



Identification of the Needs Couples Against Prenatal Class Program in Badung Regency

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ABSTRAK

Latar Belakang: Kehamilan menyebabkan perubahan fisik dan psikis. Terkadang hal itu menyebabkan krisis pematangan. Dukungan suami diharapkan bisa optimal. Selama ini pendidikan kehamilan terfokus pada ibu, sehingga suami tidak dapat menjalankan perannya secara optimal.

Tujuan: Penelitian ini bertujuan untuk mengidentifikasi kebutuhan informasi pasangan tentang materi, metode, media, pengulangan, dan durasi kelas prenatal pasangan di Kabupaten Badung.

Metode: Penelitian ini merupakan penelitian sekuensial eksplanatori campuran. Penelitian ini dilakukan di Kabupaten Badung dengan jumlah 100 pasangan. Analisis data melalui tahapan transkripsi, reduksi, koding, kategorisasi dan pencarian tema. Hasil penelitian diperoleh enam tema: mata pelajaran, fungsi, bentuk, kesadaran, kuantitas, dan kualitas pendidikan kesehatan. Langkah selanjutnya adalah kuantitatif, kuesioner berisi jenis kebutuhan materi, media, metode, durasi dan pengulangan pendidikan kesehatan yang dibutuhkan oleh pasangan. Hasil penelitian kuantitatif dianalisis secara deskriptif kuantitatif.

Hasil: Penelitian ini terdiri dari 6 tema yang digunakan sebagai dasar penyusunan penelitian kuantitatif. Kuesioner penelitian ini terdiri dari 30 item yang meliputi materi, media, metode, durasi dan pengulangan kebutuhan informasi kesehatan tentang kehamilan, persalinan, nifas dan bayi baru lahir yang dinilai dengan skala Likert. Temuan mengungkapkan bahwa topik hamil yang paling umum adalah stimulasi janin, indikator bahaya, dan keluhan, serta cara menghadapinya. Strategi manajemen nyeri, peran suami, dan inisiasi menyusui merupakan materi persalinan yang esensial. Indikator bahaya, masalah menyusui, serta penanganan dan perawatan pascapersalinan merupakan hal yang paling dibutuhkan selama masa nifas. Memandikan dan merawat tali pusat, pertumbuhan, perkembangan, dan pijatan adalah item perawatan bayi baru lahir yang penting. Media interaktif, pendekatan hybrid, durasi, dan pengulangan materi yang disesuaikan dengan urgensi dan tuntutan pasangan merupakan media pembelajaran yang diinginkan.

Kesimpulan: Kebutuhan pasangan akan pendidikan kesehatan di kelas prenatal pasangan sangat bervariasi, meliputi materi, media, metode, durasi, dan pengulangan.

KATA KUNCI: *identifikasi kebutuhan; pasangan; kelas prenatal*

ABSTRACT

Background: Pregnancy causes changes in physical and psychological. Sometimes it causes a maturation crisis. The husband's support is expected to be optimal. So far, pregnancy education has focused on the mother, so the husband cannot carry out his role optimally.

Objectives: This study aims to identify the information needs of couples about the materials, methods, media, repetitions, and duration of couple prenatal class in Badung Regency.

Methods: This research is a mixed-method explanatory sequential. This research was conducted in Badung Regency with 100 couples. Data analysis went through the stages of transcription, reduction, coding, categorization and finding themes. The results obtained six themes: subjects, functions, forms, awareness, quantity, and quality of health education. The next step is quantitative, the questionnaire contains the types of material needs, media, methods, duration and repetitions of health education needed by couples. The results of quantitative research were analyzed descriptively quantitatively.

Results: This study consisted of 6 themes that were used as the basis for compiling a quantitative research. This research questionnaire consists of 30 items which include material, media, method, duration and repetition of health information needs about pregnancy, childbirth, postpartum and newborn which are assessed with a Likert scale. The findings revealed that the most common pregnant topics were fetal stimulation, danger indicators, and complaints, as well as how to deal with them. Pain management strategies, the role of the husband, and early breastfeeding initiation are the essential delivery materials. Danger indicators, breastfeeding issues, and managing and caring for postpartum are the most needed during the postpartum time. Bathing and caring for the umbilical cord, growth, development, and massage are the essential newborn care items. Interactive media, hybrid approaches, duration, and repetition of material adapted to the urgency and demands of couples are all desirable learning media.

Conclusions: The needs of couples for health education in a couple of prenatal classes are very varied, including materials, media, methods, duration, and repetitions.

KEYWORD: need identification; couples; prenatal class

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INTRODUCTION

Pregnancy causes changes in physical and psychological aspects so that sometimes it causes a maturation crisis (1)(2). If this can be overcome, the mother becomes ready to adapt to her role (2). Conversely, if it fails, it will harm the health of the mother and fetus. The fetus may experience developmental delays or emotional disturbances at birth (3). The physical and psychological qualities of a child are determined by the physical and psychological qualities of the mother during pregnancy (1). Psychological conditions such as anxiety and stress, which can continue after delivery, develop adverse reactions (3). This condition can be transmitted to the fetus through biochemical processes, so the baby will show symptoms of depression such as restless sleep and refusal to drink (1). Support from health

workers and families, especially husbands, is needed. The husband, as the closest person, is expected to be able to work together to meet the needs of pregnant women and their fetuses so that pregnant women and their fetuses are prosperous. Husband's support is very important for pregnant women who experience anxiety. The husband's emotional support can cause feelings of pleasure in him (4).

