

## Perception of Medical Students in Cenderawasih University towards the Public Health Science Questions of the Computer Based Test UKMPPD

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### ABSTRACT

This study aims to find out the perception of Medical students in Cenderawasih University towards the CBT UKMPPD Public Health Science problems. This research is qualitative research with a phenomenological design with data collection techniques, namely in-depth interviews and empirical observations to determine the theme. The themes found in this study are: 1) PH questions are classified as moderate-difficult, because the topic of PH Science is broad and not studied in depth, 2) Increasing practice of PH questions, 3) PH questions are confusing because they are rarely studied during education, 4) Topics that are considered difficult are research methodologies and national health insurance, 5) The time used to answer PH questions during the CBT is considered long because they have to remember the rules, analyze and calculate, 6) Even though the presentation of questions is small, PH questions affect the passing of CBT UKMPPD.

## INTRODUCTION

In 2013, Law No. 20 of 2013 concerning Medical Education was born, stating that the Student Competency Test for the Medical Professional Program (UKMPPD) was carried out nationally before taking the oath as a doctor. (Pusparini et al., 2016) The components of UKMPPD consist of two types, namely: 1) Computer based test ( CBT ) UKMPPD to assess cognition, and 2) Objective Structured Clinical Examination (OSCE) to assess clinical skills which are carried out for four periods in 1 year, namely the February period, the May period, the August period and the November period. (Khadafianto, 2020)

The Student Competency Test for the Medical Profession Program (UKMPPD) in Indonesia has a fairly high non-graduation rate. (Nabila, Rahayu and Zubir, 2022) One of the areas that is considered difficult is the problem in the field of Public Health Sciences (PH). (Ichsan, Prakoeswa and Pramuningtyas, 2023) Knowing the perception of medical students, especially those who have participated in UKMPPD, will be a reference and input for educational institutions and medical education development institutions in the preparation of UKMPPD since the period of undergraduate education in medicine and the medical profession.

From the 2020 Institutional Feedback data of the UKMPPD Results of the Faculty of Medicine Uncen, it is known that the average score in the field of Public Health Sciences, namely the Community Medicine, National Health System, Research Methodology, Statistics, Epidemiology and Health Promotion is lower than the national average score. Based on the description above, the author is interested in conducting research on the Perception of Medical Students of Cenderawasih University Towards Public Health Science Questions for the CBT of Student Competency Exam for the Medical Professional Program (UKMPPD).

## LITERATURE REVIEW

### *Perception*

Perception is the Indonesian language absorbed from English, namely *perceostion*, which in Latin is called *percepto* and *percipio* which means the regulation, identification, and translation of information received through the five human senses to gain understanding and understanding of the surrounding environment. (Siti Ariska Nur Hasanah et al., 2024)

Perception is a subjective process by which a person is able to interpret social information and provide the basis for our understanding of the world around us. Perception involves the process of information from the environment, and personal experiences, each individual forms a unique perception of their respective social circumstances. (Siti Ariska Nur Hasanah et al., 2024)

### *Public Health Sciences*

Public health science is one of the sciences that studies health in a community. Public health science focuses on prevention. Public health consists of 2 basic words, namely healthy and Public. Healthy according to the WHO definition (1947) is a perfect state both physically, mentally and socially, and not

only free from disease or weakness. The definition of healthy continues to change from year to year. (Suparyanto and Rosad (2015, 2020) The definition of Winslow about public health is: Public health is the science and art of: preventing disease, prolonging life promoting health and efficiency through organized community effort for the:

1. Sanitation of environment
2. Control of communicable infection
3. Education of the individual in personal hygiene
4. Organization of the medical nursing services for the early diagnosis and preventive treatment of disease, and
5. Development of the social machinery to ensure everyone a standard of living adequate for the maintenance of health. (Suparyanto dan Rosad (2015, 2020)

### ***UKMPPD***

In Law (UU) number 29 of 2004 concerning Medical Practice, the Joint Committee (Indonesian Doctors Committee, Association of Indonesian Medical Education Institutions (AIPKI), Family Doctors Association and a number of other devices) agreed on a form of competency test in the context of certifying new graduates of the Faculty of Medicine (FK) or the Medical Education Study Program (PSPD), namely the Indonesian Doctor Competency Test (UKDI), which is now known as the Student Competency Test Medical Profession Program (UKMPPD). (Labatjo, Manoppo and Berhimpon, 2019a) In Indonesia since 2013, according to the Circular Letter of the Director General of Higher Education of the Ministry of Education and Culture number 88/E/DT/2013, UKMPPD has been used as an exam that includes Computer Based Test (CBT) with multiple choice questions and Objective Structured Clinical Examination (OSCE) to test attitudes, knowledge, and skills. (Labatjo, Manoppo and Berhimpon, 2019b)

