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The Relationship between Academic Achievement at Undergraduate Stage and Professional Stage with Objective Competency Test Scores Structured Clinical Examination (OSCE): Study of Abdurrab University Medical Students

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ABSTRACT

Objective Structured Clinical Examination (OSCE) is a form of competency test which aims to ensure that psychomotor abilities and skills are in accordance with doctor competency standards . This exam is taken by all prospective doctors who have completed undergraduate and professional education , marked by achieving a Cumulative Achievement Index (GPA). The 2018 OSCE Medical Professional Program Students Competency Test (UKMPPD) results experienced a decline compared to the previous year . The decrease in the UKMPPD OSCE pass rates is one of the evaluation materials for the students learning process at both undergraduate and professional stages . To find out whether there is a relationship between undergraduate and professional GPA with UKMPPD OSCE scores at Abdurrab Universities. This research uses an observational study design with a Retrospective Cohorts analytical approaches.The research was conducted on Abdurrab University students who had taken the OSCE UKMPPD. The sampling technique is a total sampling technique with references to the first participants . Data were analyzed using the Spearman Rank correlation test. There is a significant relationships between undergraduate GPA and professional level GPA (p- value 0.00), correlation coefficient 0.56. There is a significant relationships between undergraduate GPA and UKMPPD OSCE scores (p- value = 0.00), correlation coefficient 0.54. There is a relationship between professional stage GPA and UKMPPD OSCE scores (p- value = 0.00), correlation coefficient 0.34. Furthermore , there is a significant relationships between the length of study period at the undergraduate and professional stages and passing the UKMPPD OSCE (p-value 0.00) and a correlation coefficient of -0.37 and -0.25. Cumulative Achievement Index (GPA) at undergraduate and professional levels can be used as a reference for passing UKMPPD OSCE.

1. BACKGROUND

Doctors as health practitioners must have clinical skills that are qualified and reliable in theory and medical ethics (National Committee for Medical Professional Program Student Competency Test [PN-UKMPPD], 2015). However, this has not been reflected in the many complaints of indiscipline from Indonesian doctors. From 2006 - 2016, 381 of the largest number of complaints of indiscipline were recorded from general practitioners, some of which were due to doctors' clinical skills which were still considered poor (Zaura Anggraeni, 2017).

Even though clinical skills have been tested through a competency test before being sworn in as a doctor (Indonesian Medical Council, 2012). Simultaneously with the enactment of law number 9 of 2004 concerning medical practice, the Indonesian Doctors Committee, the Association of Indonesian Medical Education Institutions and a number of other institutions made an agreement namely that the form of competency test for doctors in Indonesia is the Indonesian Doctor Competency Test (UKDI) or what is now known as UKMPPD (Republic of Indonesia, 2004; PN-UKMPPD, 2015).

The Medical Professional Program Student Competency Test (UKMPPD) is a test used as a reference standard in an effort to guarantee the quality of prospective doctors nationally and comprehensively (PN-UKMPPD, 2015). Objective Structured Clinical Examination (OSCE) is a doctor's competency test in the form of a planned and structured assessment of clinical skills in a simulated environment (Khan et al., 2013).

The UKMPPD OSCE pass rate at the Faculty of Medicine and Health Sciences (FKIK) Abdurrab University tended to decrease compared to 2018. The UKMPPD OSCE pass rate in 2019 was only 75.47%, while the achievement in 2017 was 87.72%. (PN-UKMPPD, 2015). OSCE results describe the clinical skills abilities of UKMPPD participants. Many factors influence the UKMPPD OSCE passing score. Based on the description above, a study is needed to examine the relationship between academic achievement at the undergraduate stage and the professional stage with the UKMPPD OSCE FKIK Univrab scores.

2. THEORETICAL STUDY

Vertigo is a wrong perception of movement, both within the patient and towards the surrounding situation, as a result of not being able to move balance input vestibular. Vertigo is briefly defined as dizziness, which is an unpleasant, moving illusion also known as the condition of a person appearing to move in relation to their environment (subjective vertigo) or an environment that appears to be moving even though it is not (objective vertigo). (Ahmad, A., all, 2015). The sensation of movement that is felt can be like spinning, moving back and forth and feeling like falling. (Azim Majumder, A, 2019). There are 2 classifications of vertigo, namely central (disorders of the brain stem or cerebellum) and peripheral (disorders of the inner ear or eighth cranial nerve). (Begam, AAA, & Tholappan, A. 2018). One of the most common causes of vertigo is Benign. Paroxysmal Position Vertigo (BPPV). (Febrianti, W., 2017). The most common form of BPPV occurs when the otoliths of the macula fall into the lumen of the posterior semicircular canal responding to the effects of gravity. (Khan, K. Z, all, 2013). Diagnosis of BPPV can be made on the basis of history and examination. Patients usually report

