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Original research article

Participant analysis of the need for prenatal attachment education packages

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Abstract
Background: Primigravidas are at high risk of experiencing emotional disorders, stress, anxiety, and depression, which can lead to fetal neglect and a lack of adequate pregnancy care. This may result in problems with fetal growth and development, low birth weight, and even infant death. A strong maternal-fetal attachment significantly influences pregnancy care practices. However, there is no prenatal attachment education program included in routine education.
Aim: This study aimed to explore healthcare workers' perspectives on the need to develop a prenatal attachment education package for pregnant women in public health centers.
Methods: This qualitative study was conducted among eight healthcare workers from eight public health centers in Bantul, Yogyakarta, Indonesia; a regency with the seventh highest infant death rate in the country. Inclusion criteria included healthcare workers in maternity and child health units who resided in Bantul and agreed to participate. Purposive sampling was used to recruit the participants. Data collection was conducted through focus group discussion (FGD) with an interview guide. The FGD data were transcribed and analyzed using NVivo 12 Pro International software.
Results: The findings identified 216 codes, 16 categories, and 4 themes, including (1) pregnancy education program, (2) maternal-fetal attachment education program, (3) pregnancy emotional management program, and (4) husband support education program.
Conclusion: This study identified four themes and sixteen categories that underscore the need for further research to develop guidelines, materials, and media for prenatal attachment education packages.

Keywords: Focus-group discussion; Guidelines; Prenatal attachment

Introduction

The reduction of infant mortality is a success target in the global policy of addressing maternal and infant problems as described in the third goal of the Sustainable Development Goals for Good Health and Well-being. In 2030, the global target for reducing infant mortality is set at 12/1,000 live births. In Indonesia, the target for reducing infant mortality in 2020–2024 is 16/1000 live births, while in 2021, the infant mortality rate reached 19.5/1,000 live births, with 35.2% attributed to low birth weight (LBW) and Small for Gestational Age (SGA) (The Word Bank, 2020; UNDP, 2020).

The Indonesian government's strategy to achieve the target of reducing infant mortality is stated in the Ministry of Health Regulation Number 21 (2021), which includes antenatal care at least six times during pregnancy. Antenatal care activities involve pregnant women's education classes, following the guidelines outlined in the Maternal and Child Health (MCH) book. This program has been proven to contribute to a reduction in infant mortality from 21/1000 live births to 19.5/1000 live births. However, this reduction has not yet reached the expected target (RPJMN, 2020). Strategic innovation is needed to achieve the goal of reducing infant mortality. Based on the identification of educational guidelines for pregnant women in the MCH book, the provided educational material primarily focuses on the physical health services of the mother and fetus, lacking guidelines for addressing emotional changes and promoting mother-fetus bonding (WHO, 2018).

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Emotional changes in pregnant women occur in line with changes in pregnancy hormones, leading to mood swings, irritability, irritation, crying, or anxiety. These changes negatively impact the emotional bond between mother and fetus, resulting in a lack of affection for the fetus, neglect, or even harm to the fetus, which may pose risks to fetal welfare and survival (Purwati et al., 2023). Mothers with poor maternal-fetal attachment (MFA) may struggle to understand and interpret the baby's signals and respond less appropriately to the baby's needs. Previous research shows that babies born with strong MFA and adequate mother-baby bonding after birth tend to experience healthy and optimal development of their cognitive, mental, and social aspects (Røhder et al., 2020). Research in Mashhad, Iran, also showed an increase in adaptation and MFA scores in the group receiving prenatal education compared to those who did not (75.5 vs. 69.26) (Baghdari et al., 2016). In primigravida, pregnancy is their first experience of hormonal, physical, and emotional changes. Primigravidas are at higher risk of experiencing stress, anxiety, and depression, potentially leading to fetal neglect. Inadequate pregnancy care may result in fetal growth and development problems that increases the risk of LBW and SGA births (Wallace and Araji, 2020).

