



Learning design for couple prenatal education program; birthing class

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ABSTRAK

Latar belakang: Keterlibatan pendamping persalinan terbukti memberikan dampak positif terhadap hasil kehamilan. Ayah yang kurang persiapan cenderung mendapatkan pengalaman negative selama mendampingi persalinan. Ibu dan pasangan perlu dipersiapkan sejak kehamilan untuk menghadapi persalinan dan memperoleh pengalaman persalinan yang memuaskan. Perlu disusun program pembelajaran kelas persalinan tidak hanya bagi ibu hamil tetapi juga pasangannya.

Tujuan: Tujuan penelitian ini adalah menyusun rancangan pembelajaran kelas persalinan untuk program edukasi couple prenatal.

Metode: Rancangan penelitian ini adalah penelitian dan pengembangan (research and development) level 1. Produk yang akan dikembangkan adalah rancangan pembelajaran kelas persalinan untuk program edukasi couple prenatal. Tahapan penelitian yang dilakukan adalah: 1) Analisis kesenjangan dan kebutuhan program yang dikembangkan; 2) Penyusunan rancangan; 3) Validasi interna rancangan.

Hasil: Penelitian ini mendapatkan bahwa kebutuhan ibu hamil dan pasangan terhadap kelas persalinan tinggi. Materi yang paling diinginkan oleh kelompok istri dan pasangan adalah peran suami dalam proses persalinan. Dalam pengelolaan kelas persalinan ibu dan pasangan menginginkan metoda yang seimbang antara teori dan praktik, lama pelaksanaan kelas adalah 90 menit, dengan jumlah peserta kurang dari 5 pasangan serta penggunaan modul belajar. Rancangan pembelajaran kelas persalinan untuk program edukasi couple prenatal disusun dalam bentuk kurikulum program pelatihan yang memuat 1) kompetensi lulusan; 2) capaian pembelajaran; 3) bahan kajian; 4) mata pelatihan; 5) beban mata pelatihan; 6) metoda pembelajaran dan 7) penilaian. Uji validitas interna rancangan menunjukkan rancangan sangat valid, dapat dipergunakan tanpa perbaikan.

Kesimpulan: Rancangan pembelajaran kelas persalinan untuk program edukasi couple prenatal dibutuhkan oleh ibu hamil dan pasangan. Rancangan dapat dipergunakan sebagai dasar penyusunan model kelas persalinan.

KATA KUNCI: kelas persalinan; rancangan pembelajaran; edukasi; kehamilan; pasangan

ABSTRACT

Background: The involvement of birth attendants has been shown to have a positive impact on pregnancy outcomes. Unprepared fathers tend to have negative experiences during childbirth. Mothers and partners need to be prepared since pregnancy to face childbirth and have a satisfying birth experience. It is necessary to arrange a learning program for childbirth classes not only for pregnant woman but also their partners.

Objectives: The purpose of this study is to develop a birthing class learning design for the prenatal couple education program.

Methods: This research design is research and development (R&D) level 1. The product to be developed is a birthing class learning design for prenatal couple education program. The stages of the research are 1) analysis of gaps and needs of the developed program; 2) Drafting; 3) internal validation of the design

Results: This study found that the needs of mother and their partners for birthing classes are high. The material most needed in birthing class is husband's role in delivery process. In the management of birthing class, mother and partner want a balance practicum and theory method, the duration of the class is 90 minutes, with the number of participants less than 5 couples and the use of learning modules. The birthing class learning design for prenatal couple education program is structured in form of training program curriculum that consist 1) competencies; 2) learning outcome; 3) study materials; 4) training subjects; 5) training course loads; 6) learning methods and 7) assessments.

Conclusions: The birthing class learning design for prenatal couple education program is needed by pregnant women and their partners. The design can be used for preparing the birthing class model.

KEYWORD: birthing class; learning design; education; pregnancy; couple

Article Info :

Article submitted on November 28, 2022

Article revised on January 25, 2023

Article received on February 09, 2023

INTRODUCTION

Pregnancy and childbirth are natural periods of humans in the context of the survival of their species. In ancient times pregnancy and childbirth were considered "woman's business". The involvement of men in this reproductive process was very limited. Currently, the importance of the involvement of partners in childbirth has been accepted, although in its implementation there are still obstacles(1).

