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# Identifying Health Promotion Needs for Pregnancy Planning among Women of Reproductive Age: A Qualitative Study

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**Abstract** Pregnancy planning is one effort to achieve a quality family. However, pregnancy planning by women of reproductive age is still poor, such as an unmet need for family planning due to a lack of health promotion efforts. This study aims to identify the health promotion needs of women of reproductive age based on social capital in Bantul, Indonesia. This study employed phenomenological approach. The number of participants was 19 people, consisting of women of reproductive age, representatives of the population control service, field instructors, midwives, and cadres. Data collection was carried out using semi-structured interviews, focus group discussions (FGD), and document recording from September 2022 to April 2023. Data analysis uses Colaizii. The results of this study show that the health promotion appropriate in rural areas is 1) strategy: mentoring by cadres and midwives through blended learning; 2) media: module; 3) method: discussion and independent learning; 4) material: quality families, family planning, pregnancy and reproductive health. The results of this study can be used as a health promotion strategy in improving pregnancy planning for women of reproductive age in rural areas.

**Keywords** Pregnancy Planning, Blended Learning, Health Promotion

## 1. Introduction

Pregnancy planning is a critical public health practice, one that should be actively promoted to women of reproductive age for the benefit of maternal and child wellbeing throughout the pregnancy and beyond [1]. The current situation in Indonesia is such that the total fertility rate (TFR) has not been achieved. In 2018, the target for TFR was 2.32, but the actual figure was 2.38. This result was even more worrying in 2019, when the actual TFR reached 2.45 (not yet in line with the target of 2.28) [2]. Nevertheless, the figures for the period between 2021 and 2023 were 2.24, 2.18 and 2.14, respectively [3]. Advantageously, that the average number of offspring produced by a woman of reproductive age is approximately two. The number of children will affect the welfare of the family [4]. Therefore, the goal of population control will be achieved. However, even though each woman gives birth to two children, the quality of birth planning remains inadequate. A significant proportion of pregnancies occur without prior planning [5]. An unplanned pregnancy can have negative consequences for both the mother and the child [6].

In addition to the psychological consequences of an unplanned pregnancy, there are also physical consequences [7,8]. An unplanned pregnancy has the potential to affect

the health of both the mother and the fetus. The consequences of an unplanned pregnancy can include premature labor and delivery, premature rupture of the amniotic membrane, low birth weight infants, and increased neonatal mortality rates [9,10]. In addition, women who become pregnant unexpectedly tend to have less favorable health behaviors and experience more adverse pregnancy outcomes. This highlights the need to promote preconception health among women of reproductive age [11].

The need for health promotion varies according to demographic characteristics. One potential way to empower women is through health promotion. One potential strategy for health promotion is the use of information technology [12]. However, not all age groups are equally adept at using information technology. To illustrate, the preliminary study conducted in Bantul regency revealed that the community perceived the message to be more effectively conveyed through direct communication in a forum, such as a recitation. Nevertheless, there is a discrepancy in the perception of the desire to have children among different families. Therefore, it is not an appropriate approach to communicate such information in a forum [13]. Retention of information is enhanced when individuals are provided with written media that they can read at their convenience. One possible way to provide such information is through modular media. The provision of information in the context of a wellstructured family planning module has the potential to contribute to a reduction in maternal and infant mortality rates [14]. The study aimed to identify the health promotion needs of women of reproductive age, with a particular focus on the social capital within the community.

## 2. Materials and Methods

#### 2.1. Procedures

The research procedure was approved by the Health Research Ethics Committee of Dr Moewardi Hospital (No. 1.0118/VII/HREC/2022). The research methodology used was qualitative with a phenomenological approach. The analysis of problems and needs related to quality family health promotion included the identification of issues related to pregnancy planning among women of reproductive age, considering the influence of individual, social, and economic factors. In addition, the study examined the existing social capital in Bantul, Indonesia in relation to pregnancy planning efforts, the role of cadres

deployed in this context, particularly those related to pregnancy planning among women of reproductive age, and the regulatory and policy framework guiding the pursuit of quality families through family planning. The dataset includes information on the resources, funding, regulations and policies in place, as well as the organizational forms that play a role in the community.

#### 2.2. Participation

The researcher used purposive sampling to select research informants. The selection of informants was based on the research objectives, namely married women of reproductive age and units involved in health promotion efforts in Bantul, Indonesia.

