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Education

THE DEVELOPMENT OF BILINGUAL MODULE MODEL PARTIAL IMMERSION PREGNANCY MIDWIFERY CARE ON D III MIDWIFERY STUDY PROGRAM OF BUKITTINGGI POLYTECHNIC OF HEALTH PADANG

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ABSTRACT

Based on the ASEAN Study Center Research, the quality of Indonesian workers is considered inadequate, especially in terms of English language skills. The Indonesian English First English Proficiency Index (EF EPI) 2017 ranked at 39 with average level.. The bilingual learning method is using two/more languages during the process togive impact on improving English lskills, academic performance, and mother-language skills. This study aim to determine the validation and feasibility of bilingual modules. This study using research and development method. The research trial was carried out on DIII midwifery Bukittinggi study program on Mei-October 2018. The research respondents consisted of lecturers and students with questionnaires and interviews. The data were analyzed using descriptive standards of teaching materials according to the 2006 BSNP with an average expert rating of 89.39%. The bilingual module receives an acceptance rate of 82.22% by lecturers and is 82.82% by students. Based on that research it can be concluded that the bilingual module in pregnancy midwifery care material is accordance with BSNP standards and can be applied to students of the DIII midwifery study program of Bukittinggi.

KEYWORDS: Developing module, Midwifey Bilingual Module

INTRODUCTION

The ASEAN Economic Community (MEA) or the ASEAN Economic Community (AEC) is a form of regional economic integration which is planned to be implemented in the year 2015 with the aim of making the ASEAN as a single market and production base, which occur the flow of goods, services, investment, skilled labor and free. ¹

As the target market destination, Indonesia experiencing barriers in terms of readiness and excellence of human resources in the face of MEA. Data for year 2015 human development index showed Indonesia was still in the position of 113 of the 188 countries in the world. Based on the research of the ASEAN Studies Center, quality workforce Indonesia rated inadequate especially in terms of English proficiency.

Report of the First English English Proficiency Index (EPH EPI) year 2017 on more than 1 million adults in 80 countries puts Indonesia at no. 39 with an average level of intermediate ability. At the provincial level in Indonesia, DKI Jakarta occupies the highest level with a score of 54.65 from 12 provinces, while the West Sumatra Province sits on the lowest position with a score of 47.57. In Polytechnic of Health Padang D III Midwifery Study Program Of Bukittinggi, out of a total level I all students major in obstetrics, based on National examination results tally on English subjects only 15.7% of students gaining value by category pretty and Nice. ^{2.3}

The Government has actually issued the law No. 20/2003 of the national education system that reads "some educational mission is improving the quality of education that has a competitiveness at the national level, regional and international increase the relevance of education to the needs of society and global challenges".

Polytechnic of Health Padang D III Midwifery Study Program Of Bukittinggi has also lists the objectives to achieve relevance internationally through mission courses namely competency-based learning organizes the midwife, current, independent, have the ability of foreign languages and information technology services community midwifery program in accordance with the culture that is based on moral values.

Unfortunately, trategi United Kingdom language skills enhancement has been applied in DIII Midwifery Study Program Of Bukittinggi remembered making the language of the United Kingdom as one of the Basic Common Subjects (BCS) and apply the Test of English as a Foreign Language (TOEFL requirements) as a graduate.⁵

Bilingual learning method is a method that is both continuity learning. Fishman put forth three reasons the implementation of bilingual learning as language maintenance, a transitional purpose, and it's programs. English for Science that focus on the use of English in certain professions (medicine, midwifery, nursing) can be applied and studied through this bilingual learning methods.⁶

The first step to change the non-english medium schools into bilingual school is a bilingual as a module by using the media. A module is a set of independent learning designed include a series of learning experiences with the aim of enabling students to achieve learning objectives.^{7,8}

A preliminary study in the form of interviews and observations conducted in DIII Midwifery Study Program Of Bukittinggi suggests that pregnancy midwifery care learning media used during these learning materials and books are speaking in Indonesia with display less attractive. The media is rated not yet able to give odds on college students to facilitate the ability of Metacognition and English becomes the cause of the need for action is the development of a module that can meet the needs of midwifery students at this time.

METHOD

The methods used in this research is research and development. Research trials conducted on campus DIII Midwifery Study Program Of Bukittinggi Polytechnic Of Health Padang in May-October 2018. Products that are developed is a bilingual module on the material's midwifery pregnancy with Partial Immersion models. The respondents of this study consist of lecturers and students. Data were collected using a questionnaire/question form. Data analysis was done using descriptive percentage analysis techniques.

