plagiarized was considered to be a review article, consistent with the author's statement. Overall, in the cases for which it was determined that there was insufficient evidence of possible research misconduct to warrant an investigation, the list of conditions are as follows:

1. The Executive Committee made the decision that there is no need to open an investigation, without any investigation process and investigator.
2. The Executive Committee made the decision that there is no need to open an investigation after the inquiry process was initiated but without any investigators.
3. The Executive Committee made the decision that there is no need to open an investigation after the inquiry process was initiated in which an investigator has been assigned.
4. The Executive Committee allowed the respondent to defend himself directly and be defended by the investigator (two defending) before making the decision that there is no need to open an investigation.
5. The investigation process was opened by another regional Chamber of Medicine and it was carried out by the ACM later on. The Executive Committee of the ACM assigned an investigator and then made the decision that there is no need to open an investigation.

As seen from the list above, making the decision that there is no need to open an investigation depended on the degree of the complexity of the case. Nonetheless, according to the TMA Disciplinary Investigation Process; it was more favorable for The Executive Committee to open an investigation and let the respondent defend himself by assigning an investigator. Otherwise, the defense of the respondent would be asked directly by the Honorary Committee, and then no investigator will be able see this defense. It seems more agreeable to let an investigator see the defense before the members of the Honorary Committee see it.

During our study we noticed that investigators are selected among physicians who are members of the ACM. Nine of 11 publication ethics violation allegations were assigned an investigator; four of the nine were ethics experts, while the other five investigators were experts in the field at issue. However, to be an investigator to work on a publication ethics issue in a medical field, it is important to be an academican as well as a clinician. The

academic expertise is important because the investigator should be experienced in the steps of scientific research; experience in clinic settings alone would not be enough to solve ethical dilemmas about research ethics violations.

On the other hand, the lack of standardization in the process of the assignment of investigators has attracted attention. In some allegation cases, the Executive Committee of the ACM first let the respondent defend himself, and in some of the cases an investigator had first been assigned. Moreover, some investigators asked for a defense from the respondent, but some of them carried out the investigation by a review of the documents alone. As a result, it has been observed that every investigator chose to use a different method of investigation and also submitted final reports to ACM after different periods of time.

The difference in the method of considering allegations serves as a basis for the differences in outcome, such as:

- Time periods of allegations
- The final decisions of the Executive Committee
- The objections to the final decisions

In considering objections, especially the respondent's objections to the final decisions, the Executive Committee was often persuaded to change the decision. Controversially, a complainant's objections to even slight penalties also had a strong influence on changing the final decisions. Persistence in raising objections also influenced final decisions. The cases are summarized in Table 2 (below).

As shown in Table 2, both the complainants and the respondents in different inquiry processes tend to raise objections during any step of the process. First of all, according to the detailed information on the documents of inquiry processes, the common reason for objections is personal conflict between the complainant and respondents. Both sides of the dispute tend to raise objections when they are having difficulties in their personal relationships with each other. These problems in relationships between the complainants and respondents are often related to struggles to gain an academic position in which they are the closest competitor to each other or by the authorship rights and/or etc. violations in collaborative research processes. Thus, the questions below could be used to decide whether the objections can be validated:

- Is the objection made to the investigator?
- Is the objection made to the member of the Honorary Committee?
- Is the objection made to the inquiry process?
- Is the objection made to the final decision of the investigation process?

The above four questions deal with the objections to the inquiry process, the people who are involved in this process, and the final decision. Addressing these questions will be helpful in resolving the objections arising from the conflicts between the respondent and the complainant.

On the other hand, the most severe punishment for a scientific misconduct crime given by the ACM was a warning. A warning penalty is important to notify physicians or scientists not only for the sake of formality, but also to remind them that a monitoring mechanism exists for scientific misconduct initiatives. When a final decision on the case has been reached and that the misconduct has been committed, then the ACM notifies both the complainant and the respondent in writing. However, even if a misconduct crime has been committed, the ACM is not required to follow the case to see whether the respondent will retract or correct his publication containing plagiarized sections.