Previous studies have shown that good pregnancy care practices are influenced by MFA stimulation. Strong MFA influences pregnant women to maintain their health and the fetuses, thereby promoting normal births (Alhusen et al., 2013). Health practices of pregnant women, such as maintaining good nutrition, abstaining from alcohol and tobacco, exercising, and attending routine antenatal care and prenatal classes, contribute to positive outcomes (Maddahi et al., 2016). Mothers with low MFA may focus more on their needs and not undergo regular antenatal care. They may become less concerned about the fetus's adequate nutrition, iron, and folic acid, which are important for fetal growth. Smoking and alcohol consumption during pregnancy also decreases nutrient and oxygen distribution to the tissue cells and the placenta of the fetus, leading to the risk of hypoxia, growth and development problems, and fetal distress, thereby increasing the risk of infant death (Røhder et al., 2020).

Efforts to improve MFA in previous studies include conducting training or counseling for pregnant women. In this regard, research suggests that prenatal education and monitoring fetal movements have been shown to increase sensitivity and maternal-fetal intimacy by improving MFA scores. The training materials typically include personal hygiene, maternal nutrition, fetal movement monitoring, signs of high-risk pregnancy, breastfeeding management, and childcare (Baghdari et al., 2016). However, limitations include focusing only on pregnant women with a history of abortion, cursory monitoring of fetal movements, lack of MFA stimulation materials, absence of husband involvement, and neglect of prenatal emotional problems. In Indonesia, healthcare workers rely on the guidelines from the MCH book to conduct classes for pregnant women. These guidelines generally include materials covering physical care during pregnancy, postpartum care, and care for newborn babies. Unfortunately, there are no guidelines available for healthcare workers to educate pregnant women and their husbands on MFA stimulation.

Literature studies reveal that current prenatal classes for pregnant women in Indonesia lack a psychological approach to MFA promotion. There are no guidelines for healthcare workers in this regard. Given this gap in the existing literature, developing a prenatal attachment education package is highly important as it can contribute to increasing MFA, improving the quality of pregnancy care, and facilitating healthy birth outcomes. Integrating the development of a prenatal attachment education package within the government's standard prenatal education programs in the MCH book is crucial. Detailed information on healthcare workers' roles in providing prenatal education services for pregnant women is necessary to identify specific needs in developing this educational package. Therefore, this study was conducted to explore healthcare workers' perspectives on the need to develop a prenatal attachment education package in public health centers that offer maternal and child health services.

The prenatal attachment education package is an innovative approach to complement the available government-standard maternal and child health books. It is presented as a module and a guide for healthcare workers and includes media such as booklets and videos on MFA stimulation. The package provides easy-to-use guidelines and offers innovative media for pregnant women and their husbands. It is expected that this package can contribute to reducing anxiety, increasing husband support, and enhancing MFA stimulation, leading to healthier fetuses and smooth childbirth experiences.

Materials and methods

Study design

This qualitative study employed an exploratory, descriptive approach to understanding the phenomenon under investigation. The conclusions drawn are based on the phenomena that occur in the research context (Creswell, 2018). The study aimed to identify the need to develop a prenatal attachment education package based on the perspectives of healthcare workers who provide maternal and child health services in public health centers.

The sample

The research population comprised healthcare workers who provide maternal and child health services in 27 public health centers in Bantul, Yogyakarta, Indonesia. The inclusion criteria included healthcare workers who provide maternal and child health services in the public health centers within Bantul Regency and who consented to participate. Healthcare workers who were on leave or sick were not considered. The purposive sampling technique (Verma and Verma, 2020) was employed to recruit the participants, resulting in a total of eight participants. In this study, all participants were midwife coordinators with over 10 years of work experience, and the majority held a degree of Applied Bachelor of Midwifery. Details regarding the participants' characteristics are presented in Table 1.

Data collection

This study employed a Focus Group Discussion (FGD) with maternal and child healthcare workers for data collection. The FGD was conducted to gather information on the implementation of routine prenatal classes for pregnant women, covering guidelines, materials, media, and program evaluation. Additionally, the FGD was used to identify the need for relevant materials aimed at enhancing maternal-fetal attachment (MFA) among pregnant women. It was expected that the findings from the FGD would inform the development of innovations in the prenatal attachment education package, considering the shortcomings and limitations of previous research efforts aimed at improving MFA.

