# Assessment of Factors and Improving Cheating Behaviors Among $2^{nd}$ Year Medical Laboratory Students in Adigrat University, 2018

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#### Abstract

Cheating during examination is now day serious problem spatially in Ethiopia where many students sit in one class to exam. When cheating occurs in medical schools, it has serious consequences for human life, social values, and the economy. Even though, cheating on exams has existed in any department, with unknown reason, prevalence of cheater among 2<sup>nd</sup> year laboratory students were high. So that assessing factors and improving cheating behavior of the students are mandatory to create competitive graduated students. To identify factors and to improve cheating behavior action research study design was conducted among 2<sup>nd</sup> year medical laboratory student. Criterion sampling technique was used to selects sixteen cheater students among 2<sup>nd</sup> year laboratory students. To gather necessary data, we used focus group discussions, individual interview and observation and collected information by using hand writing notes. During exam different cheating methods used by students like using a system of signals, writing on hands, desks and copy the other students answer. While the compelling reasons for cheating were like hard courses, hard exams, time pressure and fear of failure. To improve cheating behavior of the student's different action strategies were taken like prepared exam by using code, arrangement sitting style during exam and sit with brainy students during class, reading and discussion. Most students were trying to done exam by themselves but their results are not good as previously. So that, we need more future action plan to avoid cheating behavior of the students. During, the next action plan we will be taken the remaining main action strategies and action evaluation we will be expected 50% of participants will be avoided their cheater behavior and done exam independently without forced by the environment.

Keywords: cheating behavior, cheating during exam, 2nd medical laboratory.

#### 1. Introduction

# 1.1 Background

Adigrat University is the youngest University from the three Universities in Tigray regional state and it is one of the third generation Universities in Ethiopia. It is the fastest growing university, currently accommodate near to 20,000 students. Adigrat University has established College of Medicine and health sciences four year later. Currently the college has seven departments (1.) Medical laboratory department open since 2009 EC under college of medicine and health science and accept around 40 students. Out of 40 students 11 students were female (2).

There is growing evidence that cheating is widespread in medical and health care schools worldwide. This has a detrimental effect on medical practice because students who cheat during medical school follow the same behavioral pattern later on in their work with patients (3). Finally, social predictors such as socioeconomic environment and educational system have been shown to have an important influence (4).

Cheating defined as the students' use of illegal activities, techniques and forms of fraud during their examination or evaluation processes, usually for the purpose of achieving better grades (5). Cheating may occur in any course-work (e.g., home-work, research-assignments, projects, and

laboratory-reports), cheating in exams is a more-significant-problem, since is it the universal-benchmark-method of assessment in all the global-higher-educational-systems (6).

College of medicine and health science is dedicated to providing quality education and released competent graduated health professions. Cheating on examination is compromises the quality of education, which is becoming the concern of most of the academic institutions (7), including ours. Especially for medical laboratory science students have given more attention to improving their cheating behaviors and Production of graduates fully equipped to achieve the required personal and professional standards.

## 1.2 Statement of the problem

Cheating on examinations in academic institutions is a worldwide issue (8). According to Donald McCabe and the International Center for Academic Integrity:

39% of undergraduate students admit cheating on a test, 62% of undergraduate students admit cheating on a written assignment, 68% of undergraduate students admit to cheating on either a test or written assignment.

Cheating during examination is now day serious problem especially in Ethiopia where many students sit in one class to exam. When cheating occurs in medical schools, it has serious consequences for human life, social values, and the economy (9).

Even though, cheating on exams has existed in any department, with unknown reason, prevalence of cheater among 2<sup>nd</sup> year laboratory students were high. This problem clearly observed during 1st semester of 2009 academic year final examination (10). Until know, Teachers assign to examine use different methods to minimize number of cheater but the cheater also use different tactic to cheating on examination . Medical laboratory science department teacher's discus and exist mechanism to control cheater during, 2<sup>nd</sup> semester of 2009 academic year examination. This mechanism was classified the students into two groups depending on their grade that have in 1<sup>st</sup> semester 2009 academic year. But by this mechanism many students have complained and also resist entering the class during examination (5). In addition, students cheating by using unusual material like watches. This indicates, by this mechanism difficult to minimize the problem and needs other appropriate mechanism. To design appropriate mechanism and to minimize the problem or to reducing cheater first identify factors associated with cheating. So that the current study deal with asses' factors and improving cheating behaviors among 2<sup>nd</sup> year medical laboratory students in Adigrat University.