recurrence due to certain movements such as lying face down or getting out of bed, turning in bed, looking up or straightening after bending over. (Febrianti, W., 2017). BPPV patients are diagnosed with the Dix-Hallpike test. (Khan, K. Z, all, 2013). BBPV can recur and last for a few seconds is usually successful with head position maneuvers. The effectiveness of the maneuver depends on the correct diagnosis of the canal, the cupula involved or not, the single or multiple canals affected and the side of the structure. The acute emergency patient was treated with physical therapy using the canalith repositioning maneuver. (Khan, K. Z, all, 2013). Following is a case report about Benign Paroxysmal Positional Vertigo (BPPV) which with the provision of pharmacological and non- pharmaceutical therapy gives good results.

3. CASE REPORT

As health practitioners, doctors must have clinical skills that are qualified and reliable both in theory and medical ethics (National Committee for Student Competency Test for Medical Professional Programs [PN-UKMPPD], 2015). Competency testing is a collection of various methods for measuring the abilities of a student (Republic of Indonesia's Representative Council [DPR RI], 2018). The Medical Professional Program Student Competency Test (UKMPPD) is a test used as a reference standard in an effort to guarantee the quality of prospective doctors nationally and comprehensively (PN-UKMPPD, 2015).

The Medical Professional Program Student Competency Test is divided into two types of exams, namely UKMPPD Computer Based Test (CBT) and UKMPPD Objective Structured Clinical Examination (OSCE) (PN-UKMPPD, 2015). Objective Structured Clinical Examination (OSCE) is a form of clinical skills assessment that is assessed in a planned and structured manner in a simulated environment (Khan et al , 2013). Each task given represents an actual clinical situation, so that the OSCE assessment is able to provide a relevant picture of how a doctor applies clinical skills in real life (Medical Council of Canada , 2019). Therefore, OSCE became the main pioneer in assessing the standardization of doctors' clinical skills in Indonesia (Swanwick , 2010).

OSCE results describe the clinical skills abilities of UKMPPD participants. Clinical skills can be improved through two things, namely education and continuous training (Yudkowsky , 2009). Clinical skills are acquired from the undergraduate stage to the professional stage and are part of the assessment of student academic achievement. Students' clinical skills abilities at the educational stage can be seen in the form of a Cumulative Achievement Index (GPA) as the final result of student academic achievement (Nasir, 2015). Many factors influence the UKMPPD OSCE passing score. Index

Academic Achievement (GPA) is one of the factors that has a high correlation in passing UKMPPD OSCE scores (Pusparini et al, 2015). This is illustrated by the results of previous research where there is a significant relationship with moderate strength and a positive pattern, which means that the higher the GPA, the higher the UKMPPD OSCE passing score (Manuputty et al . al 2015; Lestari et al , 2016; Febrianti et al , 2017).

4. METHOD

Data collection was carried out on 17 March–14 April 2020. The sample was students from the 2008–2013 class who had undergone the UKMPPD OSCE. The data assessed is the undergraduate GPA, professional GPA and UKMPPD OSCE scores. The data was taken in accordance with the research flow and upholds research ethics, namely it was obtained officially from educational institutions. The sampling technique used was total sampling taking into account inclusion criteria and exclusion criteria . The total number of samples taken was 239 people from a total population of 394 people. Not all populations qualify to be a sample. Some samples had to be excluded because they did not meet the established criteria and some students had to be dropped out because of incomplete data. A total of 5 students were selected randomly, then the sample was interviewed to explore the reasons why students were late in completing their education in a semi-structured manner.

RESULTS AND DISCUSSION

1. Univariate Analysis

Descriptive Gender Characteristics

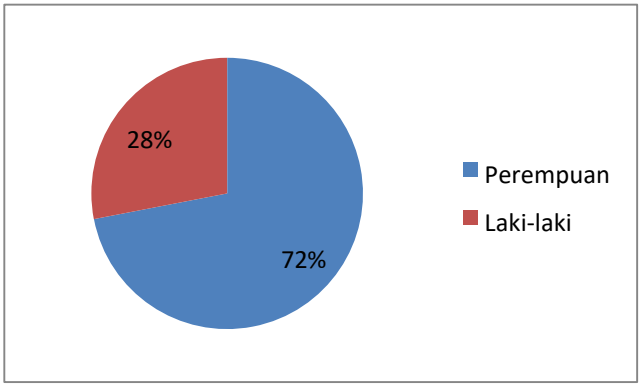

Figure 1. Frequency Distribution of Following Gender Comparisons UKMPPD OSCE

The gender ratio of UKMPPD OSCE participants was 72% (172 people) and 28% were men (67 people). This distribution can be seen that more than half of the participants who took part in the UKMPPD OSCE were women.