Table 1. Participants' characteristics

Participant	Age	Length of service (year)	Education	Affiliated public health center
P1	43	19	Applied Bachelor of Midwifery	Piyungan
P2	51	24	Applied Bachelor of Midwifery	Banguntapan
P3	47	21	Bachelor of Midwifery	Imogiri 1
P4	52	23	Applied Bachelor of Midwifery	Sewon 2
P5	41	13	Applied Bachelor of Midwifery	Kasihan 1
P6	39	15	Applied Bachelor of Midwifery	Kasihan 2
P7	35	12	Bachelor of Midwifery	Bantul 2
P8	42	16	Bachelor of Midwifery	Sedayu 2

The FGD lasted for 90 minutes and took place in the meeting room of the Bantul Public Health Center. The principal researcher led the FGD, assisted by a note taker and timekeeper. Both had been recruited and shared a common understanding in carrying out their duties (Taneichi and Rokkaku, 2020). The FGD was recorded and filmed, saved in MP3 and MP4 formats, and transcribed into a Microsoft Word document.

Data analysis

The FGD data were analyzed using NVivo 12 Pro International software (Burlington, USA), with reference to the insights provided by Miles and Huberman. The qualitative data analysis involved three stages: (1) data compression, (2) data presentation, and (3) conclusion drawing/verification. Data validity was ensured to confirm the accuracy of the research findings, with validity criteria including credibility, transferability, dependability, and confirmability (Joukl et al., 2022).

Data compression involved condensing the expressed meanings of FGD participants into concise formulations to capture diverse perspectives and synthesize the data to reflect diversely communicated experiences (Taneichi and Rokkaku, 2020). Data presentation was conducted through coding analysis, categorization, and definition. Coding involved transforming the transcript into words with similar meanings and using them to generate codes, followed by a review to ensure proper condensation of all codes. Similarities in the obtained codes were then formulated into appropriate categories and grouped into themes. The results of the analysis were presented in tables/figures that included codes, categories, and themes. An expert review was utilized to validate the study findings. Data analysis involved a process of repeated checking and adjustment of transcripts, codes, categories, and thematic conclusions.

Ethical considerations

This study obtained ethical approval from the Research Ethics Committee of the Faculty of Medicine, Universitas Diponegoro, with reference number 42/EC/KEPK/FK-UNDIP/II/2023. Additionally, a research permit was obtained from the Bantul Public Health Service, Yogyakarta, with reference number 070/01578. Throughout the research process, participants were informed of the research objectives, samples, focus, and FGD methods. They consented to their participation by signing an informed consent form. Permission to audio and video-record the FGD was obtained from the participants. Data were handled anonymously, and all transcripts, protocols, and documentation were archived for research purposes only.

Results

The analysis of the overall FGD results yielded 216 codes, which were further categorized into 16 categories, and then grouped into 4 themes as presented in Table 2.

Theme 1. Education program on prenatal care

The themes were generated based on the healthcare workers' views on the prenatal classes at the public health centers, resulting in four categories.

The first category concerns the implementation of prenatal classes for pregnant women. Participants indicated that prenatal classes involved collaborative sessions with lectures,

Table 2. Generated themes

Category	Theme
1. Implementation of classes for pregnant women	1. Prenatal care education program
2. Class materials for pregnant women	
3. Frequency of organizing classes for pregnant women	
4. Target class participants for pregnant women	
5. MFA educational experience	2. MFA Stimulation education program
6. MFA skill and knowledge	
7. MFA educational guide	
8. Pregnancy emotional problems	3. Pregnancy emotional management program
9. The aim of addressing emotional issues in pregnancy	
10. Experience in managing emotional problems during pregnancy	
11. Guidelines for managing emotional problems in pregnancy	
12. Availability of husband support classes	4. Husband support education program
13. Availability of guidelines and materials	
14. Implementation of husband's class program	
15. Husband's class program expectations	
16. Achievement of program objectives	

pregnancy exercises, online WhatsApp groups, and monthly sessions lasting 1–2 hours. Participant 7 stated: *"Pregnant women's classes are conducted in collaboration with nutritionists, dental hygienists, and psychologists. The challenge lies in the difficulty of attracting pregnant women, so sometimes online methods like WhatsApp are used, often supplemented with lectures if the practice involves pregnancy exercises"* (P7).