Discussion with Suggestions

A possible explanation for scientific misconduct is the pressure to publish in order to advance one's career. According to the results of the review we have done, the criteria (such as increasing the number of publications or publishing them in a good journal) needed to advance in an academic career and for senior academic appointments should be considered as *causa proxima* for the scientific misconduct cases. Unfortunately, the pressure caused by these criteria may predispose scientists to commit some aspect of scientific misconduct. Besides, the lack of research education of physicians is another triggering factor; because physicians spend most of their working time to cure their patients; and this generally causes them not to prioritize standards of responsible conduct of research. In addition, according to the results of our review; we had a sense that technological facilities can canalize physicians/researchers to be actors of irresponsible conduct of the research process.

It is not so easy to draw a clear distinction between examples of responsible and irresponsible conduct of research in the cases of allegations which have been made to the ACM. Mistakes based on lack of experience and made in good faith are considered as sloppy research, while the actions of those who have acted intentionally, and/or knowingly, and/or recklessly are considered as scientific misconduct (US Federal Regulations 45 CFR 93.104). The results of sloppy research and scientific misconduct both waste funds and harm scientific literature (Nylenna and Simonsen 2006). However, researchers who are intentionally dishonest deserve punishment. For example, even if there is no such inquiry of scientific misconduct conducted by the ACM, using falsified/fabricated or flawed data is totally an intentionally dishonest act. In these kinds of cases, the results of research misconduct would be more dramatic in the area of health research. Some unwanted consequences may arise such as harmful and ineffective treatments would be considered safe and effective. For that reason, research malpractice should never be considered as sloppy research and should always be punished.

Determination of the thin line between the sloppy research and scientific misconduct depends on the scientists' responsibilities, both those who conduct research and who report research misconduct in good faith. Therefore, scientists should be encouraged to report misconducts, instead of taking action against them. On the other hand, scientists should be attentive to the up-to date definitions of misconduct in research and how to report and initiate an investigation for scientific misconduct (ORI 2007). This requires a periodical review of the definitions of scientific misconduct examples and descriptions, informing researchers about the research misconduct policies at national and international level. Here,

some informative seminars about scientific misconduct cases should be organized by the Universities, Research Institutes or by research funding agencies to create awareness of the need for responsible conduct of research. On the other hand, these seminars may make researchers think that staying apart from the standards of responsible conduct of research is an important problem; and this problem is not being ignored by the universities or funding agencies. In addition to the seminars, there should be some written documents; those are simplifying the research misconduct policies such as some flowcharts. These flowcharts should be provided in every university/research institute where research is being conducted. All these mentioned ideas are different ways to prevent scientific misconduct; and Table 3 (below) summarizes these preventive methods for scientific misconduct and the ways of being responsible researchers.

Lastly, standardization of the inquiry process is both important for the research ethics values of honesty, accuracy, efficiency, and objectivity, as well as or the prevention of the rise of objections to the decisions of the ACM. According to the review of the inquiry process we had done in this study; we saw that some of the inquiries had been initiated in a different Regional Chamber of Medicine, and then they had been transferred to another Regional Chamber of Medicine to be carried out. For standardization and prevention of producing different results, an inquiry should be carried out at the Regional Chamber of Medicine where it has been initiated. In addition, according to the written rules of the ACM, if there is a need to assign an investigator for the inquiry, then this assignment should be done before The Executive Committee asks for a defense from the respondent. In this connection, we have detected non-compliance with the regulation of the TMA. On the other hand, in our opinion both the complainant and the respondent should be notified in writing by the ACM about the reasons in the case of a decision that no investigation was warranted; to be fair to both of them. Another important point is that, the timing of the allegation should be taken into consideration; because according to the regulations of the TMA, expired crimes (more than 2 years) should not be considered as sufficient information to initiate the inquiry process. However, we also detected that some expired crimes were considered to initiate an inquiry process. This causes waste of time, labor and unfortunately undermines confidence in the regulations. As a final suggestion, there should be a reminder that making an allegation that is not made in good faith or involves willful ignorance of the facts is also an example of scientific misconduct, when the complainant is being notified in writing by the ACM about the reasons for deciding no investigation is needed. This may have a strong effect on researchers to prevent them from making allegations which are not in good faith. Table 4 below lists the suggestions for facilitating improvements in the scientific misconduct investigations conducted by the ACM.