RESEARCH RESULTS

The Process Of Developing Bilingual Modules On Pregnancy Midwifery Care Material

The process of the development of the research done on this research refers to research and development measures according to Borg and Gall, consisting of several stages of research. 9,10

At this stage of problem identification, discovered the problem about the lack of use for learning modules in accordance with learning objectives, the purpose of midwifery graduates, and misiprogram studies. Based on observations made on the prasiklus stage in DIII midwifery Study Program Of Bukittinggi Polytechnic of Health Padang, obtained information that the students use only media book learning and rating scale that uses the language of Indonesia. This is not in accordance with the purpose of midwifery graduates Polytechnic of Health Padang field which is able to compete internationally and mastered foreign languages in particular English languages. In addition, the presentation of the linguistic and material displayed on these reference sources less attractive and interactive so as not to cause the learning motivation of students.

Further planning is done to develop the appropriate module. The module is a module developed bilingual material on the care of gynecologist pregnancy which is the module with a special material on the basic needs of mothers during pregnancy for students of level I courses on midwifery. This bilingual modules generally consists of

consists of the introduction, part presentation and part of the cover. The introduction consists of a preface, introduction, learning activities including basic standards of competency, competencies, learning methods, and keywords. Part of the presentation is the content/material module. While the closing section consisted of a summary, glossary, exercises, as well as a bibliography.

Next draft bilingual modules validated by five experts include two expert lecturers comprising experts of English language and obstetrics and three lecturers the pregnancy midwifery care. The assessment is based on the details of the instruments that are present in the assessment of materials according to the criteria of the National Standards Bodies of Education 2006. Assessment module consists of two phases; phase I and phase II. On stage I do assessment of feasibility component content, linguistic, and presentation of appropriate instruments research phase I.

Assessment results data modules of bilingual material pregnancy midwifery care are presented as follows:

Table 1: Assessment of Bilingual Material Module Pregnancy Midwifery Care (results of a phase I)

No.	Name Respondents	%	Criteria
1.	Ns. Lisma Evareny, MPH	100	Has been success
2.	Dian Angreni, M.Pd, M.Pd	100	Has been success
3.	Fitrina Bachtar, S.ST, M.Keb	100	Has been succes
4.	Yosi Sefrina, S.ST, M.Keb	100	Has been uccess
5.	Siti Khadijah, S.SiT, M.Biomed	100	Has been succes

Based on the table above, the results of the assessment of phase I modules are bilingual with the material's gynecologist pregnancy get percentage 100%. All components of the assessment appropriate assessment criteria have been met phase I so stated escaped and continued with the revision stage to then back do the assessment phase II.

On the assessment of phase II, the module with the material's gynecologist in pregnancy. Feasibility of components assessed the contents, components, component rendering, and linguistic. Following the results of phase II assessments by experts:

Table 2: Assessment of Bilingual Material Module Pregnancy Midwifery Care (results of a phase II)

Name Resp	Feasibility Component			%
	Contents	Language	Present ation	
Ns. Lisma Evareny, MPH	83	55	69	89,22
Dian Angreni, M.Pd, M.Pd	86	53	66	88,36
Fitrina Bachtar, S.ST, M.Keb	87	57	66	90,51
Yosi Sefrina, S.ST, M.Keb	87	54	63	87,93
Siti Khadijah, S.SiT, M.Biomed	87	56	68	90,94
Ave	rage			89,39
Criteria				Very
				Good

Based on the results of the assessment phase II, this bilingual modules rated worth applied because the average overall assessment results > 62.50% i.e. 89.39%. Furthermore, the results of this phase II assessments serve as a reference for bilingual modules revision with the material's pregnancy care. The assessment of the grain still get score assessment 1-2 re-analyzed for revision.

Currency Of Assessment Results (Acceptability) Bilingual Modules With Pregnancy Midwifery CareMaterial Results Of Data Responses Lecturer Of Courses

Data retrieval is performed against the three lecturers the course pregnancy midwifery care in DIII Midwifery Polytechnic Health Padang. The responses obtained from charging the now is done after the process of teaching and learning by using the module.. The results of the response of a lecturer of courses about bilingual modules is as follows:

Table 3: results of responses to a lecturer of courses Module Pregnancy Midwifery care of Bilingual Material with Midwifery Care

	•	•	
No.	Name Respondents	%	Criteria
1.	Fitrina Bachtar S.ST, M. Keb	78.33	very good
2.	Yosi Sefrina SST, M.Keb	83.33	very good

3.	Siti Khadijah, S. SiT, M.Biomed	85.00	very good
	Average	82.22	very good

Based on the results of the response table lecturer of courses against bilingual modules with the material's entire pregnancy, midwifery lecturer of courses provide a positive response with an average percentage of 62.50% i.e. > 82.22%. Based on these results it was concluded that bilingual modules then it's got a very good assessment criteria.

