

## Implementation Pattern of CBT UKMPPD Public Health Tutoring at the Faculty of Medicine, Cenderawasih University

Maryam Kathrien Labobar<sup>1</sup>, Samuel Piter Irab<sup>2</sup>, Martapina Anggai<sup>3</sup>, Rosmin Mariati Tingginehe<sup>4\*</sup>, Arius Togodly<sup>5</sup>, Septevanus Rantetoding<sup>6</sup>

<sup>1</sup>Master of Public Health Study Program

<sup>2,3,4</sup>Faculty of Public Health, Cenderawasih University, Jayapura

<sup>5,6</sup>Faculty of Medicine, Cenderawasih University, Jayapura

**Corresponding Author:** Rosmin Mariati Tingginehe

[evitioria.sinaga@gmail.com](mailto:evitioria.sinaga@gmail.com)

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### ABSTRACT

The aim of this research is to determine the implementation pattern of CBT Public Health Science tutoring for the Doctoral Professional Program Student Competency Test for medical students at Cenderawasih University, Jayapura. This research is a qualitative descriptive study with a total of 12 informants from the Faculty of Medicine, Uncen. The research results showed that the implementation of Public Health Tutoring had gone well but was not optimal due to the short implementation time. The Public Health Study Guidance Method required by students is the lecture method of providing material, learning modules and practice questions on the Student Competency Test for the Medical Professional Program. Tutoring student attendance tends to be low due to the long distance from home, untimely schedules and uncomfortable tutoring rooms. The very satisfactory Cumulative Achievement Index of tutoring students is not directly proportional to the low pretest-posttest of Public Health Tutoring and low Competency Test passing results.

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## INTRODUCTION

Students who have completed all stages of professional education will be graduated and will take the Student Competency Test for the Medical Professional Program (UKMPPD). The competency test component consists of a Computer based test (CBT) to assess cognitive, and an Objective Structured Clinical Examination (OSCE) to assess clinical skills. The Medical Professional Program Student Competency Test is one of the requirements for prospective doctors to obtain a competency certificate.

Competency testing is a measuring tool for assessing the quality of medical education in Indonesia (Khadafianto, 2020 ; Ichsan et al., 2023). The Student Competency Test for the Medical Profession Program has a fairly high failure rate, so it can be minimized by preparation before the exam such as tutoring. Competency Test for Students for the Medical Profession Program (Nabila et al., 2022; Sahara et al., 2019; Nazriati et al., 2022)

The Faculty of Medicine, Cenderawasih University, Jayapura, has a graduation presentation of below 50% in four consecutive periods in 2022-2023 and to overcome this, the Faculty of Medicine, Cenderawasih University, Jayapura is implementing Pre-Competency Test Tutoring. One of the difficult fields is the field of Public Health Sciences. Based on Institutional Feedback, the 2020 Medical Professional Program Student Competency Test Results, students at the Uncen Jayapura Faculty of Medicine had a low average score in the competency area which has a basis in Public Health Science compared to the national average score specifically on the topic of National Health System, Research Methodology, Statistics and Epidemiology (Doctor, 2020; Ichsan et al., 2023).

## THEORETICAL REVIEW

### *Tutoring Concept*

Tutoring is a process of providing guidance from supervisors to students by developing a conducive learning atmosphere and developing skills and study habits to achieve optimal learning results according to their talents and abilities (Munandar, 2002: 21). In general, the aim of tutoring (Syah in Fadly, 2021) is to achieve optimal academic adjustments in accordance with the student's potential. Specifically, the aim of tutoring is that students can understand themselves, students have learning skills, students are able to solve learning problems, create a conducive learning atmosphere for students, and students understand the educational environment.

### *Computer Based Test (CBT)*

Nowadays, CBT is widely used in educational institutions such as schools and universities. Computer Based Test (CBT) or Computer Based Test is a test with an implementation system using computer media. The presentation and selection of CBT questions is computerized so that each participant who takes the test gets a different question package. The CBT system was developed with the aim of minimizing cheating or question leaks that often occur during exams, preventing limitations on questions, and preventing damage to questions. From the test organizer's perspective, CBT provides benefits

including reducing implementation costs because there is no need to print questions and answer sheets on paper, distribute questions, and control questions. Meanwhile, from the examinee's perspective, the CBT system is more practical, easier and makes examinees more focused. Participants do not need a long time to fill in the answer sheet so it saves time and there are no errors in filling in personal data and question codes. There is time on the participant's computer screen so they can maximize the time available (*img.akademik.ugm.ac.id*, 2020).