Pregnancy education only focuses on increasing the mother's knowledge; the husband's involvement is still limited so that in his daily life, the husband is not able to optimally carry out his role (5). Couple Prenatal Class is an innovative couple education class implemented in several midwifery services. This activity is a class development for pregnant women. The target focus of this educational class is pregnant

women and husbands. The implementation of the Couple Prenatal Class is very limited in several health facilities such as PMB and private maternity hospitals/clinics.

The lack of knowledge and skills of pregnant women and their partners about pregnancy, childbirth, postpartum, and baby care, as well as the lack of these activities involving husbands, researchers are interested in identifying the needs of pregnant women and their husbands for the Couple Prenatal Class program at the Puskesmas in the Kuta District, Badung Regency, with research partners, are pregnant women and husbands who perform ANC examinations during the study period. The results of this study serve as the basis for developing a health education design for the Couple Prenatal Class program.

MATERIALS AND METHODS

The design is a mixed-method sequential exploratory model. The first stage aims to help develop or inform the second (quantitative) method (6). Qualitative research respondents were couples who had a pregnancy checkup at a midwife's practice in the Kuta area. The research sample was 10 couples who were chosen randomly, until the data was saturated. This research was conducted using an in-depth interview method regarding the opinions of couples needs of pregnancy, childbirth, postpartum and newborn based on experience and expectations. A qualitative analysis is carried out, and six themes are formed covering subjects, functions, forms, awareness, quantity, and quality of education—health which is then developed into an indicator of a quantitative research instrument.

Quantitative research was taken using a questionnaire which had Pearson Correlation (r) > 0.3061. The instruments include material requirements, methods, media, duration, and repetition of health education in the couple prenatal class program. These needs were

analyzed descriptively using a Likert scale, including very unneeded (VUN), unneeded (UN), quite needed (QN), needed (N), and very needed (VN). The research location was carried out in Badung Regency, Bali Province, from July to October 2021. The research sample were couples who had their pregnancy checked at the location during the study period, which was determined by cluster sampling, and the amount was calculated by the Cochran formula. The number of samples obtained was 100 respondents. The single variable in this study is the identification of prenatal class couple needs

RESULTS AND DISCUSSION

RESULTS

The results of the qualitative analysis found themes related to the need for health education in pregnancy, childbirth, postpartum, and newborns. A qualitative analysis is carried out, and six themes are formed covering subjects, functions, forms, awareness, quantity, and quality of education—health which is then developed into an indicator of a quantitative research instrument.

The concept map of respondents' opinions about the need for health education in the Couple Prenatal Class is follows:

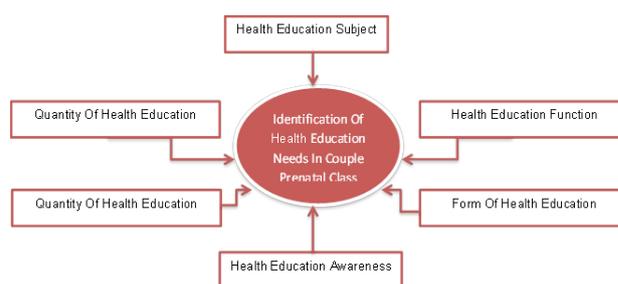


Figure 1. Concept Map of Couples' Opinions About Health Education Needs in Couple Prenatal Class

Quantitative research instruments compiled include material requirements, methods, media, time in providing health education in the Couple Prenatal Class program. The questionnaire was conducted using the Pearson correlation method

with a Pearson Correlation (r) value > 0.3061. Characteristics of respondents in this study include the age of pregnant women, husband's age, number of pregnancies and education. Based on **Table 1**, it can be seen that the age of the respondents is mostly included in the category of healthy reproduction, namely the age of 20-35 years with a total of 85%. Most of the husbands are between 20-40 years, which

is 92%. The characteristics of respondents in this study based on the number of pregnancies were mostly multigravida with a total of 54% and prigravida amounting to 42%.

Based on **Table 2**, the results show that the most needed pregnancy material is fetal stimulation with a brain booster, danger signs and complaints that often occur in pregnancy, and how to overcome them.

Based on **Table 3**, the results showed that the materials most needed about childbirth were pain management techniques, the husband's role, and early initiation of breastfeeding.

Based on **Table 4**, the study results show that the materials most needed in postpartum care are danger signs, breastfeeding problems, and ways to overcome and care for the postpartum period.