STUDENT FEEDBACK RESULTS

Data Student response data obtained at the time of the initial field trials and test the implementation field. In early trials, now given to 30 students student level I on D III Midwifery Bukittinggi Polytechnic Health Padang. The results of the response later became a reference and input at the time of the revision before implementation of field trials. After revision, the module tested to all level I students who numbered 69 people. The results of the response by bilingual modules students regarding material pregnancy midwifery care is as follows:

Table 4: Results of Student Responses Against Bilingual Modules with Pregnancy Midwifery CareMaterial

No.	Aspect Of Which Asked	The Percentage (Criteria)		
		Field Trials	Test The	
		Beginning	Implementati	
			on Field	
1.	Interest in studying the	71,67 %	84,7 % (Very	
	module	(Good)	Good)	
2.	Different modules of learning	75,84 %	84,42 % (Very	
	materials is usually	(Good)	Good)	
3.	The image helps	79,17 %	80,07 %	
	understanding the material	(Good)	(Good)	
4.	The material is easy to	74 %	84,42 % (Very	
	understand	(Good)	Good)	
5.	Activities in fun module	69 %	79 % (Good)	
		(Good)		
6.	Helpful study materials	68,3 % (Good)	80,1 % (Good)	
	independently			
7.	Help understand pregnancy	61,67 %	82,61 % (Very	
	midwifery care material	(enough)	Good)	
8.	The modules are presented in	72,5 % (Good)	85,87 % (Very	
	an interesting		Good)	
9.	The use of the symbol in the	67,5 % (Good)	81,16 %	
	module according to the rules		(Good)	
10.	Add curiosity to learn more	70,8 % (Good)	85,51 % (Very	
			Good)	
	Average	71,08 %	82,82 % (Very	
		(Good)	Good)	

Based on table 4, obtained the results of student feedback on the initial trials with the average percentage i.e. 71.08% and trial implementation of the field with an average percentage of 82.82%. Student responses on the stage of the initial test and trial implementation of the field is above the standard currency of the indicators i.e. > 62.50%. Going on a hike the percentage assessment of the stage of the initial trials with the percentage on the trial implementation of the field after the revision is done in accordance with the penialain and overall response. It shows that this bilingual modules get a very good assessment criteria defined and highly qualified to teach as a medium is applied.

The results of the assessment of the effectiveness of Bilingual Modules with Pregnancy Midwifery Care Material

Student learning outcomes data is obtained from the average of the value of exercise and a written evaluation. Recap of the student learning outcomes are presented as follows:

Table 5: the results of the assessment of the Effectiveness of Bilingual Modules with Pregnancy Midwifery Care Material

No.	Student Learning Outcomes	Total
1.	The highest value	81,95
2.	The lowest value	49,35
3.	The average value	62,99
4.	Students who thoroughly studied	59
5.	Students who hadn't studied	10
6.	Studied of classical	85,50

DISCUSSION

The module is printed materials designed systematically and have equipped learning instructions are used by teachers to achieve learning objectives.¹¹

The module was developed in this research module is bilingual with the material's gynecologist pregnancy. Assessment modules are bilingual with pregnancy midwifery care material consisting of a two-stage assessment, namely the assessment of phase I and phase II assessments using instruments from the modified the National Standards Bodies of Education.

In the assessment phase I components are assessed include the feasibility component contents and components of the presentation. The results showed that at this stage the entire expert showed a positive response i.e. providing answers "Yes" at any granule component research with the percentage scoring 100%.

Components of the feasibility of the content focuses on basic standards of competency and competency that has been listed in the modules section of the learning activity. In addition the content modules also complies with the standards of competence and basic competence that are listed on the front of the module. It is in accordance with the opinion of the Sudrajat (Kusuma 2008) that the preparation of learning materials should have linkages with the standard of competence and basic competence, relatedness between materials with basic competencies that must be accomplished students, as well as the material being taught enough in helping students achieve the basic competencies. On the components of the presentation, one of the experts gave an opportunity to add a keyword and a list of libraries to meet the requirements to qualify for assessment of phase I.

Meanwhile at the assessment phase II components that judged the appropriateness of content, linguistic components, and components of the presentation. The range of scores given by the experts in this assessment is the 1-4 at any granule assessment. The assessment phase II qualify with a score of 89.39% excellent criteria according standard the National Standards Bodies of Education.