The involvement of birth attendant has been shown to have positive impact on pregnancy outcomes (2).the presence of a birth attendant has been shown to reduce the intensity of labor pain, reduce labor with epidural anesthesia, reduce the use of drugs for pain management, decrease labor duration, reduce stress levels during labor and reduce operative delivery(3). In additional, the presence of partner during delivery childbirth increase emotional connection between

father and newborn and this has an impact throughout their lives"(4).

The biological father of the baby is the ideal companion for the mother during childbirth. The reason for this idea is the formation of family ties, witnessing the birth of new family member and the affirmation or parenthood. However, the impact of attending labor on father is relatively new subject to studied.

Being involved during labor for father is a uniquely transformative experience. Enthusiasm mixed with feelings of insecurity in unfamiliar delivery room environment as well as the uncertain development of the labor (5). There are also reports of father's posttraumatic stress disorder symptoms and anxiety after accompanying childbirth (6). Unprepared fathers tend to have negative experience during childbirth (7). To be able to cary out the role during labor and increase the

positive experience, education class is needed that involve not only mother but also father.

Couple prenatal classes have been implemented in developed countries, but have not been widely developed in Indonesia. Education classes during pregnancy in Indonesia are carried out through 'Kelas Ibu Hamil'. Husbands or companions are expected to attend at least one time so that they can find out important information about pregnancy, childbirth, postpartum period and newborn care (8). Indonesian government report that only 20,2% of pregnant woman were accompanied during 'Kelas Ibu Hamil'. The most reason (49,8%) was that they did not know about 'Kelas Ibu Hamil'(9).

A preliminary study conduct in Badung Regency shows that couple prenatal classes have been implemented in several non-government maternal and child health services. It was found that 4 Independent Midwife Practice and private clinics in North Kuta District and South Kuta District in Badung Regency have been carrying out prenatal class for prenatal couple since 2 years ago. According to five couples who have attended the couple prenatal class, this class was private class or only for 2 couple and different from 'Kelas Ibu Hamil'.

The material that is expected to be receive in prenatal class are newborn care, birth plan and supporting mother during childbirth ""(10)-(11). Material that related to childbirth in Kelas Ibu hamil program is sign and delivery process, also birth plan (8). Education related to the need of mother, pain management and the role of companion in delivery process is not specifically discussed.

This study aims to develop a learning

design for a prenatal couple education program that is focused on increasing the confidence of pregnant women and their partners in facing childbirth. This program is not intent to replace the existing education program for pregnant women, but as an alternative choice for health practitioners who wish to organize classes for couple s focused on preparation for childbirth and support for mother during birthing process. At this stage the research is focused on developing learning designs, while design testing will be carried out in further research.

MATERIALS AND METHODS

The design of this research is research and development level 1 (12). The stages of this research are: 1) gap analysis and quantitative study of user needs; 2) learning design drafting; 3) internal validation; 4) design improvements. Stage the gap analysis and quantitative studies of user needs have been carried out in three sub-districts in Badung Regency. This stage involves 100 pregnant women and their partners. The sample was determines by Cochran formula and selected by cluster sampling technique. Questionnaires were given to pregnant women and their partners separately and analyzed using descriptive analysis. Learning design drafting based on Peraturan Menteri Pendidikan dan Kebudayaan Number 3 of 2020 about National Higher Education Standards. Internal validation and design improvement were carried out by 2 experts (education experts and midwives). Design improvement is based on the reviews of the two experts. This research was approved by the Health Research Ethics Commission Polytechnic of Health Denpasar.

RESULTS AND DISCUSSION

RESULTS

Gap analysis and user needs

The respondents' characteristics in this study are described in the following table. The majorities of respondent were 25-30

years old, completed middle education, had their first pregnancy and were in the second trimester of pregnancy. The majority of respondents in the wife group have no occupation, while in the husband/spouse group most worked as private employees.