The second category pertains to class materials for pregnant women. The participants stated that the implementation of pregnancy exercises was guided by the MCH book and additional resources that could be accessed online. Participant 5 stated, *"Sometimes I have to look for additional information myself; I often asked about the baby's development in the womb and emotional issues, which are not covered in the MCH book"* (P5). Similarly, Participant 6 said: *"The counseling material is based on the MCH book. However, it does not contain information about emotional changes or fetal development"* (P6).

The third category discusses the frequency of organizing classes for pregnant women. Participants mentioned varying frequencies, ranging from monthly to four times a year, for scheduled activities. Their statements included: *"The frequency of the prenatal class is once a month"* (P4, P5); *"The prenatal class is conducted six times per year"* (P8), and *"The education for pregnant women is conducted 3–4 times every year"* (P6). Additionally, participants mentioned that some activities were not scheduled; for example: *"The education of pregnant women is carried out by practicing students in the maternal and child health unit, but it is not scheduled"* (P7).

The fourth category describes the target-class participants for pregnant women. Most participants stated that the pregnant women were not grouped based on obstetric status or gestational age. Although sessions were limited to 20–25 participants, this quota was often not met. In one class, there could be pregnant women with varying obstetric status and gestational age. If certain limitations were applied, the number of pregnant women attending the class would decrease. Participants stated the following: *"The coverage for the prenatal class is insufficient"* (P9); *"There are approximately 20–25 pregnant women attending the class"* (P8); *"The provided educational materials are not suitable for pregnant women"* (P7); *"The pregnant women attending the class have variations in gestational age, from trimesters 1 to 3"* (P1).

Theme 2. Education program on maternal-fetal attachment stimulation

This theme is generated from three categories.

The first category is MFA educational experience. Healthcare workers stated that they facilitated MFA in an unstructured manner; they encouraged frequent stroking, communication, and monitoring of fetal movements. However, only verbal instructions were provided, and no structured learning resources were available. The significant insights from participants included fetal movement monitoring, husband involvement, musical stimulation, and the absence of an MFA education program. Some participants stated: *"I recommend pregnant mothers to monitor fetal movement"* (P5); *"We encourage mothers to chat with the baby…"* (P5); *"We also suggest playing music for the baby…"* (P6).

The second category is MFA knowledge. Five participants pointed to the benefits of providing MFA education to pregnant women for maternal-fetal health, stimulating prenatal care and highlighting special benefits for first-time pregnant women. Participants said: *"We support mothers to develop strong bonding for smooth delivery"* (P1); *"I provide an introduction about family bonding, especially for young families"* (P2).

The third category is MFA guidelines. The participants expressed the importance of material, targeted media, and availability of guidelines used as a basis for implementing MFA simulation education. Participants mentioned: *"There are no MFA guidelines and stimulation materials yet"* (P1, P2); *"We hope that someone will create innovative MFA educational media that is easy to implement, such as modules and booklets"* (P7, P8); *"If the guidelines have been developed, they can be used in public health centers"* (P7).

Theme 3. Emotional management program during pregnancy

This theme is generated from four categories.

The first category focuses on the emotional problems of pregnancy, highlighting pregnant women's susceptibility to worry, anxiety, and mood swings. Participant 9 expressed her concern as follows: *"Pregnant women, especially at a young age, can easily become anxious, cry, fight, and may neglect their pregnancy"* (P9).

The second category consists of pregnancy emotion managements goals. This category was generated from the keyword: "benefits of emotion management", based on participants expressions: *"Emotional management is necessary so that pregnant women can accept and care for their pregnancy"* (P7, P8).

The third category describes the experience of emotional management during pregnancy, generated from the participants' perspectives on materials, educational methods, frequency, and education implementation. All participants indicated the absence of a specialized class for emotional management. While some public health centers may have psychologists offering counseling for pregnant women during first check-ups and before childbirth, the counseling is provided on an as-needed basis, with no established guidelines yet. As psychologists work part-time once a week, not all pregnant women receive these services. Participants stated: *"There is no structured material yet, counseling was provided based on individual needs"* (P2, P8); *"The psychologists work part-time, so the availability of the service may vary"* (P1–P8).