On the component content, the whole feasibility experts give score with 3-4 range at any granule component with an average percentage of 89.58%. Those results include the criteria very well. It means bilingual modules has complied with the eligibility of the contents including the breadth of grains as well as the depth of the material, the accuracy of the material, evidence based, so as not to do revision. The material listed in the module is pregnancy midwifery care material with the topic of discussion is the basic needs of pregnant women. The material organized in the basic competence to be accomplished student. In addition, the module is also specified in the learning resource and reference material. For example, the material needs of the nutrition of pregnant women taken from the book source of Nutrition of pregnant women's Guide issued by the Department of health that can be accounted for accuracy and truth of his theory.¹³

The linguistic component, most experts give the score on 3-4 range at any granule ratings with an average percentage of 78.57%. The results obtained are good criteria. It means the linguistic component of bilingual modules were in accordance with the conditions and needs of midwifery students because it is served with plain language, communicative, and interactive. In accordance with the opinion of the Erfiana, that should be used notation – the notation and terms common and widely used in the school environment. The opinion is supported by Sofyan (1997) States that the term used in a learning materials should be prevalent and widely used in the school environment. [4,15]

In addition, the experts competent in the languages also provide input to correct the spelling and grammar of the English language used in the module on some parts. Errors in spelling and grammar writing votes can affect the language rule that good and right so that the improvements on this component should be done.

Meanwhile on the presentation components, almost all experts give an assessment with a score of 3-4 range, average percentage i.e. 87.37%. The results categorized very well. This means the module components meet the bilingual presentation. The component is met because the module is presented systematically, complete, and has a very interesting look. This is in accordance with the opinion of Sofyan (1997) stating that in the preparation of learning materials to further

facilitate understanding the substance pmbelajaran, needs to be complemented with illustrations and the gambat visually can give a real picture of a substance studied. ¹⁵ But one of the experts give a score of 2 on the assessment of the accuracy of its subcomponents grain numbering, naming tables, images and attachments so that the revision needs to be done on that section.

On the assessment of phase I, the average percentage obtained is 100% with very good criteria according standard the National Standards Bodies of Education. Meanwhile at the assessment phase II, average percentage obtained is amounting to 89.39% with very good criteria in accordance with standard the National Standards Bodies of Education. These results have reached the criteria based on the indicators set out namely > 62.50% so no need for repeated assessment after revision. Based on the obtained results it can be concluded that bilingual modules with pregnancy midwifery care of materials that have been developed were declared valid and viable as learning materials pregnancy midwifery care. In addition to qualify in the assessment of the experts, this module has also been tested for their effectiveness on students and professors the courses involved in the learning process. It complies with the statement Sudjana and Rivai (2007) concerning the quality module functions, i.e. learning materials that meet the requirements as a quality learning materials and proper will be able to help achieve an objective of learning.

At the stage of preliminary trials involving 30 students, module used is a module that has been rectified its shortcomings in accordance with the results of the assessment and feedback provided experts. According to the results of student feedback on the initial trial stage, it was concluded that the average percentage of students are the responses of 71.08% which is included on the category either. Students give sufficient criteria on the assessment helps grain study materials independently. Assumptions of researchers, it is because students are not yet accustomed to using English and Indonesian language in partial immersion in the form of materials or learning process. In addition, because at the stage of initial tests students only understand and bring the module to be studied on its own, the awareness for the independent study as well as the absence of help from the professors as steering the material into the cause. Whitley (2010) submit that teachers have a very big role in the success of student learning.¹⁷

Based on an interview conducted by a lecturer of courses obtained information that the student never use reference sources in English language learning. In addition to exercise and test as given during the evaluation is also always in English, whereas in bilingual modules throughout the evaluation process are presented in English. Independent study is also focused on teaching so that students are still experiencing difficulties for independent study on learning theory. Based on the feedback, researchers refine the use of English words and sentences that are difficult to grasp to facilitate students to understand English-language content. To avoid errors in the use of the term, the researchers added a glossary at the end of the module.

On field trials or trials widely module development, researchers using a sample i.e. the entire level I students who numbered 69 people. At this stage the bilingual module applied in real conditions i.e. learning in class by using the module as a medium of instruction. In this step the used module is a module that has been revised accordingly early field trial results. The implementation of the study carried out by as much as 2 times. At the end of the study conducted an evaluation to assess student learning outcomes after using bilingual modules. Field test results include the results of student learning, student responses, and responses to midwifery courses lecturer's pregnancy.

Student learning outcomes derived from the value of the tasks/exercises, practical value, and the value of test. Learning outcomes students as decisive in reaching the limits of the minimum values specified in D III midwifery program study Bukittinggi i.e. 69 students. Based on the results of the research, it can be noted that of the 69 students, 59 students achieve mastery of classical ketuntasan with value i.e. 85.50% or categorised very well.