### **Competence test**

Competency Test is exams held by the state or institutions collaborating with universities for professional level students at the end of their education as a prerequisite for obtaining a Competency Certificate or Professional Certificate. Several types of competency tests are Teacher Competency Test, Health Worker Competency Test, Dentist Professional Program Student Competency Test, and Doctor Professional Program Student Competency Test (*dikti.kemdikbud.go.id; ppsdmk.kemkes.go.id, in campus.quipper.com*, nd). Quoting Widnadianti (2023) Competency Tests are administered by the state or institutions in collaboration with universities for professional level students at the end of their education as a prerequisite for obtaining a Competency Certificate or Professional Certificate.

### **METHODOLOGY**

When conducting research, the method used is important (Wambrauw, 2023; Renyaan, 2023). This method is a guide in achieving or answering the research objectives (Tokang and Yumame, 2023; Ohoiwutun and Ilham, 2023). So in this research, the method used is qualitative descriptive research (Sapioper et al., 2021), which seeks to describe the implementation pattern of CBT Public Health Science tutoring for the Student Competency Test of the Medical Professional Program at the Faculty of Medicine, Cenderawasih University (Ucnen). The research was conducted at the Faculty of Medicine, Cenderawasih University, Jayapura.

The researcher is the main instrument in this research. Researchers conducted interviews with informants via zoom meetings and in person. The interviews were recorded and the researcher wrote interview transcripts. Informants in this study were selected using a purposive sampling technique, informants were people who were directly involved with various problems related to tutoring in Public Health Science CBT Student Competency Test for the Medical Professional Program, Faculty of Medicine, Uncen Jayapura. The informants interviewed were 12 (twelve) people consisting of 10 (ten) students taking part in Tutoring and 2 Lecturers related to Tutoring in Public Health Sciences.

## RESULTS

### *Informant Characteristics*

The characteristics of the informants are shown in the table as follows:

Table 1. Characteristics of Respondents

Characteristics	Total	Percent
Gender		
- Man	7	58%
- Woman	5	42%
Exam Times (students)		
- First Taker	5	50%
- Hacker	5	50%
GPA (student)		
- > 2.75	10	100%
- < 2.75	0	0

### *Themes and Categories found*

The categories found in this research are: 1) Implementation of Tutoring 2) Tutoring Methods 3) Attendance of Tutoring Students 4) Academic Information from Tutoring Students

### *Implementation of Tutoring*

The implementation of Public Health Tutoring at the Faculty of Medicine has gone quite well in terms of implementation and teaching, but there are several obstacles. The following are several excerpts from interviews with informants regarding the implementation of study tutoring: "For the guidance activities that I received on campus, I think it was very good for me, for the Public Health material, I think it was very good" (student). "In my opinion, the guidance initiated by the campus is good" "But doctor, I think there's not enough time. In my opinion, the guidance is at least 3 months before the exam. The campus has provided guidance so that we learn more optimally... there are also a lot of material, doctors, so if the time is only 1 month, it's not effective, Doctor..." (student). "The teacher was very good, very to the point, very useful for exams, very easy to understand" (student) "I think the guidance was very helpful for us who initially just found out about Public Health Science in a simple, easy way. We were guided well by Practice questions, the material discussed also appeared in the exam. "I personally am very happy, the guidance is very good, but we are the only ones who don't continue to participate in the Public Health Sciences guidance" (student). "Regarding the implementation of Tutoring for the Student Competency Test for the Medical Professional Program, if you say it is effective it is less effective and if you say the achievement is good, it is good for only a few people." (Lecturer).