The fourth category concerns guidelines for managing pregnancy emotions. It highlights the absence of spiritual guidelines and approaches to emotional management. Participants said: *"There are no guidelines for managing the emotions of pregnant women"* (P1–P8), *"We hope to have guidelines that incorporate a spiritual approach"* (P2, P6). Healthcare workers expressed the need for structured guidelines and a spiritual approach to managing emotional issues during pregnancy.

Theme 4. Husband support education program

This theme is generated from four categories.

The first category focuses on the challenges experienced in implementing the husband support program. The participants mentioned the difficulty in engaging husbands, as indicated by the following statements: *"Providing education to husbands is challenging because of their work commitment"* (P3); *"Inviting husbands to attend the prenatal class is challenging. When it is conducted on Sundays, only a few attend"* (P4); *"Despite there being a WhatsApp group for husbands, it remains inactive"* (P5).

The second category pertains to the hope for a structured husband support class program. The participants expected that the husband support class should be reactivated to contribute positive outcomes for pregnant women. They stated: *"Husband support classes should be activated"* (P7, P8).

The third category describes the aim of the husband support class program, highlighting the importance of awareness and calmness. Husbands should understand the pregnancy condition of their wives, and love and help them with their

duties, thus promoting a sense of calmness and happiness. The participants stated: *"It is necessary that husbands should be more aware of their wives"* (P7), and *"When husband provide support, mothers can feel more calm and relax"* (P2).

The fourth category is the availability of guidelines and materials. Eight participants stated: *"There are currently no guidelines available for the husband support classes"* (P1–P8). Developing guidelines and materials is important to activate the husband support program.

Discussion

This study revealed four themes: prenatal care education program, MFA stimulation education program, pregnancy emotional management program, and husband support education program, which establish the foundation for the development of a prenatal attachment education package. This package comprises a series of educational materials for pregnant women and their husbands aimed at enhancing the understanding of pregnancy care, reducing pregnancy-related anxiety, improving husband support, and increasing MFA. These four themes constitute a series of materials for developing a prenatal attachment education package. The package will contain guidelines for healthcare workers delineating work procedures, material sequences, audiovisual media, and a collection of relaxation music for pregnant women and their husbands, supplemented by media such as booklets and audiovisuals. In line with previous studies, module development is effective as a guide to increase competency. Healthcare workers who were guided by a module in implementing targeted training demonstrated better psychomotor competence than the control group (67.1% vs. 20.6%, $p < 0.001$) (Iswarawanti et al., 2019). It is pivotal that the modules include engaging and comprehensible media that promote independent practice. Studies have shown that educational media is useful in increasing understanding and interest, making it easier to apply (Durán et al., 2021). Moreover, other research shows that audiovisuals are feasible and practical solutions to support the delivery and expansion of health information and encourage understanding and skills for pregnant women (Adam et al., 2021; Purwati and Sari, 2024).

The following sections elaborate on the findings of the four underlying themes that support the development of the prenatal attachment education package.

Prenatal care education program

The findings revealed that all public health centers have implemented an education program for pregnant women. The materials, targets, methods, and frequency of implementation vary according to the dynamics of each healthcare facility. Generally, the difficulty lies in reaching the target group. Furthermore, the education provided lacks materials on physical and emotional changes, as well as fetal development. The implementation of pregnant women's classes follows the guidelines outlined in Indonesian Ministry of Health Regulation number 21 (2021), which pertains to the implementation of health services during pregnancy, childbirth, and postpartum. This regulation states that antenatal care services should be provided at least six times and counseling through prenatal classes is carried out at least four times for every pregnant woman.

Ideally, prenatal classes for pregnant women are carried out with structured material at each stage, following the need to maintain a safe and healthy pregnancy. However, this study revealed that pregnant women did not attend classes regularly, resulting in variations in gestational age and materials. Some pregnant women received the same material repeatedly. Research by Saragih et al. (2019) reports that holding classes for pregnant women increases knowledge about pregnancy care. The highest increase was observed in material that was repeatedly provided, while knowledge about material that had not yet been obtained remained low. An identified weakness was the low maternal participation rate in prenatal classes (27%). According to a study by Fuadah and Pipana (2022), prenatal classes increase pregnancy care behaviour and prepare women for their role as mothers. However, there is a challenge in attracting pregnant women to attend prenatal classes. Based on these findings, planning prenatal class programs with structured material is needed. Planning is fundamental for setting goals and strategies for optimal achievement (Bradley et al., 2013). Efforts to increase MFA stimulation must begin with understanding physical and emotional changes during pregnancy, as well as fetal growth and development. The importance of providing preliminary material is supported by the findings of this study, which highlights the necessity of such material to enhance understanding and interest in pregnancy experiences among pregnant women.