Descriptive Length of Undergraduate Education Study

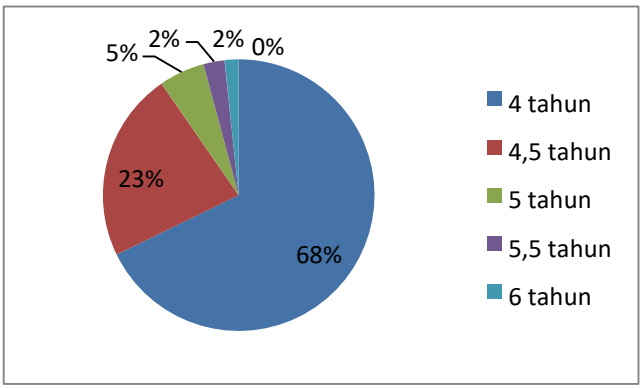

Figure 2. Frequency Distribution of Graduation Time for Undergraduate Programs

Based on the length of graduation in the undergraduate program, it was found that almost the majority of students completed the undergraduate program in 4 years (68%), 4.5 years (23%), 5 years (5%), 5.5 years (3%), >6 years 2%. The average study period for undergraduate students is 4 years and 2 months.

Descriptive Length of Study at Professional Stage

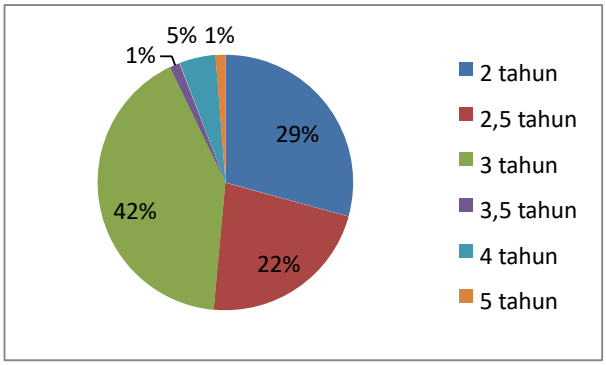

Figure 3. Frequency Distribution of Length of Professional Program Education

The study period for students to complete professional education ranges from 2 - 5 years. The average study period at this professional stage is 2 years 6 months. The largest period of study for students completing professional education is within 3 years, namely 42%, this includes having passed UKMPPD CBT and OSCE. Furthermore, as many as 29% completed professional education within 2 years. There are still students who have not completed their professional education within 5 years, namely 1%.

Descriptive GPA Value for Undergraduate Stage

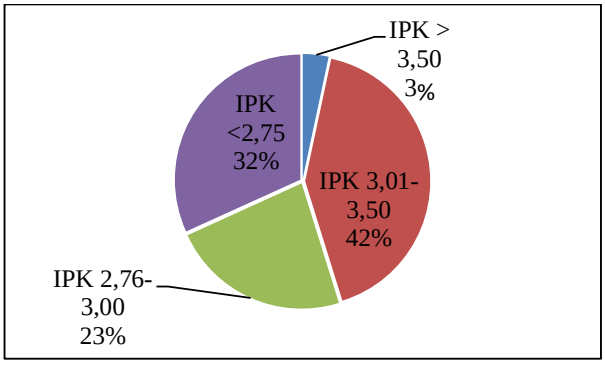

Figure 4. Frequency Distribution of Undergraduate Stage GPA

Based on the output results in the form of a frequency distribution, it can be concluded that almost the majority of students' GPA is in the range 3.01-3.50, namely 42%, then the second highest score is in the range <2.76-2.00 at 32%, the range 2.76-3.00 is 23% and the score > 3.50 at 3%. The average undergraduate GPA is 2.95. The highest GPA value is 3.84 and the lowest GPA value is 2.30. The standard deviation of the undergraduate stage GPA variable is 0.309.

Descriptive GPA Value for Professional Stage

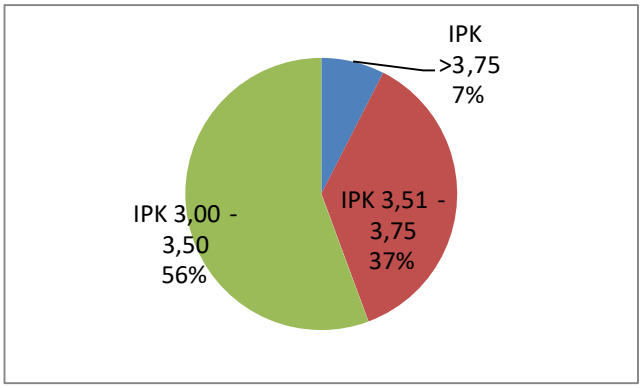

Figure 5.. Frequency Distribution of GPA at Professional stage

The highest distribution of GPA scores is in the 3.00-3.50 range , namely 55%, followed by 37% in the 3.51-3.75 range and 8% in the GPA range >3.75. The average GPA for professional stage students is 3.50, with a standard deviation of 0.16. The highest GPA at the professional stage is 3.95 and the lowest GPA is 3.00.