The effectiveness of bilingual modules on the material's gynecologist pregnancy chances due to the content, appearance, and a component that is contained in the module already adapted to the needs of the students. This can be proved by the results of student responses at this stage of the implementation of the field that has a percentage of the average of i.e 82.82% and categorised very well. Whole grains

assessment taken positively so that whole grains are categorised assessment good or very good.

According to the results of student responses, 82.82% rate that the student module is bilingual with midwifery care in pregnancy material deserves to be applied and used in the study pregnancy midwifery care. Based on the results of the calculation of the data taken at the initial trial stage and implementation stage of the field, it brings to the conclusion that the percentage of early trials to test the implementation of the field has increased from 71.08% to 82.82%, of the criteria well be very good overall. It means the input and advice of experts, professors of courses, and students have successfully applied and adds to the quality of bilingual modules with the material's gynecologist in pregnancy. On the assessment helps understand the material grain direction of midwifery in pregnancy also increase the assessment criteria of being good enough. Thus, in accordance with the indicators of success i.e. > 62.50%, this module is judged worthy to be applied in learning obstetrics midwifery care courses particularly in pregnancy.

The results of the responses to the lecturer of courses about pregnancy midwifery care eligibility module is obtained by using the now tanngapan lecturer of courses. The results of the penilian Professor of the course shows the average percentage of i.e 82.22% and categorised very well. According to the response of professors, all components contained in the modules already reflects a very good learning modules. The preparation of the material has been carried out systematically with the reference and the source of the writing that fits the evidence based obstetrics. The language used in the module are also easily understood by students of obstetrics because it is not convoluted. The research results obtained from responses to the now lecturer at the courses show that the percentage of assessment each course lecturer was 78.33%, 83.33%, 85%. The advice given by a lecturer of courses in bilingual modules with the material's gynecologist in pregnancy: obstetrical care of bilingual modules in pregnancy should display the pictures that came from local models and not only from the abroad, it is a matter of practice and test varied and augmented so that students can train their ability after understanding the module, and then add the answer keys on the back of the module so that the student can evaluate themselves on its own.

Based on the research results obtained, bilingual modules with the material's gynecologist in pregnancy has a number of advantages such as: presentation of a very interesting and not boring because it is supported by the use of colour gradations Nice as well as the use of pictures and illustrations real and related to real life. An interesting presentation can upload the curiosity and interest of the students to learn. Then the material presented in the module is very complete and easy to understand so you can help to improve the understanding of the student as well as to learn independently. Then the overall module has been compiled systematically with attention to the completeness of the elements material.

Besides the advantages offered by this bilingual modules, there are still some flaws that can be found in this bilingual modules such as lack of variation problem exercises, tests, and answer keys for evaluation of students, as well as the lack of the use of images with local wisdom.

Although it has been judged effective and deserve to be applied to the study of midwifery care in pregnancy, but there are still obstacles to implementation and use of this module on the learning process of midwifery. One of the obstacles faced is not yet optimal levels of mastery of English students and professors who teach courses. Because of this learning model and media still belongs to the new midwifery lecturers, students and still have to make adjustments by using the module is bilingual.

The presence of a bilingual module with midwifery care in pregnancy material is expected to help the students and lecturers in order to be accustomed to using English as the language of international reference point to achieve the goal of quality of midwifery graduates and it has global competitiveness in the future.

With the utilization of this bilingual modules, then who in the get is not only limited to the delivery of the material's midwifery towards students. However, indirectly will improve the English proficiency of students. Indirect vocabulary additions occurred recently on college students.

The research is in line with research conducted by Erie Agusta entitled

study of biology bilingual modules with the use of the self regulated learning strategy based on scientific verification. This research it can be concluded that the use of the learning media in the form of a bilingual module is a very effective method. Not only in the process of understanding the learning material. However, it is also in the process of conditioning students from exposure to English. Of course this will indirectly improve the ability of English-speaking students. This will make the students better able to compete globally for the future.

CONCLUSION

The research results and discussion conclusion then that module is bilingual with the material's gynecologist pregnancy is declared valid and feasible for use by students of grade I status of midwifery Obstetrics DIII Polytechnic Health Ministry Health Field. The results of validation experts showed the average percentage that is 89.39% with very good category, so having achieved success criteria according to the National Standards Bodies of Education 2006 i.e. > 62.50%. Jam it based on research results obtained ketuntasan of classical i.e. 85.50% criteria i.e. > 75% of students have thoroughly studied the subject matter (the limit pass > 56)

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