### *Tutoring Methods*

An effective tutoring method for student learning in Public Health Sciences tutoring is the lecture method (providing material and modules from the lecturer) followed by practice questions on the Student Competency Test for the Medical Professional Program. The following was expressed by the

informant: "In my opinion, it would be preferable for the doctor to give the material first, then practice the questions according to the material given that day, the doctor" (student). "If possible, the guidance is given materials first, such as modules, so the day before the guidance, we are then given questions to work on" (student). "Regarding the method I use in this guidance, it is still the same as the method used during lectures, namely by teaching in one direction but that only lasts for about a quarter of the teaching I do... the rest is for us to discuss each existing problem and solve it. The function of me using the first method is for them to flash back to the material they have studied, so some of them already remember, they remember easily, some find it difficult, so the time I need is a bit longer because they have to remember what they learned previously then a question and answer session, then working on the questions together then I usually tell them to do one question at the same time as when they took the Medical Professional Program Student Competency Test" (Lecturer)

### ***Student Attendance***

Student presence in tutoring in Public Health Sciences CBT Student Competency Test for the Medical Professional Program, Faculty of Medicine, Uncen Jayapura tends to be low, from the student attendance list it was found that as many as 61 students (87.1%) attended Tutoring 1 - 3 times and 9 students (12, 9%) attended tutoring 4 - 6 times, which was influenced by several factors, both internal and external. This was expressed by the informant as follows: "The first thing is that our home is far from the campus, the doctor is far away, then most of the guidance on campus is not on-time, there are back-and-forths so a lot of time is wasted so it's not very good if the guidance was yesterday" (student). "The tutoring is on campus and the distance from home to campus is quite far and I'm sorry if the doctor is on campus, we have to go to the hospital first so we have to wait for the doctor... the schedule is not yet regular... for the doctor's classes too, if we get too hot, the room will be very hot, that's very annoying the doctor. We have been waiting for a long time, and the class atmosphere is not according to our wishes, which is also disturbing once again the doctor" (student). "For the initial meeting, student interest was quite large, but after three or four meetings and so on, the number of meetings increased, the fewer students attended... poor learning facilities also automatically affected students' learning outcomes... so in hot weather the learning atmosphere was less conducive y This also affects their learning outcomes... the classrooms are less comfortable..." (Lecturer).

### ***Academic Information***

Academic information was obtained from the Academic Section of the Faculty of Medicine, Uncen and the Student Competency Test Tutoring Team for the Medical Professional Program, Faculty of Medicine, Uncen. Academic information is explained in the following table.

Table 2. Academic Information

No	Data	Frequency (n)	Percentage (%)
1	Gender		
	- Man	28	40 %
	- Woman	42	60 %
2	GPA		
	- < 2.75	0	0
	- 2.75 - 4.00	70	100%
3	Tutoring Methods		
	- Exercises	9	12.8 %
	- Lecture Material	16	22.8%
	- Combined Methods	45	64.2 %
4	Attendance of Tutoring Students		
	- 1 - 3 x attendance	61	87.1 %
	- 4 - 6 x attendance	9	12.9 %
5	Tutoring Pretest		
	- < 60	68	97.1 %
	- 60 - 100	2	2.9 %
6	Tutoring Posttest		
	- < 60	67	95.7 %
	- 60 - 100	3	4.3 %
7	Tutoring Graduation Results		
	- Not pass	65	92.9 %
	- Passed	5	7.1 %

## DISCUSSION

The results of the interview revealed that the Public Health Science tutoring had been carried out well, with various shortcomings, but the material provided in the tutoring was quite helpful for students when Student Competency Test for the Medical Professional Program. This was revealed by research informants that apart from implementation, the tutoring instructor had delivered the material well and the material presented was in accordance with the topics that came out during the Student Competency Test exam for the Medical Professional Program. According to student informants, the Student Competency Test questions for the Medical Professional Program in Public Health are questions at a fairly difficult level and are rarely trained in the Public Health phase of clinical education and the difficult questions are related to statistical topics, research methodology and health insurance. This is in accordance with research by Ichsan et al., (2023), Public Health Science has many topics that are quite broad and students often find it difficult to study these things (Ichsan et al., 2023).

The results of this research reveal that students choose the learning method in the form of lectures providing material as a basis and followed by providing practice questions given by the teacher to strengthen students' knowledge in dealing with problems. Student Competency Test for the Medical

Professional Program. In interviews, students also revealed that it would be better if there were modules or materials provided before tutoring is carried out so that students learn from one source of material. The methods proposed by students are part of the input and process of learning.

According to Cahyaningrum's research, education in the Medical Study Program no longer uses the principle of teacher-centered learning, but uses the principle of student-centered learning. This is a combination of teacher centered learning and student centered learning. In the tutoring method in the form of lectures providing material by the lecturer, students will fully listen to the knowledge provided by the lecturer. In the question practice method, students will analyze the questions and try to find answers by seeking knowledge or are called active adult learners and active seekers (Cahyaningrum, 2019) Regarding the tutoring method, it was revealed in research by Ichsan et al., (2023) that students proposed that there be a review of Public Health Science material from lecturers on campus, when students underwent Public Health Science states, the lecturer made a donkey bridge to answer the questions. Student Competency Test for the Medical Professional Program and there is a discussion after the Public Health Science Try Out (Ichsan et al., 2023).