Frequency Distribution of UKMPPD OSCE Passing Rates

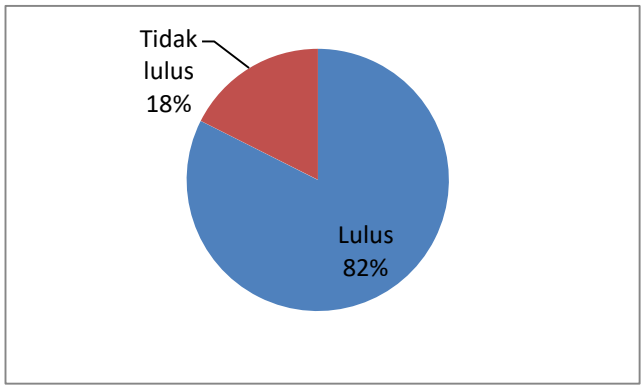

Figure 6. UKMPPD OSCE Passing Rate

The UKMPPD OSCE pass rate is 82% (197 people). The passing number is the passing number when taking the OSCE as first taker . The mean UKMPPD OSCE is 72.5 with a standard deviation of 8.85. The highest score is 94.2 and the lowest score is 25.9.

Distribution of Graduation Based on UKMPPD Period

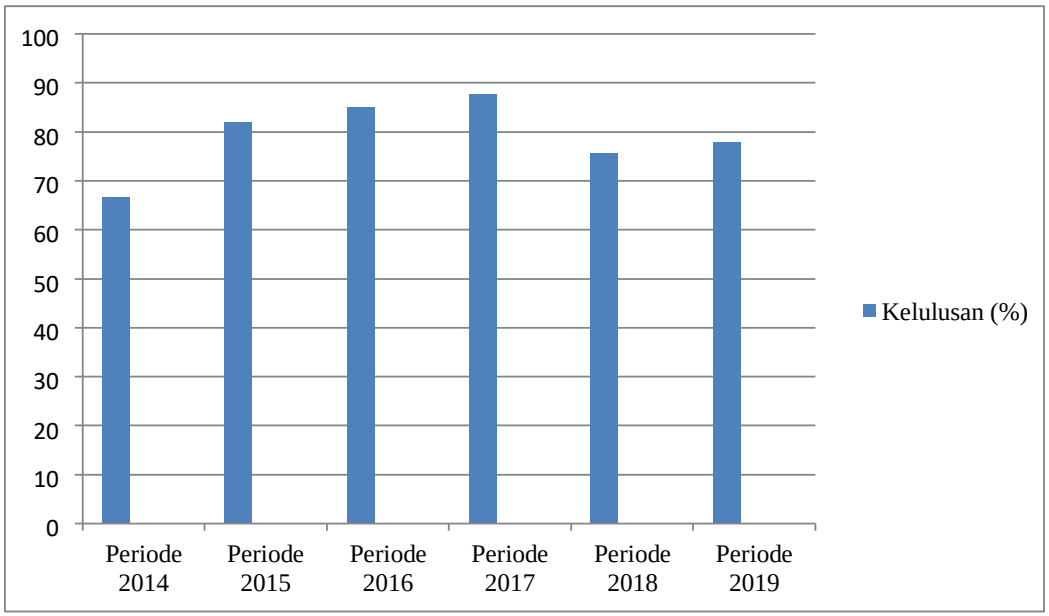

Figure 7. Distribution of Graduation Frequency Based on UKMPPD Period

UKMPPD graduation data based on the 2014 – 2019 graduation period shows an increase in the graduation percentage from 2014 to the 2017 period. The graduation rate for the 2014 period tends to be low because the number of UKMPPD OSCE participants was 3 people with a pass rate of 66.6%. The highest peak achievement occurred in the 2017 period with a percentage of 87.72%. The decline occurred significantly in the 2018 period to 75.47%.

Bivariate Analysis

Bivariate analysis used the Spearman correlation test Rank to see the relationship between undergraduate GPA and professional stage GPA, undergraduate GPA with UKMPPD OSCE scores and the relationship between professional stage GPA and UKMPPD OSCE scores. Before carrying out the correlation test, the researcher first carried out a normality test using Kolmogorov-Smirnov and obtained the GPA variable data bachelor's degree, professional GPA and UKMPPD OSCE scores are not normally distributed.