Based on **Table 5**, the results show that the most needed materials for newborn care are

Table 1. Frequency Distribution of Respondents Characteristics

Characteristics	n	%
Maternal Age (year)		
20-35	15	15
>35	85	85
Husband' Age (year)		
20-40	92	92
>35	8	8
Gravida		
Primigravida	42	42
Multigravida	54	54
Grandemultigravida	4	4

Table 2. Description of Identification of the Needs of Pregnant Mothers and Husbands for Pregnancy Health Education Materials in Couple Prenatal Class

PREGNANCY MATERIAL REQUIREMENTS QUESTIONS	LIKERT SCALE											
	VUN	%	DN	%	QN	%	N	%	VN	%	n	
Daily care	0	0	1	0	50	50	11	11	38	38	100	
Physiological Changes	0	0	2	2	43	43	15	15	40	40	100	
Common Complaints	0	0	1	1	40	40	13	13	46	46	100	
Danger Signs	0	0	2	2	35	35	9	9	54	54	100	
Exercise	0	0	2	2	41	41	13	13	44	44	100	
Brain Booster	0	0	0	0	34	34	4	4	62	62	100	

*VUN: Very Unneeded *UN: Unneeded *QN: Quite Needed *N: Needed *VN: Very Needed

Table 3. Description of the Identification of the Needs of Pregnant Women and Husbands on Maternity Health Education Materials in the Couple Prenatal Class.

QUESTIONS OF LABOR MATERIAL REQUIREMENTS	LIKERT SCALE											
	VUN	%	DN	%	QN	%	N	%	VN	%	n	
Signs of Labor	0	0	2	2	43	43	15	15	40	40	100	
Childbirth Preparation	0	0	5	5	44	44	14	14	37	37	100	
Normal Labor	0	0	3	3	42	42	19	19	36	36	100	
Maternity Needs	0	0	2	2	40	40	18	18	40	40	100	
The Role of Husband and Family as Childbirth Facilitator	0	0	0	0	36	36	11	11	53	53	100	
Delivery Position	0	0	0	0	45	45	14	14	41	41	100	
Techniques for Overcoming Pain in Labor	0	0	0	0	32	32	11	11	57	57	100	
Early initiation of breastfeeding	0	0	0	0	35	35	15	15	50	50	100	
<i>Hypnobirthing</i>	0	0	11	11	52	52	19	19	18	18	100	
Oxytocin Massage in Labor	0	0	2	2	39	39	21	21	38	38	100	

*VUN: Very Unneeded *UN: Unneeded *QN: Quite Needed *N: Needed *VN: Very Needed

Table 4. Description of Identification of the Needs of Pregnant Women and Husbands for Postpartum Health Education Materials in Couple Prenatal Class.

QUESTIONS OF POST PARTUM MATERIAL REQUIREMENTS	LIKERT SCALE										
	VUN	%	DN	%	QN	%	N	%	VN	%	n
Postpartum Care	0	0	1	1	32	32	15	15	52	52	100
Postpartum Exercise	0	0	2	2	39	39	16	16	43	43	100
Position Breastfeed	0	0	1	1	33	33	18	18	48	48	100
Breastfeeding Problems and How to Overcome	0	0	1	1	31	31	11	11	57	57	100
How to Express and Save Mother's Milk	0	0	2	2	35	35	18	18	45	45	100
Postpartum Danger Signs	0	0	0	0	33	33	5	5	62	62	100
Postpartum Depression and How to Overcome	0	0	0	0	41	41	14	14	45	45	100
Oxytocin Massage	0	0	0	0	38	38	12	12	50	50	100
Contraception	0	0	3	3	33	33	9	9	55	55	100

*VUN: Very Unneeded *UN: Unneeded *QN: Quite Needed *N: Needed *VN: Very Needed

Table 5. Description of the Identification of the Needs of Pregnant Women and Husbands for Health Education Materials for Newborn Care in the Couple Prenatal Class.

QUESTIONS OF NEW BIRTH CARE MATERIALS	LIKERT SCALE										
	VUN	%	DN	%	QN	%	N	%	VN	%	n
Bathing and care for umbilical cord	0	0	0	0	26	26	18	18	56	56	100
Massage	0	0	1	1	31	31	18	18	50	50	100
Exclusive breastfeeding immunization	0	0	2	2	28	28	23	23	47	47	100
Baby Growth	0	0	1	1	37	37	15	15	47	47	100
	0	0	0	0	33	33	7	7	60	60	100

*VUN: Very Unneeded *UN: Unneeded *QN: Quite Needed *N: Needed *VN: Very Needed

Table 6. Description of Identification of the Needs of Pregnant Women and Husbands for Health Education Media in Couple Prenatal Class

QUESTIONS OF HEALTH EDUCATION MEDIA NEEDS	LIKERT SCALE										
	VUN	%	DN	%	QN	%	N	%	VN	%	n
Print Media	0	0	1	1	51	51	23	23	25	25	100
Interactive Media (video)	0	0	0	0	29	29	2	2	69	69	100

*VUN: Very Unneeded *UN: Unneeded *QN: Quite Needed *N: Needed *VN: Very Needed

bathing and caring for the umbilical cord, growth and development, and baby massage.

Based on **Table 6**, the identification of the needs of pregnant women and their husbands for health education media other than the KIA book, which is already owned by pregnant women, is measured by a questionnaire.