Table 1. Respondents characteristics

Characteristic	Wife		Husband/spouse	
	n	%	n	%
Age(years old)				
< 20	3	3.0	0	0
20-25	25	25.0	35	35.0
> 25-30	46	46.0	40	40.0
>30-35	16	16.0	7	7.0
>35-40	9	9.0	6	6.0
>40	1	1.0	12	12.0
Education				
Primary	20	20.0	8	8.0
Middle	45	45.0	70	70.0
Higher	35	35.0	22	22.0
Occupation				
None	47	47.0	0	0
Private sector employee	43	43.0	72	72.0
Government employee	3	3.0	0	0
Entrepreneur	7	7.0	28	28.0
Pregnancy				
1 st	47	47.0		
2 nd	32	32.0		
3 rd	9	9.0		
4 th	8	8.0		
5 th	4	4.0		
Gestational age				
1 st trimester	19	19.0		
2 nd trimester	62	62.0		
3 rd trimester	19	19.0		

Table 2. Participation and desire to participate in birthing class for couples

	Wife		Husband/spouse	
	n	%	n	%
Participation in birthing class classes for couples				
Yes	11	11.0	11	11.0
None	89	89.0	89	89.0
Desire to participate in birthing class for couples				
Yes	68	68.0	57	57.0
None	32	32.0	43	43.0

This study shows that only 11% of respondents have attended birthing class for couples. The results of this study also show that the interest in participating in childbirth

classes for couples is high. A greater desire was seen in the wife group (68%) than in the husband/spouse group (57%).

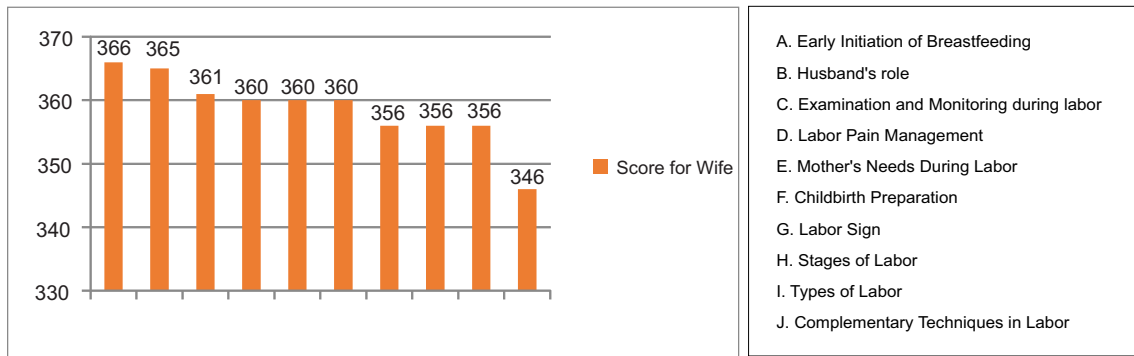


Figure 1. Wife's needs related to study material for childbirth classes

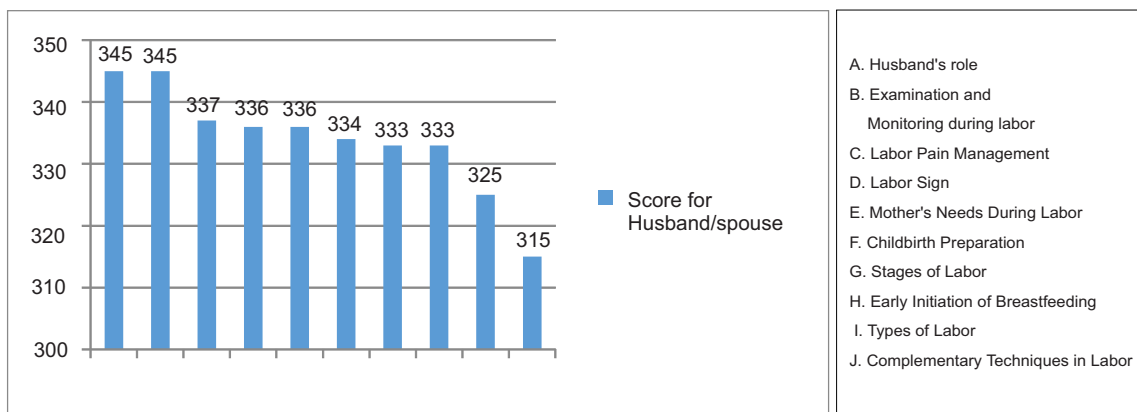


Figure 2. Husband/spouse's needs related to study material for childbirth classes

The needs of the wife's group related to the study materials discussed in the childbirth class are early breastfeeding initiation and the husband's role in childbirth. Slightly different from the wife group, the material most interested in the husband group

is husband's role and examination and monitoring during childbirth. However, it seems that the husband's role in childbirth is considered important in the wife and husband group.