Correlation test between undergraduate GPA variables and professional GPA variables

The results of the correlation test between the undergraduate stage GPA variable and the professional stage GPA showed that there was a significant relationship (p value 0.00) between the undergraduate stage GPA and the professional GPA with a correlation coefficient of 0.56. This indicates that there is a positive relationship between the two variables with a strong correlation strength, which means that the higher the GPA at the undergraduate stage, the higher the GPA at the professional stage. The determinant value between the two variables is 0.562 or the equivalent of 31.36%, which means changes in the GPA at the undergraduate stage contribute 31.36% to changes in the GPA at the professional stage.

Test the correlation between the undergraduate GPA variable and the UKMPPD OSCE score

The results of the correlation test on the undergraduate stage GPA variable and the UKMPPD OSCE score showed that there was a significant relationship (p value 0.00) between the undergraduate stage GPA and the UKMPPD OSCE score with a correlation coefficient of 0.54. This indicates that there is a positive relationship with moderate correlation strength, which means that the greater the undergraduate GPA, the higher the UKMPPD OSCE score. The determinant value between the two variables is 0.542 or the equivalent of 29.92%. These results show that undergraduate GPA contributed 29.92% to changes in UKMPPD OSCE scores.

Test the correlation between the professional GPA variable and the UKMPPD OSCE

The results of the correlation test showed that there was a significant relationship between the professional stage GPA and the UKMPPD OSCE score (p value 0.00) with a correlation coefficient of 0.34. This shows that there is a positive relationship between the two variables with moderate correlation strength, which means that the greater the professional stage GPA, the higher the UKMMPD OSCE score. The determinant value is 0.342 or 11.83%.

This value can be interpreted as the professional stage GPA contributing 11.83% to the change in the UKMPPD OSCE score.

Correlation test between study period and UKMPPD OSCE scores

The results of the correlation test between the undergraduate study period and the UKMPPD OSCE scores showed a significant relationship (p- value 0.00) with a correlation coefficient of -0.37. These results show that there is a negative relationship between the two variables with a weak correlation strength. This finding means that the longer a student's study period is at the undergraduate stage, the lower the UKMPPD OSCE score they get. The determinant value is -0.372 or 13.69%. This value can be interpreted as the length of the professional stage study period contributing 13.69% to changes in the UKMPPD OSCE value.

The correlation test of the professional stage study period with the UKMPPD OSCE score obtained a significant relationship (p- value 0.00) with a correlation coefficient of 0.25. These results indicate a negative relationship between the two variables with weak strength. This finding means that the longer a student's study period is at the professional stage, the lower the UKMPPD OSCE score they obtain. The determinant value is -0.252 or 6.25%. This value can be interpreted as the length of the undergraduate study period contributing 6.25% to changes in UKMPPD OSCE scores.

Discussion

1. Univariate Analysis

Based on the student sample size of 239 people, it was found that almost the majority of UKMPPD OSCE participants were women with a percentage of 72% (172 people) while the percentage of male students who took part in UKMPPD OSCE was 42% (67 people). This number is because the distribution of female students in the class is greater than the number of male students each year. One example of the gender distribution of students for the 2013 academic year shows that of the 56 students, 71% (42 people) were women and 29% (16 people) were men (Siakad Univrab , 2019) The distribution of gender data each year tends to be at the same percentage, so it does not rule out the possibility that UKMPPD OSCE participants are also dominated by women. Research conducted (Pinasthika & Andi Findyartini , 2018) shows a trend of increasing the number of female students entering FK UI compared to the number of students, so that the dominant students are women rather than men.

The average length of undergraduate program education is 4 years 2 months, with 68% graduating within 4 years. Some students must complete their undergraduate education in more than 5 years. The reasons for delays experienced by Abdurrab University Medical students in

undergraduate programs based on interviews are usually due to illness, financial reasons and insufficient academics . Financial reasons are included in the extrinsic factors that influence a student's GPA. This is due to the influence of family finances on students' GPA achievements, where the higher the family's financial income, the better the student's academic achievements so that they complete their education more quickly (Ahmad et al. al , 2015). Furthermore, the reasons for illness include intrinsic factors, namely physical and psychological. If sleep and rest time is low, it will affect students' physical and mental health, resulting in low student GPA achievements (Pilcher & Walters , 2010). Academic reasons include failing a module so that you repeat it, improving your grades to achieve a better GPA target, or delays in completing your final assignment (thesis) (Timely Graduation Data, 2018). Based on the results of interviews with several students, the majority of students said that the length of the undergraduate education process was due to hampered research which resulted in students having to increase their undergraduate education time.