Standardization of the assignment process of investigators is also important, for the same reasons as the standardization of the inquiry process; such as the needed criteria for investigators. First of all, we think that, the investigators dealing with files about violation of research ethics should be academicians. Having an academic practice is necessary in the decision-making process of scientific misconduct issues. In addition, because these issues needed to be solved in both the ethical and related scientific expertise; for each investigation, at least one ethics expert and one expert in the field at issue should be assigned. We have witnessed that in some cases, the complainants insist on making new allegation about the

same persons/issues. For these kinds of cases, it is important to not lose the details of the file; when a new allegation is made by the same complainant about the respondent, then the investigator of the closed investigation should be assigned again. To ensure maximum benefit, the investigator should be chosen from the members whose administrative workload is least; and of course to avoid possible conflict of interest; investigators should never be employees of institutions where the complainant and the respondent are working.

Moreover, for the standardization of the assignment process of investigators; it would be useful to notify the investigators in assignment letters by using the statements below:

- Comply with scientific rules and if any case is not directly related to your expertise, then decline being assigned as an investigator.
- In the case of any circumstances that prevent making an investigation objectively, report these circumstances to the regional Chamber of Medicine and do not take the investigator position.
- Prepare the summary of cross-examination (investigator report) according to the desired format in which the conclusions and assessments are based on scientific facts.
- Ask for the defense by a respondent when appropriate.
- Avoid writing any offensive phrases in the cross-examination report

In conclusion, the regional Chambers of Medicine have a responsibility to report and investigate allegations of misconduct when committed by medical researchers. If the final decision states that misconduct has been committed by the respondent to an extent that punishment is deemed necessary, then it is their duty to decide appropriate penalties. The regional Chambers of Medicine share this responsibility with universities, research institutes, and research hospitals, and even with private companies where scientific research is being conducted. Because this responsibility is shared by more than one organization, there is also a need to create standards of research and publication ethics that will be effective and viable. According to the report on Education Strategy of the Turkish Council of Higher Education (CHE), there are five main topics necessary to standardize research ethics (CHE 2007):

1. Ethical standards for the relationship and its borders between university and society;
2. Ethical standards for the education strategies of higher education;
3. Ethical standards for scientific research and the publication process;
4. Ethical standards for the function of universities to produce a public service;
5. Ethical standards for the relationship among the members of the university;

In 2010, there were 27,364 publications by academic members of universities in Turkey, indicating there was a mean of 0.65 publications per academician (CHE 2013). This means many academicians did not publish that year. Awareness of scientific ethics is likely to improve as scientific productivity increases.

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Fig. 1.
The reasons for inquiries carried out by ACM