Maternal-fetal attachment educational program

In the pregnant class for pregnant women, healthcare workers provide information on stimulating MFA through some activities such as stroking, communicating, and monitoring fetal movements. While healthcare workers understand the benefits of MFA, there are currently no educational guidelines available on this topic. MFA describes a cognitive and emotional connection between the mother and fetus influenced by psychosocial situational factors, which affects the mother's behaviour towards the fetus (Khalili et al., 2020). A study conducted on pregnant women in Iran has reported that stronger MFA correlates with better prenatal care and normal births ($p < 0.01$, $r = 0.23$) and health practices ($p < 0.05$, $r = 0.11$) with an average baby weight of 3,052.38 grams (Maddahi et al., 2016). This evidence strengthens the importance of MFA stimulation education for pregnant women.

The importance of prenatal education guidelines was emphasized in this study, indicating a need for guidelines for pregnant women class facilitators. The development of this MFA education guideline requires a foundation derived from evidence-based theories and a team of experts from various disciplines, such as obstetric gynecologists, maternal and child health nurses, psychologists, health promotion experts, and media communication experts. Healthcare workers should receive training in using these guidelines before implementing prenatal class services (Chedid and Phillips, 2019). The MFA education program needs to be developed as the second component after implementing the pregnancy care education program. The program should include materials on understanding physical and psychological changes in pregnancy within a series of prenatal attachment education packages.

Pregnancy emotional management program

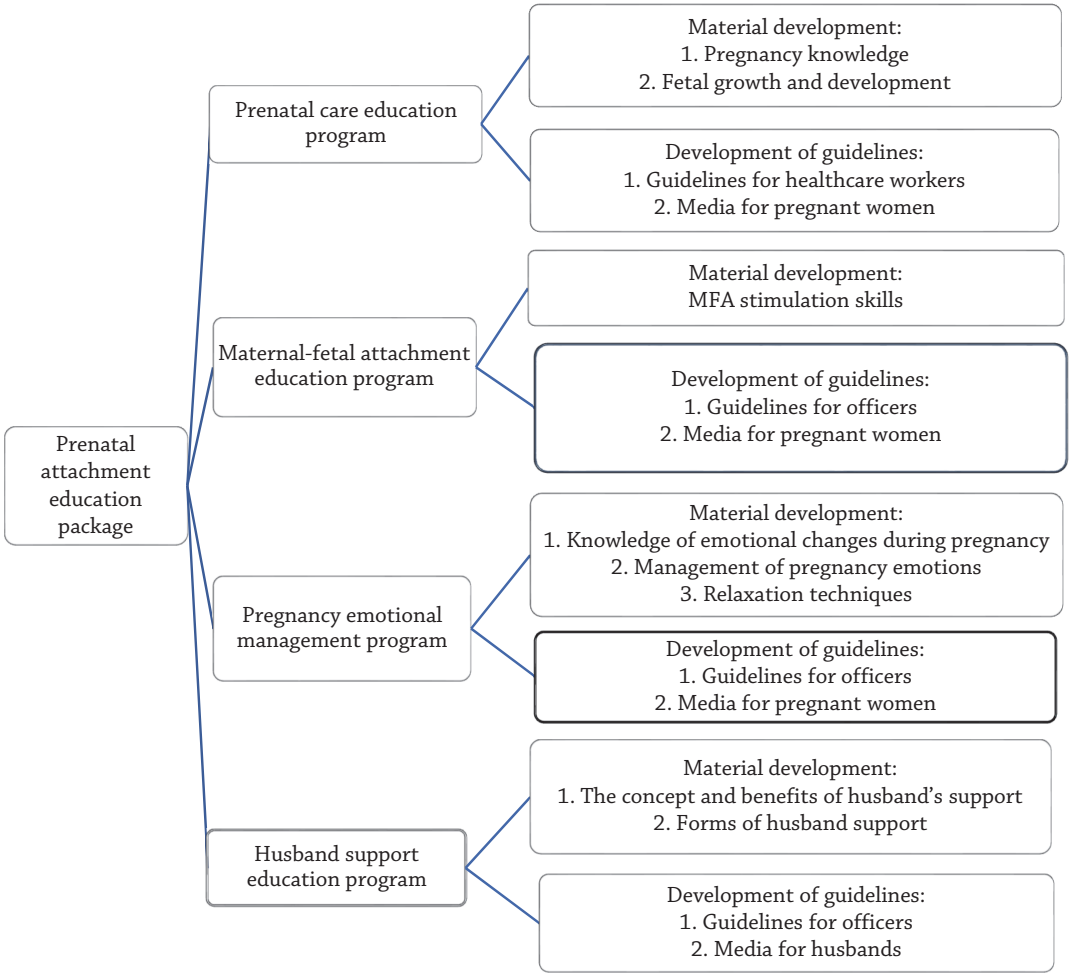
Pregnant women easily experience emotional changes due to an increase in the hormone progesterone and psychological vulnerability. Emotional changes can affect the growth and development of the fetus, making it necessary to manage pregnancy emotions (Abazari et al., 2017). Psychologists can help manage pregnancy emotions, but counseling is typically provided to pregnant women with special emotional problems. Previous studies have found that strong MFA was associated with low anxiety scores ($p < 0.05$, $r = 0.283$)