Previous research from Airlangga University found that the average length of time for graduating from an undergraduate program was 4 years and 10 months (Utomo & Safitri, 2014). Previous research from England also grouped students who graduated in 4 years and 5 years. The reasons for student tardiness are usually due to motivation, how to socialize and choosing study friends, as well as some experiencing conditions such as illness, lack of self-confidence and having to repeat failed courses (Todres et al , 2012).

The length of professional program education ranges from 2 – 5 years. The average length of study for professional program students is 2 years and 6 months. The professional education process will end with UKMPPD graduation. However, not all students are able to complete their professional study period on time. Most students have to take part in UKMPPD several times to complete the professional study period and obtain a medical degree. This may be the main problem that there are still students who complete professional programs of up to 5 years.

Based on the results of interviews with research samples, one of the factors that slows down students' professional graduation is UKMPPD. Students feel that UKMPPD is still the main problem in completing professional education. More attention from the university is certainly needed by students who have repeatedly failed the UKMPPD so that the length of professional education is no more than 2-3 years.

The comparison of the professional study period for FKIK Abdurrab University students with other universities such as Airlangga University, namely 5 years and 6 months, is quite a big difference (Utomo & Safitri, 2014). This may be due to the number of students and

the length of time medical education at Airlangga University has been established, causing the average length of time for graduating from Airlangga University's professional program to be quite high. It is hoped that this comparison will motivate FKIK Abdurrab University to further maximize the achievements of UKMPPD graduates.

Undergraduate program education has the highest GPA range of 3.01-3.50 with a very satisfactory predicate. This achievement amounted to 100 people or 42% of the total sample. The results of the analysis show that GPA values below 2.76 are evenly distributed among the 2008-2010 class, in fact the lowest GPA was obtained by one of the 2008 class students with a GPA of 2.3. This achievement may be due to differences in minimum student GPA policies and the student selection process which has become increasingly stringent in recent years compared to several years earlier when the medical faculty was established (Valzon & Wati, 2019). Apart from that, at the undergraduate stage students are still trying to adapt to the Problem Based learning process Learning (PBL) and finding your own learning style. Similar results were also obtained by research (Winda, 2017), there was a low GPA distribution in the classes of 2003 and 2006 due to campus policy regarding allowing a minimum GPA below 3.0 for graduation, while for the class of 2007 and above it was mandatory for students to obtain a minimum GPA of 3.0. .00 to be able to do graduation. This policy causes an unequal distribution of several generations. Research from (Hardiansyah, 2014) states that at the preclinical stage medical students experience problems with adaptation and new learning styles, so that students' GPA tends to be low.

The average undergraduate GPA is 2.96. This value is lower than the average GPA in two other private FKs, namely FK Lampung University (average GPA 3.23) and FK Samratulangi University (average GPA 3.41). This achievement should be improved considering that the registration requirements for specialist programs at several universities such as Gajah Mada University and the University of Indonesia require graduates with campus C accreditation to be ≥ 3.00, so attention needs to be paid to increasing the average GPA for the FKIK undergraduate stage at Abdurrab University (Education Program Admissions Committee Gajah Mada University Specialist Doctor, 2018).

The highest frequency distribution of professional GPA is in the range of 3,003.50 with a total of 133 students or 56% of the total sample. The distribution of these scores is almost even in each generation. The lowest score set by the institution is 3.00 for completing professional education, so that no student gets a score below 3.00. The student's highest score is 3.95 and the lowest score is 3.00. The fundamental differences regarding the minimum GPA limits for undergraduate and professional degrees affect the respective average GPA values.

The minimum score set by professional programs is 3.00 and undergraduate programs are 2.00. The demand for a minimum graduation threshold might trigger students to try harder to get a better GPA. The high achievement in professional GPA may be due to a learning system that tends to repeat lessons learned at the undergraduate stage and dealing directly with patients so that during exams it is easier for students to remember the lessons they have gone through.

This concept is also called procedural learning knowledge (Omrod , 2009).

The average GPA for the FKIK Abdurrab University profession is 3.50. This achievement is quite high compared to the average for students at Lampung University (3.19) and Samratulangi University (3.38). This achievement shows the adaptation of procedural learning knowledge has been successfully implemented. An assessment system that tends to be evenly distributed in every aspect maximizes student GPA achievements. Students have the opportunity to get a good GPA even if they get bad results in one aspect of the assessment . This is different from the undergraduate assessment system which focuses on cognitive abilities with a fairly high percentage compared to other assessments, so that if students fail the cognitive exam, their GPA tends to be low. This is what causes the GPA at the undergraduate stage to be lower than at the professional stage. (Valzon & Wati, 2019).