Table 1

Reasons for the allegations of plagiarism made to ACM

# of file	The reason for the allegation	Has the allegation been judged to be justified?/Final decision
2	<i>Quoted without permission and without giving reference</i> (The published article by complainant's mentor was related to his own research)	<i>The action which was the subject of the complaint has not been considered as plagiarism</i> (It has been decided that although the article contains many parts of the complainant's research; the way of analyzing parameters-results and the discussion points was different from the respondent's)
7	<i>Quoted without permission and without giving reference</i> (Some parts of a published article were quoted literally in the respondent's article)	<i>There was no need to open an investigation</i> (It has been decided that there was not enough evidence)
11	<i>Quoted without permission and without giving reference</i> (The respondent published an article in a weekly news magazine which contained some parts from the complainant's book without any appropriate citation)	<i>The action which was the subject of the complaint has been judged to be sloppy research</i> (The respondent's behavior was a careless one so it has been decided that warning punishment will be appropriate for his future studies)
12	<i>Quoted without permission and without giving reference</i> (The respondent published a book chapter; which was the same as one of the articles of the complainant)	<i>The action which was the subject of the complaint has been judged to be sloppy research</i> (It has been detected that a problem occurred during the printing stage of the book; so it has been decided that a warning as punishment will be appropriate for his future studies)
13	<i>Published an article without scientific content which is a duplicate copy of another one</i>	<i>There was no need to open an investigation.</i> (It has been decided that there was not enough evidence)
14	<i>Quoted without permission and without giving reference</i> (The respondents published an article with minor modifications, which was also published by the complainants 1 year earlier)	<i>There was no need to open an investigation.</i> (It has been decided that this case occurred because of the lack of a sufficient amount of communication between the clinic members)
20	<i>Quoted without permission and without giving credit</i> (The respondent published an article which was a part of a draft study in which the respondent himself was also a group member)	<i>The decision about the action which was the subject of the complaint was no requirement for a criminal sanction</i>
21	<i>Quoted without permission and without giving credit</i> (The respondent published an article which contained some plagiarized results)	<i>There was no need to open an investigation.</i> (It has been decided that there was not enough evidence)
29	<i>Quoted without permission and without giving credit</i> (The respondent published an article which was almost the same copy of another article written in a different language)	<i>There was no need to open an investigation.</i> (This case was invested by Turkish Council of Higher Education (TCHE) before and the article in question was regarded as a review article)

Table 2

Objections to the inquiries of scientific misconduct conducted by ACM

# of file	Is there any objection?	Who made the objection?	What was the objection?	Has the objection been agreed to?
2	Yes, twice	complainant	(1) Objection to the investigators final report, because the investigator is only a clinician, not an academician (2) Objection to the final decision	No
3	Yes, twice	respondent	(1) Objection to the final decision (2) Objection to the approval given to the final decision by Central Council of TMA	No
6	Yes, once	complainant	(1) Objection to the final decision; because of the finding the punishment was deemed inadequate	No
7	No	–	–	–
11	Yes, twice	complainant	(1) Objection to the decision of no need for an investigation and to absence of any investigators (2) Objection to the final decision which was no need for any punishment	Yes, both of them
12	Yes, 3 times	complainant (the first 2 objections) and respondent (last objection)	(1) Objection to the decision of no need for an investigation and to absence of any investigators (2) Objection to the final decision which was no need for any punishment because of the extenuating circumstances (3) Objection to warning penalty	Yes for the first one, no for the last 2 of them
13	No	–	–	–
14	No	–	–	–
20	No	–	–	–
21	No	–	–	–
29	Yes, once	complainant	(1) Objection to the final decision which was no need for any punishment	Yes

Table 3**Recommendations for Scientific Misconduct Prevention**

Prevention of scientific misconduct
Scientific misconduct initiatives should not be taken lightly and should not be ignored or hidden
Informative seminars about scientific misconduct cases should be organized by the University/Research Institutes
Definitions of scientific misconduct examples should be reviewed periodically
The flowcharts drawn for the rules of responsible conduct of research process should be simplified
Experienced scientists who advise young scientists should be a role model for them
Publication of scientific articles should be perceived as important for the improvement of scientific literature, not only as a criteria for academic improvements
The pressure on researchers to publish should be reduced
The pressure on researchers relating to financial issues should be reduced
Core ethical values such as objectivity and transparency should be highlighted in the domain of science

Table 4

Recommendations for standardization of the investigative process

Suggestions
An inquiry should be carried out at the Regional Chamber of Medicine where it has been initiated
The timing of the allegation should be taken into consideration; expired crimes (according to the regulation of the TMA at more than 2 years) should not be considered as sufficient information to initiate the inquiry process
Both the complainant and the respondent should be notified in writing by the ACM about the reasons in the case of a decision that no investigation was warranted
If there is a need to assign an investigator to the inquiry, then this assignment should be done before The Executive Committee asks for a defense from the respondent
Requests for making an oral defense from the respondent should not be taken into account; an oral defense should depend on the decision of the Executive Committee or investigator
When the complainant is being notified in writing by the ACM about the reasons for deciding no investigation is needed, there should be a reminder that making an allegation that is not made in good faith or involves willful ignorance of facts is also an example of scientific misconduct