# 2. Objective

## 2.1 General objective:

To asses factors and improving cheating behaviors among 2<sup>nd</sup> year medical laboratory students in Adigrat University 2018

## 2.2 Specific objective:

To identify factors associated with cheating among 2<sup>nd</sup> year medical laboratory students in Adigrat University 2018.

To improve cheating behaviors among 2<sup>nd</sup> year medical laboratory students in Adigrat University 2018

#### 3. Research Questions

- 1. What factors force 2<sup>nd</sup> year medical laboratory students towards cheating?
- 2. What are the techniques used by 2<sup>nd</sup> year medical laboratory students during cheating in class room examination?
- 3. What intervention measures have been used to improve cheating behaviors among medical laboratory 2<sup>nd</sup> year students in Adigrat university CMHS?

#### 4. Methods and materials

## 4.1 Target group

The target groups of this research were 2<sup>nd</sup> year medical laboratory sciences cheater students which were 16 in number. 2<sup>nd</sup> year students were selected because, there is no third year students in our department and we are familiar with them. Total numbers of medical laboratory students were 36 in number and we could differentiate around 16 cheater students from this class so they were better suited for our action research project.

## 4.2 Study design and period

Action research study design was conducted from January to June 2018. There was no goal of trying to generalize the endings of this study. We implemented the solutions after gathering important information from the students.

## 4.3 Sampling technique

Criterion sampling technique was used to selects cheater students among 2<sup>nd</sup> year laboratory students. We were familiar with them so we could separate who is cheater and who is not cheater, most of the cheater students given the warring by different teachers. So the cheater students voluntarily participate in this study.

#### 4.4 Data collection

To gather the necessary data, we used focus group discussions (FGD), individual interview and observation. Focus group discussions helps to develop discussion among group members, thus yielding a wide range of responses.; and member of a group was three.

To meet the purpose of the study, we were prepared three semi structured interview questions with different probing related to factors leading students to cheat, techniques used by students to cheat and methods of intervention to improve cheating behavior during examination was asked and discussed in detail.

We were also conducted individual interviews, on the same questions raised in the FGD. More ever the second research question (techniques used by students to cheat) was more discussed in detail during individual interview time. The interviewers also collected information hand writing notes.

## 5. Data Presentation and Analysis

A total of sixteen respondents 11 males and 5 females' students participated in this action research.

The findings of the study can be put into three categories in relation to our three specific research questions that we found from the interview, observation and FGD. These data collection tools were used to answer the three specific research questions as much as possible.

At the initial stage of data analysis, first we transcribed data gathered interviews from Amharic in to English; the transcribed data will be written under quotation and interpreted with thematic analysis.

### 5.1. Factors that force students towards cheating

During FGD and interview students said that "there were many factors that force us to towards cheating". Most of the participants said that "most of the time our reading style and the exam is not equivalent" in addition that "most of our exam is very difficult so we cheat to survive". Moreover two female participants responded that "we couldn't read all portion of the course due to shortage of time and leads to lack of confidence during exam". On the other hand most of students said that "We couldn't well understand during learning in the class" particularly, all female students' participants said that "we couldn't well understand molecular biology so forced to cheat". Beside, few students said that "We develop cheating behavior before join in the university and just we accept as a normal behavior". Moreover, most of students said that "our sitting styles during exam also enhance to cheat". In addition most of the participants said that "most of our examination types are multiple choices and true false moreover, by different means if we not well prepared leads to cheating". On the other hand one male student said that "If the examiner is careless I copy to get higher grade". In addition most of students said that "If the examiners are not familiar with us it is also favorable condition to cheat".

## 5.2. The techniques used during cheating in class room exam;

Large number of students during interview time said that "when one student asked the examiner and the attention of the examiner not with us so during this time we directly copy from other students answer". Beside, most of female students responded that "We sit the back or in front of the class room and used short note with soft or with a piece of paper". In addition one male student said that most of the time I sit in front of the class and used memory hold watch". Most of students also said that "by writing short note on the disk and hands". Also Most of students also said that most the time we use mobile message". In addition few students respond that "By showing finger signs for example one finger represents A if 2 B and soon". Generally all students used different techniques even in a single exam.

# 5.3 Action strategies to improve cheating behavior of students.

During FGD the participants said that "there are different action strategies to improve cheating behavior of the students". Mainly teachers and students are responsible to apply action strategies.