The distribution of UKMPPD OSCE passes found that 82% of students passed the first time UKMPPD OSCE taker . These results show that the majority of FKIK Abdurrab University students are able to implement the learning process during the lecture period. Previous researchers said that the learning process carried out during the medical study period influenced the OSCE results as the final assessment of becoming a doctor (Azim Majumder et al , 2019). This is what attracts researchers' attention to which process has more influence on passing the UKMPPD OSCE.

2. Bivariate Analysis

a. Relationship between undergraduate GPA and professional GPA

Based on the results of statistical tests using the Spearman test , the correlation coefficient was 0.56 (p- value 0.00). These results show that there is a relationship between undergraduate GPA and professional GPA with a strong relationship strength and a positive correlation direction. The positive direction of the correlation means that the two variables are directly proportional, that is, if the undergraduate GPA is good then the professional GPA is also good.

The spiral curriculum concept implemented at FKIK Abdurrab University results in continuity between the undergraduate and professional stages. The concept that is in

accordance with these results is the third concept, namely new learning related to previous learning. In this concept, the learning that has been obtained at the professional stage must be related to the learning that has been obtained at the undergraduate stage. On the other hand, the learning obtained at the undergraduate stage must become the basis for learning at the professional stage. This concept helps students not be overwhelmed in receiving new information. It can be concluded that the spiral curriculum concept contributes to the continuity of the undergraduate and professional stages (Harden & Stamper , 2015).

Scriven's theory (Shankar, 2011) says that there are two types of assessment, namely formative assessment and summative assessment. A summative assessment, one of which is carried out at the end of the education period, determines whether the student is worthy of advancing to the next stage Furthermore, students who have a good undergraduate GPA must have completed all types of exams at the undergraduate stage with good results, which means they have the knowledge and skills to undertake a professional education program. On the other hand, students who have a low undergraduate GPA should repeat the theories they have learned during their undergraduate studies so that they can complete their education and exams in professional programs with better results. (Pratiwi YS, 2016).

These two theories may cause the continuity of GPA at the undergraduate stage and the professional stage. If students have received the concept of a spiral curriculum, of course students will be better prepared to face summative exams because the learning obtained previously is related to the exams that students pass. So it is necessary to apply the spiral curriculum concept to be developed, expanded and deepened to get more meaningful results in the future (Neumann , Neumann , & Lewis , 2017).

b. Relationship between undergraduate GPA and UKMPPD OSCE scores

Based on the results of statistical tests using the Spearman test , the correlation coefficient was 0.54 and the p-value was 0.00 (<0.05). These results show that there is a relationship between undergraduate GPA and UKMPPD OSCE scores with a moderate strength of relationship and a positive direction of correlation. The positive direction of the correlation means that the two variables are directly proportional, that is, if the undergraduate GPA is good then the UKMPPD OSCE score is also good.

The principles of medical education have never escaped constructivism theory. This principle requires a person to build information slowly. The information obtained

will be developed continuously. This theory would be better if someone already had a prior sufficient knowledge . The result of this theory is that students are able to remember the information they obtain for longer so that when the information is recalled, the information does not just disappear (Sari et al. al. , 2016). This principle allows the relationship between the undergraduate learning process and the UKMPPD OSCE to be reconstructed permanently.

Abdurrab University FKIK curriculum uses the SPICES (Student Centered , Problem Based , Integrate Curriculum , Community Oriented , Early Clinical Exposure , and Systematic). The advantage of this concept is that students become more active in the learning process and are able to develop skills in solving problems (Swanwick , 2010). The approach to the UKMPPD OSCE competency standards might cause the correlation between the two variables to be strong. At the undergraduate stage, students have been exposed to OSCE since the first semester. Rubric assessment has also been introduced in semester 5, where rubric assessment is an assessment that is close to the UKMPPD OSCE and is very familiar to undergraduate students. Previous research also showed the same results where there was a significant relationship with moderate strength (r= 0.54). According to researchers, the OSCE exam not only assesses clinical skills, but also assesses cognitive abilities according to the computer material blueprint Based Test (CBT) (Febrianti et al. , 2017). Other research from (Pusparini, 2016) also obtained the same results, namely that there was a significant correlation between undergraduate GPA and UKMPPD OSCE.

c. Relationship between professional stage GPA and UKMPPD OSCE scores

Based on the results of statistical tests using the Spearman test , the correlation coefficient was 0.34 and the p-value was 0.00 (<0.05). These results show that there is a relationship between professional GPA and UKMPPD OSCE scores with a weak relationship strength and a positive correlation direction. The positive direction of the correlation means that the two variables are directly proportional, that is, if the professional stage GPA is good then the UKMPPD OSCE score is also good. This correlation is quite low compared to undergraduate GPA, if you look at it, professional learning should be more relevant to UKMPPD OSCE. If you look at it, there are differences between the learning and exam systems during the profession and the OSCE which is carried out at the undergraduate stage.