Based on research results from both interview data and student attendance data for Public Health Tutoring, student attendance is still relatively low. Of the six face-to-face tutoring meetings held over four weeks, 61 out of 70 students attended one to three meetings or less than 70% of meetings according to the Academic Rules of Cenderawasih Jayapura University. This is one of the things that influences the success of tutoring. The results of the interviews revealed that the factors that influenced student attendance were the long distance between home and campus, tutoring schedules that were not on time and the building where the tutoring was held was not comfortable. This is in accordance with Hermawaty's research that the learning process in guidance is largely determined by the presence of students and lecturers. In the teaching and learning process between students and lecturers, special regulations are needed for discipline and comfort in the teaching and learning atmosphere (Hermawaty, 2019).

Based on the research results, it shows that students who took part in the CBT Public Health Science Tutoring Student Competency Test for the Medical Professional Program all had a Cumulative Achievement Index (GPA) above 2.75 or a very satisfactory predicate. This is not in line with the pretest score for Tutoring in Public Health Sciences, as many as 68 out of 70 students got a score of less than 60 and 2 students got a score of more than 60. In the posttest for Tutoring in Public Health Sciences, 67 students got a score of less than 60 and as many as 3 students got a score of more than 60. The results of passing the Student Competency Test for the Doctor's Profession Program for Public Health Study Guidance students stated that as many as 5 students passed the Student Competency Test for the Doctor's Profession Program and 65 students did not pass the Student Competency Test for the Doctor's Profession Program.

It was revealed by the lecturer informant that the Cumulative Achievement Index (GPA) was obtained from the average score of 16 clinical

stages of the Medical Profession, one of which was the Public Health Sciences stage which had 4 (four) Semester Credit Units. The scores obtained in stages and then averaged into the student's Cumulative Achievement Index cannot yet represent the student's own abilities regarding Public Health Science because if we look again based on the results of the previous category of research, the implementation of tutoring, tutoring methods and the presence of students in tutoring influence the results. pretest tutoring, post test tutoring and results of passing the Student Competency Test for the Medical Professional Program.

Tutoring, especially in the field of Public Health Sciences at the Faculty of Medicine, Uncen Jayapura, is expected to build good attitudes and study habits, build discipline and high motivation, help students to have effective study skills. Students are expected to have mental readiness and the ability to face exams, especially the Student Competency Test exam for the Medical Professional Program in the field of Public Health Sciences (Anwar, 2021), A doctor as a health service needs to have competency in the field of Public Health Science because doctors will work in primary, secondary and tertiary services and are part of the National Health System.

## **CONCLUSIONS AND RECOMMENDATIONS**

The research results showed that the implementation of Public Health Science Tutoring had gone well but was not optimal due to the short implementation time. The Public Health Science Tutoring Method required by students is the lecture method of providing material, learning modules and practice questions on the Student Competency Test for the Medical Professional Program. Tutoring student attendance tends to be low due to the long distance from home, untimely schedules and uncomfortable tutoring rooms. The very satisfactory Cumulative Achievement Index of tutoring students is not directly proportional to the low pretest-posttest of Public Health Tutoring and low Competency Test passing results.

As a recommendation, tutoring, especially in the field of Public Health Sciences at the Faculty of Medicine, Cenderawasih University, Jayapura, is expected to build good attitudes and study habits, build discipline, high motivation, and help students to have effective study skills. Students are expected to have mental readiness and the ability to face exams, especially the Student Competency Test exam for the Medical Professional Program in the field of Public Health Sciences. Apart from that, a doctor as a health service needs to have competency in the field of Public Health Science because doctors will work in primary, secondary and tertiary services and are part of the National Health System.

## **FURTHER STUDY**

Evaluation research needs to be carried out to determine the effectiveness of the implementation of CBT UKMPPD Public Health Tutoring at the Faculty of Medicine, Cenderawasih University. Evaluation research utilizes systematic methods aimed at finding out the effectiveness of a program, action or policy or other object being studied when compared with the objectives or standards applied.

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