Teacher's responsibilities; most of the students said that "the instructor should check whether all students understand day to day session objective or not". In addition, also most of the students said that "the exam should be prepared depending on the objective of the course". Moreover, few students said that "Most of medical laboratory course are better if practical and theory part go ahead parallel". Beside most of the students said that "The exam should be hold all types of exam type". In addition, most of the students also said that "the examiner should be strictly follow up during exam and arrange sitting style like those students who haven't cheating behavior should be sitting at the back and who have cheating behavior should be sitting in front of the classroom during exam".

Student's responsibilities; most of the students said that" we must accept cheating is guilty" in addition most of the students said that "we try to change reading style and create self-confidence when we do exam". Moreover most of the students also said that "we cover all portion of the course and did exam independently". Beside most of the students said that "we should discuss the difficult portion course with cleaver students".

# 6. Major Finding and Conclusion

# 6.1 Major Finding

The major findings of this study can be put into three categories in relation to our three specific research questions that we found from the interview, observation and FGD.

# 6.1.1 factors that force students towards cheating

The researchers found the following major factors that forces the student to cheat

- fear of failure
- hard courses
- hard exams
- time pressure
- carelessness of the examiner
- sitting style during exam
- exam type
- for better grade

## 6.1.2 The techniques used during cheating in class room exam;

The researchers found the following major techniques used during cheating in class room exam.

- Using system of signals
- > writing on hands, desks, piece of paper, soft,
- using a cell phone to text
- using memory hold watch
- > Directly copy from other students answer.

# 6.1.3 Action strategies to improve cheating behavior.

The following action strategies to be taken to improve cheating behavior of the students,

- ✓ The examiner should be strictly follow up during examination.
- ✓ Those students who have higher grade should be sitting at the back during exam.
- ✓ Exam should be prepared by using code.
  - ✓ The instructor should check if all students understand day to day session objective.
  - ✓ The exam should be hold all types of exam type
  - ✓ The exam should be prepared depending on the objective of the course
  - ✓ The students try to cover read all portion of the course and did exam independently.
  - ✓ The students try to change reading style and create self-confidence when they did exam.

## 6.2. Conclusion

The researchers depending on the finding concluded that most of the students using system signals, writing on hands and piece of paper, desks, soft and using memory hold watch, using a cell phone to text and also directly copy from other students answer were frequently cheating methods. While the most of complaining reasons for cheating were hard course, hard exam, fear of failure, for better grade, carelessness of the examiner, sitting style and exam type. These study findings were correlated with the most of similar studies done in different countries (11-14).

## 7. Actions Taken/Intervention

Half of students have cheating behavior in the class. Therefore there is a need to take an action to improve students' cheating behavior in class room exam; even if, there are many action strategies, because of different reason we could only apply the following action strategies

- Students who haven't cheating behavior were sitting at the back during exam and students who cheat from other students were sitting in front of the class during exam.
- Mix different department means 2<sup>nd</sup> year Medical laboratory students with 1<sup>st</sup> year midwifery during examination.
- We established examiner committee and these committees observed the exam and gave feed back to the instructor depending on standards. Like avoid ambiguous words, including different method of tests and so on.
- We used four types of code exam. This is because we prepared two types of code exam previously but not that much improve cheating behavior so that now we used four types of code exam.
- All students switched mobile and avoided any paper, soft around them and strictly observed if use any material like watch.
- Those students, who said we didn't understand some course, help them to sit with brainy students during class, reading and discussion.

#### 8. Action evaluation

By applying the above actions during exam and results obtained by observation;

**During the first mid exam**: one student was showed aggressive behavior when he sit in front of the classroom. On the other hand most of students asked unnecessary question for the examiner.

**During the second mid exam:** only one student was avoided cheating behaviors and he done independently and got good results compare to pervious results. One student was leave from the university without any reason; this might be due to inability to survive independently. On the other hand, the other students were trying to done exam by themselves but their results are not good as previously.

Generally, by applying the above action strategies, our students cheating behavior were improved. But there is a need of more research and action to be undertaken to avoid cheating behavior of the students.

#### 9. Plan for the next action

According to this study; students are improving their cheating behaviors. In addition, we have created suitable environment for them to avoid cheating behaviors. During the current study Intervention we only applied few action strategies because of time constrain. So that, for the next time being we will be take the remaining main action strategies including other strategies which were applied by other previous studies by comparing the outcome of the intervention. So from the next action evaluation we will be expected 50% of participants will avoid their cheater behavior and do exam independently without forced by the examiner/environment.

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#### Annex I

# Students interview guide

- 1. What are the factors forced the students towards cheating?
- 2. What are the techniques used by students during cheating in class room examination?
- 3. What do expect from the teachers that will improve cheating behaviors of the students? What is expected from you to improve cheating behavior during examination?