At the professional stage, students are given the opportunity to meet directly with patients where students must adapt to the conditions in the field. The exam system at the professional stage is called Mini-CEX. The basic difference between Mini-CEX and UKMPPD OSCE is the time and type of patient. There is no significant time limitation in patient processing when performing Mini-CEX. The work is adjusted to conditions in the field , it can be faster or slower according to the patient's condition. In contrast to the UKMPPD OSCE, time is the benchmark in assessment. The time given is around 15 minutes and you must complete a comprehensive examination. Furthermore, Mini-CEX does not use standard patients so cases are not typical and are more complicated because tasks must be completed according to the patient's needs. The cases tested were cases that were carried out at each stage by students, so that students who were in the nervous stage were unlikely to get cases of urogenital patients . This learning makes students' thinking become fragmented and they are unable to explore the knowledge they are learning. This is different from the UKMPPD OSCE where the patients treated are standardized patients and follow the instructions given. The picture of the disease that appears is also distinctive and uniform. At UKMPPD OSCE the systems tested can also vary and it is unpredictable in the cases that will be tested (PN-UKMPPD, 2015; Academic Guidebook, 2015).

The UKMPPD OSCE examination system based on PN-UKMPPD is more inclined towards undergraduate OSCE examinations. This fairly close difference in assessment systems may be the reason why the correlation between undergraduate GPA and UKMPPD OSCE is higher than professional GPA and UKMPPD OSCE. The results of this research are in accordance with previous research, namely (Puspitasari, 2015) which stated that the difference between the education taught and different field conditions makes students unable to apply the competency standards that have been set.

The similarity of the undergraduate examination system which is more structured, more uniform and the policy of having to pass the OSCE at the undergraduate stage results in a greater correlation with the UKMPPD OSCE. This is also reinforced by assessment theory drives learning , namely the condition that a person has to learn optimally because of an exam and must pass the exam (Wormald et Al ,

2009). This theory confirms that the almost identical atmosphere of the undergraduate OSCE and UKMPPD OSCE exams makes students' efforts and readiness more mature. There needs to be further deepening and attention from the professional

sector to improve the examination system so that it is more correlated with the UKMPPD OSCE.

d. The relationship between student study period and UKMPPD OSCE scores

The correlation test results of the undergraduate study period with the UKMPPD OSCE score showed a significant relationship with a negative correlation direction, namely - 0.37, which means that the longer the undergraduate study period, the lower the UKMPPD OSCE score obtained by students. This data supports the results of the undergraduate GPA correlation test with the UKMPPD OSCE scores. Furthermore, a correlation test of the professional stage study period with the UKMPPD OSCE score showed a significant relationship with a negative correlation direction of -0.25. Which means that the longer the professional stage study period, the lower the UKMPPD value

OSCE. This may be because when students are late in completing their studies, they have less interest and enthusiasm for learning compared to those who have completed their undergraduate or professional programs on time. The aim of taking the exam is just to be able to pass even with a minimum score. This is in accordance with previous researchers who said that students who are late tend to experience a crisis of self-confidence so that their final medical exam results tend to be lower than students who finish on time (Ahmad et al . al , 2015). These findings indicate the need for special attention to students who are late in completing undergraduate or professional studies so that they can still maximize the results of achieving better UKMPPD OSCE scores, not just passing.

5. CONCLUSIONS AND RECOMMENDATIONS

Based on research on the relationship between GPA at the undergraduate stage and GPA at the professional stage with UKMPPD OSCE, it can be concluded that there is a relationship between: GPA at the undergraduate stage and GPA at the professional stage, GPA at the undergraduate stage and UKMPPD OSCE, GPA at the professional stage and UKMPPD OSCE, length of study period at the undergraduate stage and professional stage with UKMPPD OSCE graduation.

Based on the conclusions above, cooperation between students and educational institutions is needed to obtain good results . It is hoped that the agency will pay special attention to students who are late in completing the undergraduate program intensively so that the problems that are hampering them can be resolved. Professional programs need to consider

creating an OSCE exam system that is close to the UKMPPD OSCE so that students are better prepared to face the UKMPPD OSCE. For students, they can learn optimally, not only during exams, and prepare themselves to study optimally to face competency exams, especially UKMPPD OSCE. Apart from that, it is necessary to carry out further research regarding the spiral learning of the medical education curriculum in relation to the UKMPPD graduation results at Abdurrab University and an in-depth study is needed regarding the undergraduate stage OSCE scores and the Mini-CEX scores with the UKMPPD OSCE scores.

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