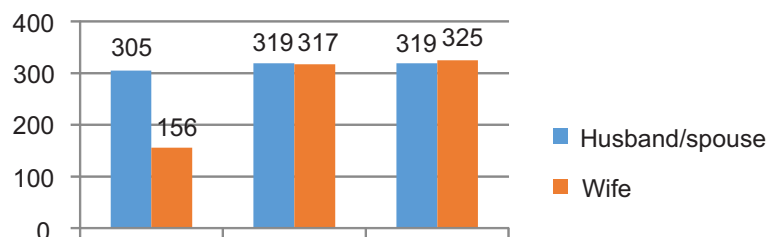


Figure 3. Learning aids to be used in the birthing class

The surveys show that the use of the module in childbirth classes is most desired by the wife and husband/spouse groups.

Table 3 shows the husband and wife groups agree that they want a balanced

learning theory and practice, the length of time for class is 90 minutes and the number of class participants is held in small groups of less than 5 people.

Table 3. Organizing the birthing class

	Wife		Husband/spouse	
	n	%	n	%
Education methods in <i>birthing class</i>				
More practical	36	36	24	24
More theory	3	3	11	11
Balance theory and practical	61	61	65	65
The time for holding the birth class is in 1 meeting				
30 minute	1	1	11	11
60 minute	43	43	24	24
90 minute	56	56	65	65
Number of birthing class participants				
<5 couples	69	69	65	65
5-10 couples	26	26	24	24
>10 couples	5	5	11	11

Learning design drafting

The learning design is arranged in the form of a birthing class training curriculum. Curriculum is based on Peraturan Menteri Pendidikan dan Kebudayaan Number 3 of 2020 about National Higher Education Standards. The curriculum contains competency and learning outcomes, study materials, training subjects, training course loads, learning methods and assessments.

Competence is a minimum standard for the ability of graduates of educational programs which include attitudes, skills and knowledge that are formulated in learning outcomes (20). The learning outcomes of birthing class in the couple prenatal education program are described as follows. Study material that describes the depth and breadth of the training materials are described in the following table 5.

Table 4. Learning outcomes of birthing class in the couple prenatal education program

Learning outcomes	
Attitudes	<ol style="list-style-type: none"> 1) Believing that childbirth is a couple's experience 2) Believing that the natural birth process can be passed by the couple 3) Believing that the efforts may positively help couples go through the delivery process safely and satisfactorily
Skills	<ol style="list-style-type: none"> 1) Able to recognize the signs of natural labor 2) Able to take actions and efforts to get a safe and satisfying natural childbirth experience 3) Able to facilitate the initiation of parent-newborn relationships 4) Be able to make a birth plan
Knowledge	<ol style="list-style-type: none"> 1) Knowing the philosophy of natural childbirth 2) Mastering the stages and mechanisms of childbirth 3) Mastering the needs of mothers in labor and how to meet those needs 4) Mastering various methods of labor pain management 5) Mastering complementary techniques in labour

Table 5. Study materials and birthing class training subjects in the prenatal couple education program

Study materials	Training subjects
Natural childbirth philosophy	The concept of natural childbirth and early breastfeeding Initiation
Preparation for labor during pregnancy	
Signs of natural labor	
Stages and mechanism of labor	
Examination and monitoring in the labor process	
Early breastfeeding initiation	
Maternal needs during labor	Maternal needs and delivery plans
The role of the companion in the delivery process	
Management of labor pain	
Complementary techniques in childbirth	
Birth plan	

An overview of the training subjects and the load of each training subject are presented in the following table. The training load includes theoretical and practical

learning. One hour of training is equivalent to 45 minutes for theoretical and practical learning.

Table 6. Training subject and load of birthing class training subject in the prenatal couple education program

Training Subject	Training Load (training hour)		
	Theoretical	Practical	Total
The concept of natural childbirth and early breastfeeding Initiation	2		2
Maternal needs and delivery plans	2	2	4

Training methods designed in the birthing class are more in the form of student centered learning including brainstorming, role play, practicum, and coaching. Training assessment is conducted through theoretical and practical assessments. Theory uses written pre and posttests while practical assessment is carried out through performance assessment.