Multiple Choice Questions (MCQs) in CBT UKMPPD is the most widely used test method in testing understanding of a concept of knowledge (knows or knows how (Miller, 1990)). The MCQs developed are prepared using the concept of key features, which focuses on understanding concepts that are vital for the successful handling of a health problem. These MCQs consist of a vignette or clinical scenario/case followed by a question that has 5 answer choices and only 1 answer option is the most appropriate/correct. An incorrect answer (called a distractor) can be wrong or inaccurate when compared to the answer key. MCQs with CBT consist of 150 questions based on the blueprint that has been set in this guide with a duration of 200 minutes. (Lesmono, 2015)

### ***Public Health Science in UKMPPD***

The competence of Indonesian doctors is based on the Indonesian Physician Competency Standards (SKDI) where seven competency areas are regulated, of which the seven competencies there is a basis for Public Health Sciences. (Indonesia, 2012) In the area of Competency 1, namely noble professionalism; Where there are competencies 1.4. The concept of society (including patients) regarding health and illness. Next, competency 1.19. Doctors

as part of the general public and professional society. As well as 1.20. Doctors as part of the National Health System. (Indonesia, 2012) In competency area 5: scientific foundations of medical science, there are the basics of public health science that a doctor needs to learn; competencies 5.6-5.10, namely: principles of health services (primary, secondary, and tertiary), principles of disease prevention, principles of family medicine approach, quality of health services, and socio-cultural approaches.

In the area of competence 7, namely Health Problem Management, there are many competencies that contain the basics of Public Health Sciences, namely: minimum service standards, national health system (SKN), health financing, epidemiology, health insurance, etc. (Indonesia, 2012)

## METHODOLOGY

This study is a qualitative research with a phenomenological design using primary data. This study aims to analyze students' perceptions of UKMPPD CBT questions in the PH field, by reading and analyzing the themes that arise from each question asked according to the interview guidelines. In addition to in-depth interview data, the researcher will conduct empirical observations during the interview to observe the attitudes and expressions of the informants during the interview. The data will be triangulated with academic data, namely graduation results, especially in the PH field. The theme will be analyzed by the researcher and the academic information data and observations are complementary. This research will be conducted at the Faculty of Medicine, Uncen Jayapura in March-July 2024.

The research population is all FK Uncen Jayapura students who participated in UKMPPD for the May 2024 period. The sampling technique used in this study is purposive sampling, where it will be selected based on gender, age, the number of times the UKMPPD exam (first taker/retaker), and willingness to be a research informant.

The researcher is a key instrument in this study, both researchers will conduct in-depth interviews with informants face-to-face and Zoom meetings. The interview was recorded and then transcribed in a clean verbatim way. The researcher uses content analysis by analyzing the verbatim transcript and then determining the code, sub-category, category, and theme. Informed consent is done with an explanation sheet before approval. The researcher will maintain the confidentiality of the informant's data by providing the informant code in the consent sheet and interview transcript.

## RESEARCH RESULTS

### *Characteristics Respondent*

<i>Characteristics</i>	Total	Percent
Gender		
Man	1	20%
Women	4	80%
Graduation		

Pass after one exam(first taker)	2	40%
Pass after >2 exams (retaker)	3	60%

### ***Themes and Categories found***

The themes found in this study are: 1) PH questions are classified as moderate-difficult, because the topics of PH material are broad and not studied in depth, 2) Increase the practice of PH questions, 3) PH questions are confusing because they are rarely studied during education, 4) Topics that are considered difficult are research methodologies and national health insurance, 5) ) The time used to answer PH questions during the CBT is considered long because they have to remember the rules, analyze and calculate, 6) Even though the number of questions is small, PH questions affect the graduation of CBT.

### ***The PH questions are classified as moderate-difficult because the topic of PH material is broad and is not studied in depth***

Students consider PH questions to be moderate to difficult, because PH topics are considered many and broad such as research methodologies, national health insurance, statistics, etc. According to students, this material is not studied in depth when receiving pre-clinical education (medical bachelor) and during professional education (koass).

The following is an excerpt from an interview that shows this.

"Moderate. It's because it's a lot, not because it's difficult because it's a lot. The topic is broad, not because it is difficult, then I learned that it is actually cool to understand KM because of its application, it seems that right away, yes, we can see its application." (student, female) "So, it's quite difficult, especially what I see is that for this PH question, on average, most of them are some, what we learn is there, and on average there are many things that we don't learn. At the time when the koas are on the field." (student, male) "Like BPJS, we are not taught the type of patient during the KOASS, all of that is when the exam comes out like that." (student, female)

### ***Increase the practice of PH questions, because there are many questions that come out***

In preparation for the UKMPPD CBT, students practice a lot of PH questions because the types of questions that come out during UKMPPD are quite many so by practicing the questions students can learn a lot of material at once.

The following is an excerpt from an interview that shows this.

"We practice more questions, and repeat it again, about this PH, he must develop, his knowledge. Where we have to update, continuously, and follow the guidance that, don't the one we follow, which as a result there must be a question, or new material that will be given, that's why we have to follow the guidance again, follow the guidance again. That's because this PH is always updated, and there are quite a lot of problems." (student, male) "There are a lot of topics that go out to be tested, even though what I got during college was not that much.