Based on **Table 7**, the results of the study showed that the most desirable health education method was a combination of theory and practice. Class activities for pregnant are a means for group learning about health for pregnant women, in the form of face-to-face meetings aimed at increasing the knowledge and

skills of mothers regarding pregnancy, childbirth, postpartum and newborn care through practice using the KIA handbook (11).

Table 7. Description of Identification of the Needs of Pregnant Women and Husbands on Health Education Methods in Couple Prenatal Class

Health Education Method	n	%
Practice	23	23
Theory	0	0
Combination	77	77

*VUN: Very Unneeded *UN: Unneeded *QN: Quite Needed *N: Needed *VN: Very Needed

Based on **Table 8**, the study results obtained data on the duration of health education

needed in the Couple Prenatal Class, which is about 60 minutes.

Table 8

Description of Identification of the Needs of Pregnant Women and Husbands on the Duration of Health Education in Couple Prenatal Class

Duration of Health Education	n	%
30 minute	17	17
60 minute	83	83
120 minute	0	0

Based on **Table 9**, the study results showed that not all material presented in health education in the Couple Prenatal Class had to be given repeatedly.

DISCUSSION

The results showed the identification of the needs of pregnant women and their husbands for pregnancy health education materials in the couple prenatal class identified by questionnaires using a Likert scale obtained from the maximum score on each question about pregnancy material, and it was found that the material most needed was stimulation of the fetus in the womb with brain booster, danger signs in pregnancy and complaints that often occur in pregnancy and how to overcome them.

Brain booster is an evidence-based obstetric service that has positive benefits for fetal brain development. Brain booster is a fetal stimulation and nutritional fulfillment to increase the potential of fetal intelligence (12). Provision of stimulation and proper nutrition is expected to increase the potential for intelligence in children (12). Children's intelligence is influenced by 3 things, namely genetics, nutrition and environmental

factors. The fulfillment of brain lever nutrition must be synergized with the provision of stimulation so that the results are optimal (13). Stimulation is done by inviting talking, chatting, singing songs, and reading prayers and religious songs while stroking the mother's belly (13). The fetus can hear the mother's voice since 18 weeks of gestation (14). Experimental research with experimental animals, found the effectiveness of sound stimulation with music affects increasing brain cell proliferation (14). Giving a brain booster to pregnant mice with the music of Al-Quran Murrotal surah Ar-Rahman during pregnancy on days 6-17, stimulated several cerebrum and cerebellar neurons of newborn mice (15). The earlier the health education is known by pregnant women and husbands, it will also be done earlier.

The second material needed is a danger sign. Every pregnancy is at risk of an emergency, therefore couples must have the knowledge and ability to detect emergencies that may occur early and the efforts that can be made. Husbands have a supportive function by providing guidance and disseminating information to other family members (16), detecting danger signs of pregnancy, determining family health status and making decisions (17). Health education about danger signs such as bleeding, excessive nausea and vomiting, reduced fetal movement, premature discharge of amniotic fluid, swelling of the feet, hands and face, or headache accompanied by seizures, and high fever (18) is important to be given clearly and completely.

The third most needed material is physiological complaints of pregnancy and how to overcome them. Couples should be given health education about the occurrence of

Table 9. Description of Identification of the Needs of Pregnant Women and Husbands for Health Education Repetition in Couple Prenatal Classes

QUESTION NEEDS FOR HEALTH EDUCATION REPETITIES	LIKERT SCALE											
	VUN	%	DN	%	QN	%	N	%	VN	%	n	
Repetition	0	0	12	12	37	37	10	10	41	41	100	

*VUN: Very Unneeded *UN: Unneeded *QN: Quite Needed *N: Needed *VN: Very Needed

complaints and non-pharmacological treatment to overcome these complaints such as herbalism, yoga, pregnancy exercise, massage and so on. Discomfort is an isolated symptom that is integrated to exacerbate other complaints (19). Complaints that are not completely resolved cause stress and anxiety, triggering the activation of corticotropin relaxing hormone, adenocorticotropin relaxin hormone, cortisol, and adrenaline to be released into the blood circulation (19). Yoga can increase a sense of well-being in body and mind (20). A quasi-experimental non-equivalent control group for pregnant women in the third trimester who did prenatal yoga, found a significant difference in the complaints of pregnant women before and after prenatal yoga with $p = 0.000$ (19).

The results showed the identification of the needs of couples for delivery health education materials in the couple prenatal class, was found that the most needed material was techniques for dealing with pain in labor. The role of the husband in the delivery process and early initiation of breastfeeding. Health education about the role of companions is much in demand by primigravida and multigravida, even though they have previous experience in the delivery process.

Research on the role of husbands in childbirth and postpartum care, data obtained husbands play a passive role, meaning that the husband's role is not optimally carried out due to a lack of understanding of his role (21). Labor pain, if not handled properly, causes worry, tension, fear, and stress so that it impacts the occurrence of prolonged labor (22). This causes discomfort, causing trauma. Reviewing articles on pain in a normal delivery, data showed that most mothers had a negative impression of labor pain (23). Support can be done by massage, providing a comfortable position, relaxation, touch, visualization, and counterpressure (22).