(Hasanabadi, 2013), and prenatal anxiety increased the incidence of LBW and SGA (Eichler et al., 2019). This shows the importance of managing emotions in pregnancy, which can be facilitated through easy-to-implement techniques, such as relaxation and a spiritual approach. A spiritual approach can create a sense of self-confidence and bring calmness, peace, and a feeling of God's presence. A sense of calmness can promote the release of endorphins in the body, leading to feelings of well-being and comfort. Relaxation techniques with a spiritual approach based on a sense of surrender can help to better manage emotions (Pereira et al., 2020). This study has shown that the pregnancy emotional management program is important as the third part of the prenatal attachment education package.

Husband support education program

Husbands are the main source of support for pregnant women. Unfortunately, husband classes have not been optimally implemented, and there are no guidelines due to difficulties in bringing husbands along. The research findings show that a husband's love can create a sense of security and comfort in the mother, reduce anxiety, and increase MFA, thereby positively contributing to the health and physical and emotional well-being of the mother and fetus (Zefanya and Suryadi, 2021). Innovation in guidelines, media, and techniques for organizing husband classes is needed. Working husbands can be provided with accessible learning methods and media, such as husband support class videos, which are easy to view and follow on WhatsApp. A study by Al Owaifeer et al. (2018) stated that learning videos can be used repeatedly, showing the reality of movement, sound, and place, thus influencing emotions to effectively convey the message and achieve health promotion goals. The results of a previous study on the use of WhatsApp in education show that it is an effective medium for motivating and easily disseminating health information that requires repetition, and effectively achieves health promotion goals with $p < 0.05$ (Kamel Boulos et al., 2016). This study shows that developing a husband support education program is necessary as the fourth component in the prenatal attachment education package.

The scheme for developing a prenatal attachment education package is presented in Scheme 1.



Scheme 1. Prenatal education package development scheme

Limitations of the study
This study has its limitations. During the FGD, the first participant provided extensive opinions, whereas subsequent participants had less opportunity to fully explore their responses.

Conclusion

The findings of this qualitative study indicate the necessity to develop a prenatal attachment education package for maternal and child health services in public health centers. Four themes were identified from the analysis: pregnant mother education program, MFA stimulation education program, pregnancy emotional management program, and husband support class program. It is recommended that future research focuses on developing a prenatal attachment education package based on the findings of these four themes. The effectiveness of the package can be tested in pregnant women to understand its impact on reducing anxiety, increasing husband support, and enhancing MFA. The prenatal attachment education package is integrated with the MCH book in pregnant women's classes and presented in module form to improve the competency of healthcare workers. It also includes materials and media to enhance the knowledge and practices of pregnant women and their husbands.

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Ethical aspects and conflict of interest
The authors have no conflict of interest to declare.

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