Yes, I see. The implication is that I did not meet in college. We met when we were in the binan, when we met the practice questions. I met him there. Only then did I finally study the material." (student, female)

***The PH question is confusing because it is rarely studied during Education***

"Maybe after studying, after the fourth time he graduated, it was indeed because I rarely met during the power period that I might study PH. We rarely feel like I am rarely accompanied by research and others. So it was a bit of a struggle at first, but after repeating it quite often, I understood the truth, the flow of the research was like that, but it was rarely exposed." (student, female)

"From my experience, the question of dikayam is really confusing, the question is longer, a bit difficult to do, especially in the sampling section, the knowledge of how to take samples, the kind of knowledge to compare with each other." (student, male)

***The topic that is considered difficult is the methodology of research and national health insurance***

For students, the topic that is considered difficult in the field of PH is the topic of research methodology and national health insurance, because this topic has many and wide topic derivatives and students find it difficult to learn many topics in a short time.

"A difficult topic is research, approximately if it is done for more than a minute because we have to think we want to read the question, we know that the question is longer than the others because in taking a research case where we are invited to think about determining what type, where is the direction of this question, for this research. (student, male)

"If it is related to the topic that is still difficult in the field of PH, it is BPJS." (student, female)

"If in CBT it's like BPJS, the class, independent patients, like that, we find it difficult because we are not taught during Koass" (student, female)

"IKAIM is indeed difficult in the research method section because there are many branches and there are also several research methods from the research method. So it's a bit difficult there, too." (student, female)

***The time used to answer PH questions during CBT is considered long because they have to remember the rules, analyze and calculate***

In the UKMPPD exam, it is known that the questions in the field of PH are narrated quite long in the vignette of questions, especially if the questions are in the form of case scenarios, often a long time is needed to analyze the questions and work on calculation problems, both research methodology calculations and statistics.

"If it's about PH, it's a long doctor, not to mention that when it comes to calculations, there are tables, there is research, so to be honest, if it's about PH, it's more than a minute to doc" (student, female)

"Yes, it is more than a minute for questions in PH because we have to think We want to read, we know that the problem is longer than others because in taking research cases where we are invited to think about determining what type" (student, male)

***Although the number of questions is small, the PH questions affect the passing CBT UKMPPD.***

Of the 150 questions in UKMPPD CBT, the PH field often amounts to 10%-15% of 150 questions where the proportion is quite small, but according to students, the correct score of the PH questions still has an influence on the passing of UKMPPD CBT because if more than 50% of the questions can be correct, it will add to the correct score points.

This is confirmed in the following interview excerpt:

"PH scores also have an impact on the overall CBT score" (students, males)

"I see that it has an effect because there are some friends who I pay attention to believe that the system is all good, some are 70% on average, but health insurance and research methodology also have a role if the overall presentation effects. If PH can be 50% correct, it can help graduation scores" (students, women)

"In my opinion, it also has an impact, no matter how many questions the doctor wants, even if it's true, 1 is also very good, doctors affect our grades as well." (student, female)

## **DISCUSSION**

UKMPPD is a competency exam that is expected to produce doctors as health workers who have quality knowledge, skills, and ethics. One of the fields tested in UKMPPD is the field of Public Health Sciences which is closely related to primary services. (Ichsan, Prakoeswa and Pramuningtyas, 2023)

This research is important because with this research we can find out the perception of students of the Faculty of Medicine, Cenderawasih University Jayapura towards CBT questions, especially in the field of PH in order to evaluate PH both in pre-clinical education, professional education, and preparation ahead of UKMPPD,

The results of this study show that students' perception of the UKMPPD CBT questions in the PH field is dynamic, from the level of difficulty of PH questions, there are students who say it is moderate but there are also students who say it is difficult. In terms of UKMPPD preparation, there are students who say that repeated practice questions in the field of PH will be helpful when learning many topics. The theme found in this study also shows that research methodology and health insurance are topics that are considered difficult by students because during college students do not study the topic in depth.

The next theme found is that a longer time is needed in answering the UKMPPD CBT questions, this is because the questions have a long narrative, and take time to analyze, especially questions that require calculation skills. This requires careful exam preparation so that students can maximize in terms of time and knowledge when working on PH questions at the CBT UKMPPD. Next, with a small proportion, the PH questions have an influence on the passing score of CBT UKMPPD so it is hoped that if the students can answer the questions with the right answers, it will increase the possibility of passing UKMPPD.

## **CONCLUSIONS AND RECOMMENDATIONS**

The conclusion of this study is about the perception of students of the Faculty of Medicine, Cenderawasih University towards public health science questions, the Student Competency Exam for the Medical Profession Program is a medium-difficult PH question, students prepare themselves by increasing the practice of PH questions, PH questions are confusing because they are rarely studied during education, topics that are considered difficult are research methodologies and national health insurance, the time used to answer questions PH during the CBT exam is long. Although the number of questions is small, the PH questions affect the passing of CBT UKMPPD.

## **ADVANCED RESEARCH**

The limitations of this study are that the number of informants willing to be involved in research is small and the field of science which is studied in this research is one of the many areas tested in UKMPPD. So the suggestion from the researcher for the next research is to increase the number of informants and research student perceptions related to other fields of science in UKMPPD.

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