The next material respondents need is Early Initiation of Breastfeeding (IMD). Evidence-

based, the program benefits both mother and baby. In a systematic review, it was found that the delay in doing IMD in the first 1 hour after the baby's birth increases the risk of death in the baby (24). This is positively correlated with the benefits obtained by the mother, namely, stimulating the hormone oxytocin (24). Most primigravidas need health education about the needs of maternity mothers, such as nutrition, mobilization, how to deal with pain, and so on. The qualitative research conducted stated that most husbands did not know their role adequately. Respondents detailed that they did not know what they could do to help their wife in labor, what food could be given and what care could make her comfortable (25).

The results showed the identification of the needs of pregnant women and their husbands for postpartum health education materials in the Couple Prenatal Class identified that the material most needed was the danger signs of postpartum, breastfeeding problems and how to overcome and care for postpartum mothers. The dangerous signs of postpartum that must be understood by mothers and husbands include bleeding, fever for more than two days, smelly discharge from the birth canal, swelling of the face, hands, and feet or headache accompanied by seizures, the mother looks sad, moody and cries for no reason. depression) and breast swelling, redness, and pain (18).

This is at risk of an emergency, so the knowledge and ability to perform early detection must be optimal. The second material for health education that is much needed by couples is the problem of breastfeeding and how to overcome it. A cross-sectional study found postpartum problems, including symptoms of depression, lactation problems, sexual intercourse after childbirth, and urinary incontinence. The problem was detected within six weeks after delivery (26).

Breastfeeding problems are at risk of causing anxiety in the mother and the failure

of exclusive breastfeeding. Anxiety includes a lack of self-confidence, and stress affects the relationship between mother and baby and inhibits the release of the hormone oxytocin so that it has an impact on the breastfeeding process (27). The third material for health education during the puerperium that is needed is postpartum maternal care, including fulfilling nutritional needs, mobilization, facilitating postnatal physical activity needs, providing support, baby care, choosing contraceptives, and monitoring danger signs. Husband's support prevents depression and psychological disorders because changes in roles, physiological and psychological changes that occur simultaneously can cause discomfort. According to Reva Rubin (1991), quoted in (28), there are three phases in the role adaptation period during the postpartum period, namely the period of taking in, taking hold or the independent phase, and letting go or the interdependent phase.

The results showed the identification of the needs of pregnant women and their husbands for health education materials for newborn care in the Couple Prenatal Class identified that the most much needed is how to bathe and care for the umbilical cord, baby growth, and baby massage. It is important to provide education for newborn care to parents since pregnancy, with the aim of preparing parents to be able to carry out their role in parenting. Postpartum psychology often experiences unstable, sad, and irritable emotions, one of which is stimulated by anxiety about the inability to properly care for the baby (28). The provision of education on newborn care should involve the husband; the aim is to be able to take a role in meeting the needs of the newborn. Psychological and physical support can increase self-confidence in carrying out their role in parenting (29).

Baby care is the fulfillment of the need for sharpening or the need for stimulation of development in infants. Meeting the needs of

honing, compassion and care is the responsibility of parents; the fulfillment cannot be done separately. Parenting needs can be met by parents by bathing, caring for the umbilical cord, and massaging the baby. Parents can simultaneously meet the needs of love with touch and invite the baby to talk and meet the needs of sharpening with gentle massage (30).

In the health education process, the media is one of the most critical components so that the delivery of information can be well received. Media are all forms and channels used to distribute information (31). Learning media by learning activities will create an effective and efficient learning activity so that the material presented can be absorbed optimally (31). The use of technology can improve the learning process if used correctly, and in health education, technology that is commonly used videos, power points, or information in the form of health articles presented on the web (32).

Media is the most important component to deliver information that can be received well. Media are all forms and channels used to distribute information (31). Media that is by learning activities will create effective and efficient learning so that the material presented can be absorbed optimally (31). The use of technology can improve the learning process if used properly; commonly used media include videos, power points, or health articles on the web (32). Video can be used in various ways online, offline, and blended learning. Instructors must consider several elements, including managing cognitive function so that information is conveyed properly, maximizing the active role of participants, and effectively promoting interesting and useful educational media (33).

Media helps clients understand and capture the information contained in the message conveyed (34). Video is easily accessible, effective, and efficient, so it is widely used as a means of health promotion and education (34).

The media needs that respondents want other than the MCH Handbook are interactive learning media. Research on the implementation of learning media found that the use of interactive learning media (audiovisual) was more effective in improving learning outcomes than print media (35).

The results of another study using a scoping review approach (34) concluded that video in providing education was proven to significantly increase patient knowledge in various age groups and disease groups. Another advantage is the presence of audio, making it easier to understand the information provided (34). The effectiveness of the video can also be seen from the length of information that can survive in memory so that when recalled, the group with 3D media is better able to remember more information than the 2D group (34). This is considered efficient and practical, easy to understand, and can be broadcast repeatedly so that it is effective in changing the views of the target to be intervened (36). Video media rely on hearing and sight from the target, where the use of audiovisual involves all senses, so the more senses are involved in receiving and processing information, the more likely the information content can be understood and retained in memory, and with the effect of moving images and images. Sound effects can make it easier for the audience to understand the content of the news so that it can increase knowledge (36)(37).