Validation of the birthing class learning design

Internal validation of design was carried out by two experts. The results of the design assessment are presented in the following table 7.

The results of the assessment by the two experts are very valid. The lowest rating is given for 2 aspects; Learning method and

Learning subject load.

DISCUSSION

This study shows that only 11% of respondents have attended birthing class for couples. The results of this study are smaller than the results of a national survey which showed 20.2% of couples attending education classes for pregnancy (9). The results of this study also show that the interest in participating in childbirth classes for couples is high. A greater desire was seen in the wife group (68%) than in the husband/spouse group (57%).

Birthing class provides many benefits for mothers. Research has shown that taking prenatal classes during pregnancy increases confidence in childbirth (13). Pregnant women

who participate in labor preparation classes are reported to have better coping with labor pain, use non-pharmacological pain management and have a satisfying delivery experience(14).

Couples also benefit from birthing classes. The presence of a partner during childbirth classes encourages and prepares couples to be actively involved in the labor process. This has the impact of increasing the emotional closeness of the father to the child and also the emotional closeness of the mother and father"(4).

Being involved during labor for fathers is a uniquely transformative experience. Enthusiasm is mixed with feelings of insecurity in the unfamiliar situation and environment of the delivery room and the uncertain development of the labor process (5), there are also reports of posttraumatic stress disorder symptoms (PTSS) and symptoms of anxiety by the father after accompanying the birth(6). Fathers who are less prepared tend to have negative experiences while attending labor/birth(7).

Wife and husband/spouse groups agreed that the important material discussed in childbirth classes was the husband's role. The presence of a companion who is able to play an active role in the birth process will have a direct impact on the mother in the delivery process. Research shows that the active involvement of birth attendants will improve control of labor pain (15) and smooth delivery (16). Practicing to carry out the role during childbirth is needed in order to be able to carry out the role well and increase the positive experience of fathers during the delivery process.

The use of learning modules in childbirth classes was also agreed upon by the

wife and husband/spouse group. Learning with modules is one of the individual learning methods where each individual can organize and determine the learning process that is most suitable for him. The learning module is a package that as a whole contains one unit of the concept of learning materials. The module allows students to master a concept of lesson material and is self-instructional (17). So that the design of a module greatly influences the mastery of the subject matter being studied (18). The development of learning modules can follow certain steps such as the Plomp model (19). The development of learning modules needs to be carried out in further research.

Learning design for birthing class in the couple prenatal education program is based on Peraturan Menteri Pendidikan dan Kebudayaan Number 3 of 2020 about National Higher Education Standards (20). Learning standards in the National Higher Education Standards aim to ensure that education held by higher education institutions conforms to standards set nationally. National education standards include graduate competency standards, learning content standards, learning process standards, educational assessment standards, lecturer and education staff standards, facilities and infrastructure standards, management standards and financing standards.

Participants of the birthing class are pregnant women and their partners so that the education in this training is based on an adult learning system. This national education standard was adapted for the development of learning designs in birthing class training based on the understanding that national higher education standards are intended for

adult learning so that they are more suitable to be applied compared to learning standards at the primary or middle education level.

Adaptation is needed considering the birthing class is a short course. So that not all of the standards set in the national education standards can be applied. National education standards that can be applied include 1) graduate competency standards in the form of learning outcomes; 2) standard of learning content in the form of study materials; 3) standard of the learning process in the form of the design of the training courses, the load of the training subjects, the learning methods; 4) standard of educational assessment includes the assessment methods and instruments; 5) standard of facilities and infrastructure including media and learning aids; 6) management standards include lesson plans. National education standards that cannot be implemented in this training program include the standards of lecturers and education personnel and standards of financing.

The assessments by the two experts are very valid which shows that the learning design that has been prepared can be continued in the next development process. Nevertheless the lowest rating is given for 2 aspects; Learning method and Learning subject load. Improvement is needed in these two aspects.

The design testing stage needs to be continued to get the birthing class learning model in the prenatal Couple education program. Further testing is carried out by testing external validity to test the product in a limited group and in a larger group before finally the product can be disseminated (21).

CONCLUSION AND RECOMENDATION

The birthing class learning design for

prenatal couple education program is needed by pregnant women and their partners. The design can be used for preparing the birthing class model.

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