The "cone of experience" theory proposed by Edgar Dale (1946) states that it can be concluded that a person's memory can receive better when utilizing more than one sense when receiving health education (38). The results of experimental research on health education related to maternal health literacy who were given health education using audiovisual with video were higher than using visual media such as brochures (39).

Based on the study results, it was found that the respondents needed health education

given to the couple prenatal class in the form of a combination of theory and practice. Health education for pregnant women and husbands is given in classes for pregnant women. Class activities for pregnant women are a means for group learning about health for pregnant women, in the form of face-to-face meetings aimed at increasing the knowledge and skills of mothers regarding pregnancy, childbirth, postpartum care, and newborns through practice using the KIA handbook (40).

Health education activities in the class for pregnant women are divided into five materials consisting of material for antenatal care so that the mother and fetus are healthy; safe delivery, comfortable postpartum, safe mother, healthy baby; prevention of diseases, complications of pregnancy, childbirth and postpartum so that mothers and babies are healthy; newborn care for optimal growth and development; physical activity in pregnant women. The health education materials were delivered using the lecture method with presentation media in the form of a flip chart (11).

The implementation of health education for pregnant women and husbands is a concept of adult education (andragogy); the rationale for the concept is that couples have varied characteristics in receiving health education. The whole educational process is organized, regarding any form of content/material, level of status, what methods are used in the educational process, which makes adults able to develop abilities, skills, enrich the repertoire of knowledge and skills (41). Health education, by using strategies based on client needs, aims to make changes in health behavior, prepares for client acceptance of information, and increases the client's ability to access needed information (42). His learning includes all aspects of the learning experience adults need; the process provides knowledge and is equipped with skills. Psychologically, knowing the client's needs in

educational activities, it is easy to determine the learning conditions that must be created, what content of the material should be given, what strategies, techniques and methods are suitable for use (41). Determination of the method considers aspects of the objectives to be achieved.

The outline of the adult learning program is divided into two types, namely: 1) Process design to encourage adults to be able to organize and fill in new experiences by referring to the past that has been experienced, for example, skills training, discussion, question and answer, sensitivity training and others so that they can provide new insights for each individual to be able to take advantage of what is already known. 2) A learning process designed to increase the transfer of new knowledge, new experiences, new skills to encourage each adult to achieve as much as possible the knowledge he wants, what his needs are, the skills needed (41). The study results stated that most of the respondents expected a real learning experience with the hybrid method of health education given to skills that require real experience in the form of hands-on practice.

Based on the results of the study, it was found that the duration of health education needed in the Couple Prenatal Class was about 60 minutes. The duration of the health education provided is related to the client's ability to concentrate as a recipient of information. The duration of health education that is too long can cause boredom and reduce concentration, so the effectiveness of time in providing health education must be considered. With the use of interactive media, the duration of health education can be streamlined in a shorter time.

The implementation of health education is based on adult learning; the learning time is "not long" because one of the characteristics of the learning is that more/dominant is a place to share or justify or clarify experiences or increase

knowledge, skills, and attitudes or values (43). The weakness of using video as a medium is that it is possible for students not to get any information by the learning objectives because they do not listen well to the information content presented. A good instructor must ensure that information is presented concisely and clearly in making educational videos. The duration of the delivery of information in the video is expected to be short (33).

The main thing about using video as a medium is to ensure that the duration of the video is not long so that it does not cause boredom, decreased concentration, difficulty capturing the message conveyed (33). The average effective duration is about 6 minutes, and when the viewing duration is added according to the intervention, it is found that it causes a decrease in the concentration of the receiver (33). Another thing that influences the use of video is language style. The use of a more familiar language is more attractive to the message recipient to watch the video. The narrator should convey the information in the video in an attractive, enthusiastic style, with the right intonation, and stimulate the activity of the recipient of the message (33).

One of the advantages of using interactive learning media in videos for skills material is the ease in the learning process. Pregnant women and husbands can repeatedly study the material/topics given independently at home. This will greatly affect the achievement of the expected health education goals. Repetition and reinforcement have been shown to play a role in changing health behavior. These two things are important in the clarity of the learning objectives and the active involvement of the recipients of health information/education. They support each other. Reinforcement of information increases the likelihood that something new in the form of informed health behavior will be repeated in the future, while repetition causes the health behavior to be more attached to be adopted (44).

Repetition is done by repeatedly providing health education, ensuring that the recipient understands the information provided. The repetitions can be done continuously in successive times, or the repetitions can be done not in successive times (44).

CONCLUSION AND RECOMMENDATION

Based on the study results, it was found that the identification of the needs of pregnant women and their husbands for health education in the Couple Prenatal Class was very varied, including materials, media, methods, duration, and repetitions.

Implementers of maternal and child health services in health facilities can optimize health education in pregnancy, childbirth, postpartum, and infant care by developing the Couple Prenatal Class program concerning the health education needs to be required by each couple.

REFERENCES

1. Astuti AB, Santosa SW, Utami MS. Hubungan Antara Dukungan Keluarga dengan Penyesuaian Diri Perempuan Pada Kehamilan Pertama. *Psikologi*. 2000;27:84–95.
2. Susanti NN. *Psikologi Kehamilan*. Jakarta: EGC; 2008.
3. Ningrum SP. Faktor-Faktor Psikologis yang Mempengaruhi Postpartum Blues. *Jurnal Ilmu Psikologi*. 2017;4:205–18.
4. Diani LPP, Susilawati LKPA. Pengaruh Dukungan Suami Terhadap Istri Yang Mengalami Kecemasan Pada Kehamilan Trimester Ketiga Di Kabupaten Gianyar. *Psikol Udayana*. 2013;1:1–11.
5. Fletcher R, Silberberg S, Galloway D. New Fathers' Postbirth Views of Antenatal Classes: Satisfaction, Benefits, and Knowledge of Family Services. *Jurnal Perinat Educ*. 2005;13(3):18–26.
6. Samsu. *Metode Penelitian: (Teori Dan Aplikasi Penelitian Kualitatif, Kuantitatif, Mixed Methods, Serta Research & Development)*. Rusmini, editor. JAmbi: Pusaka Jambi; 2017. 161–171 p.
7. Prasanti D. Penggunaan Media Komunikasi Bagi Remaja Perempuan Dalam Pencarian Informasi Kesehatan. *Lontar*. 2018;1:13–21.
8. Deanawa NA. Analisis Kebutuhan Informasi (Information Need Assesment) Lansia di Kota Surabaya. Universitas Airlangga; 2016.
9. Winarsih, Ati S. Kebutuhan Dan Perilaku Pencarian Informasi Taruna Angkatan 46 Di Perpustakaan Politeknik Ilmu Pelayaran Semarang. *Jurnal Ilmu Perpustakaan*. 2013;2 (4):9–17.
10. Wulandari FR, Samsiyah S, Darmanto, Tiesnawati. *Dasar-dasar Informasi*. 1st ed. Jakarta: Universitas Terbuka; 2007.
11. Indonesia KKR. *Pegangan Fasilitator Kelas Ibu Hamil*. Jakarta: Kementerian Kesehatan RI; 2014.
12. RI D. *Pedoman Stimulasi Dan Nutrisi Pengungkit Otak (Brain Booster) Pada Janin Melalui Ibu Hamil*. Jakarta: Pusat Pemeliharaan Peningkatan dan Penanggulangan Intelegensia Kesehatan; 2009.
13. Suparni S, Fitriyani F, Aisyah RD. Paket Edukasi Brain Booster Pada Ibu Hamil di Kabupaten Pekalongan. *Siklus*. 2019;8:93–101.
14. Panjaitan HMB, Joewono HT, Widjiati2. Default sequence** of Mozart's compositions during pregnancy gave higher dendritic density in the cerebrum and cerebellum of *Rattus norvegicus* offsprings compared with reversed sequence and control. *Maj Obs Gin*. 2019;27:5–11.
15. Yani AP, Joewono HT, Widjiati. Effect of Murotal Sound Stimulation during Pregnancy on the Number of Neuron Cells of Cerebrum and Cerebellum of the Newborn *Rattus norvegicus*. *Indian J Forensic Med Toxicol*. 2021;15(4):845–51.

16. Aditiawarman, Armini NKA, Kristanti YI. The Beneficence of Family Social Support toward Anticipatory Behaviour of Pregnancies Sign's Alert in Primigravida. *Ners.* 2008;3.
17. Winancy, Raksanagara AS, Fuadah Y. Perbandingan Penerapan Metode Brainstorming dan Buzz Group Terhadap Peningkatan Pengetahuan Suami Ibu Hamil Tentang Tanda Bahaya Kehamilan, Persalinan, Dan Nifas (Studi Kasus Di Bogor). *Southeast Asian Journal Midwifery.* 2015;1:1–9.
18. Indonesia KKR. Buku KIA Kesehatan Ibu dan Anak. Jakarta: Kementerian Kesehatan dan JICA; 2020.
19. Rafika. Efektivitas Prenatal Yoga terhadap Pengurangan Keluhan Fisik pada Ibu Hamil Trimester III. *Kesehatan.* 2018;9.
20. Pont AV, Rosiyana NM, Pratiwi V, Enggar, Nurfatimah, Ramadhan K. The Effect of Prenatal Yoga in Reducing Pregnancy Complaints. *Indian Journal Public Health Res Dev.* 2019;10:1218–22.
21. Kristianingrum DY. Peran Suami Dalam Memberikan Dukungan Persalinan. *Embrio J Kebidanan.* 2021;13(1):39–45.
22. Kurniarum A. Asuhan Kebidanan Persalinan dan BBL. 1st ed. Jakarta: Badan Pengembangan dan Pemberdayaan SDM Kesehatan; 2016. 32 p.
23. Whitburn Y, Jones L, Davey MA, McDonald S. The nature of labour pain: An updated review of the literature. *Aust Coll Midwives, Elsevier.* 2018;
24. Khan J, Vesel L, Bahl R, Martines JC. Timing of Breastfeeding Initiation and Exclusivity of Breastfeeding During the First Month of Life: Effects on Neonatal Mortality and Morbidity—A Systematic Review and Meta-analysis. *Matern Child Heal J.* 2014;
25. Lewis S, Lee A, Simkhada P. The role of husbands in maternal health and safe childbirth in rural Nepal: a qualitative study. *BMC Pregnancy Childbirth.* 2015;162:1–10.
26. Galiano JMM, Martínez AH, Almagro JR, Rodríguez MD, Alvarez AR, Salgado JG. Women's Quality of Life at 6 Weeks Postpartum: Influence of the Discomfort Present in the Puerperium. *Internasional Journal Environ Res Public Health.* 2019;
27. Hoff CE, Movva N, Vollmar AKR, Escamilla RP. Impact of Maternal Anxiety on Breastfeeding Outcomes: A Systematic Review. *Am Soc Nutr.* 2019;10:816–26.
28. Wahyuningsih HP. Asuhan Kebidanan Nifas dan Menyusui. Jakarta: Kementerian Kesehatan RI Pusat Pendidikan Sumber Daya Manusia Kesehatan; 2018.
29. Winarni LM, Winarni E, Ikhlasiah M. Pengaruh Dukungan Suami Dan Bounding Attachment Dengan Kondisi Psikologis Ibu Postpartum Di Rsud Kabupaten Tangerang Tahun 2017. *J Ilm Bidan.* 2018;3(2):1–11.
30. Wijaya AM. Kebutuhan-Dasar-Anak-Untuk-Tumbuh-Kembang-Yang-Optimal [Internet]. 2011. Available from: <https://kesmas.kemkes.go.id/konten/133/0/021113-kebutuhan-dasar-anak-untuk-tumbuh-kembang-yang-optimal>
31. Sapriyah. Media Pembelajaran Dalam Proses Belajar Mengajar. *Pros Semin Nas Pendidik FKIP.* 2019;2:470–7.
32. Herbert PC, Lohrmann DK. It's All in the Delivery! An Analysis of Instructional Strategies From Effective Health Education Curricula. *Journal Sch Health.* 2011;81(5):258–64.
33. Brame CJ. Effective Educational Videos: Principles and Guidelines for Maximizing Student Learning from Video Content. *CBE—Life Sci Educ.* 2016;15(6):1–6.
34. Aisah S, Ismail S, Margawati A. Edukasi Kesehatan dengan Media Video Animasi: Scoping Review. *Jurnal Perawat Indonesia.* 2021;5(1):641–55.
35. Sumarsono A, Sianturi M. Implementation Interactive Media and Characterized

- MemeMedia: A Comparison Study. *Journal Educ Vocat Res.* 2018;1:10–6.
36. Sabarudin, Mahmudah R, Ruslin, Aba L, Nggawu LO, Syahbudin, et al. Efektivitas Pemberian Edukasi secara Online melalui Media Video dan Leaflet terhadap Tingkat Pengetahuan Pencegahan Covid-19 di Kota Baubau. *Jurnal Farm Galen (Galenika J Pharmacy).* 2020;6(2):309 – 318.
 37. Adam M, McMahan SA, Prober C, Bärnighausen T. Human-Centered Design of Video-Based Health Education: An Iterative, Collaborative, Community-Based Approach. *J Med Internet Res.* 2019;1(1):1–18.
 38. Arista BE, Hadi S, Soesilaningtyas. Systematic Literature Review : Penggunaan Media Yang Efektif Dalam Promosi Kesehatan Gigi Dan Mulut Pada Anak Sekolah Dasar. *Jurnal Ilmu Keperawatan Gigi.* 2021;2(2):209–15.
 39. Prawesti I, Haryanti F, Lusmilasari L. Effect Of Health Education Using Video And Brochure On Maternal Health Literacy. *Belitung Nurs Journal.* 2018;4(6):612–8.
 40. Indonesia KKR. Pegangan Fasilitator Kelas Ibu Hamil.pdf. 2014.
 41. Budiwan J. Pendidikan Orang Dewasa (Andragogy). *Qalamuna.* 2018;10.
 42. Alexander J, Bambury E, Mendoza A, Reynolds J, Veronneau R, Dean E. Health education strategies used by physical therapists to promote behaviour change in people with lifestyle-related conditions: A systematic review. *Hong Kong Physiother.* 2012;30(2):57–75.
 43. Indonesia KKR. Modul Pelatihan Tenaga Pelatih Kesehatan. Jakarta: BPPSDM Kementerian Kesehatan RI; 2019. 65 p.
 44. Haleem A, Khan MK, Sufia S, Chaudhry S, Siddiqui MI, Khan AA. The role of repetition and reinforcement in school-based oral health education-a cluster randomized controlled trial. *BMC Public Health.* 2016;16(2):1–11.