The Bantul regency is distinguished by predominantly rural character, with a significant portion of its geographical area consisting of rural land. This district undergoes annual population growth. According to recent demographic data, the region's population stood at 956,513 in 2021, 964,245 in 2022, and 972,161 in 2023, respectively [15]. In 2023, Bantul Regency's family development index was projected to reach 64.38, which was higher than the national and provincial figures. This figure places the region within the sufficient family development category. The region's population of couples defined as those between 15 and 49 years of age who are capable of bearing children, was 139,938 in the year 2020. The region also exhibits an ongoing increase in the incidence of unmet needs for family planning, with figures rising from 8.42 in 2017 to 9.76 in 2018, 10.55 in 2019, 10.56 in 2020, and reaching 15.5 in 2023. The data on exposure attainment family planning programs through media channels indicate a 78.85% rate, while data on family planning officers show a 74.87% rate [16].

The research locations were situated in three distinct areas: Sidomulyo, Sumbermulyo, and Mulyodadi. These three regions have been identified as areas with the highest unmet need for family planning. The economic level in this rural area is classified as medium, with most of the population engaged in labor force activities, primarily as laborers, and the majority of women employed as housewives.

A total of 19 informants were included in the study (Table 1), including four key informants (one from the Office of Population Control, Family Planning, Community Empowerment and Villages, and three field instructors), ten main informants (women of reproductive age), and two supporting informants (two midwives of community health centre and three family planning cadres).

No	Status	Frequency	Description	
1	Population Control Family Planning Community and Village Empowerment Office	1	To obtain on regulations, resources, and funding related to quality family health promotion	
2	Family Planning Field Instructor	3	To obtain data at the sub-district level data on quality family health promotion programs and efforts that have been carried out and their problems.	
3	Health Centre Midwife	2	To obtain data on the implementation of quality family health promotion at the sub-district level	
4	Family Planning Cadres	3	To obtain data on the implementation of quality family health promotion at the hamlet level based on length of time served as a cadre	
5	Women of reproductive age	10	To obtain data on pregnancy planning issues based on family income categories (above Bantul minimum wage and below Bantul minimum wage) and age categories (< 20 years, 21-35 years, > 35 years).	

2)

Table 1. Key and supporting informants

#### 2.3. Data Collection Techniques

The techniques and tools used for data collection at this stage are as follows:

interviews 1) Semi-structured with women reproductive age. In-person interviews were conducted for a duration of 30 to 60 minutes at the participants' homes. The interviews were conducted in a relaxed atmosphere, and a time contract was established in advance to ensure that participants would not be disturbed by other activities. The interviews were conducted by the researcher directly and accompanied by one research assistant, whose job was to document and observe. The objective of conducting interviews with participants was to explore in greater depth the internal factors of women of reproductive age regarding quality families and pregnancy planning. The second objective is to explore health promotion that has been implemented at the research site. During the interview, the following questions were posed to the participant: a) "What do you know about quality families, what are the key points of discussion?", b) "What are the participants' attitudes and sef-efficacy regarding quality family programs that have been implemented by the central and regional governments?", c) "How pregnancy planning has been carried out?", d) "What health promotion strategies have been implemented by cadres or health workers at the research site?", e) "What health promotion media are commonly used for health promotion?", f) "What methods are often used in health promotion?", g) "Who is typically responsible for providing health promotions?".

In addition, the Focus Group Discussion (FGD) method was used to obtain more in-depth information. FGDs were used to obtain data from family planning cadres and field instructors. The focus group discussion (FGD) was conducted in collaboration with community health workers

(CHWs), two midwives, and three Family Planning Field Instructor members at the village hall. The researcher, assisted by two research assistants who served as observers and note-takers, oversaw the session. The FGD was conducted over three hours. The objective of the FGD activity was twofold: first, to ascertain information regarding health promotion initiatives that have been implemented at the research site, and second, to validate the information provided by female participants of women of reproductive age. The questions posed during the FGD were as follows: (a) What media strategies and health promotion methods have been implemented by cadres or health workers at the research site? (b) What existing regulations are related to the implementation of health promotion? (c) What capital is owned by the research site to improve pregnancy planning for women of reproductive age?

Document recording (content analysis), this technique was used to collect data sourced from documents and archives related to pregnancy planning efforts for women of reproductive age in Bantul, Indonesia. The data collected through documents were the Bantul profile, draft decree of family planning cadres, and management information system. The collection of this data was carried out by researchers in coordination with cadres and the family planning field instructor. Researchers first applied for permission from the family planning field instructor and submitted any necessary data to support the research. The profile of Bantul regency was documented in the form of a village report book, a proposal was submitted for the names of cadres tasked with helping women of reproductive age, and researchers were granted access to the management information system called SIDUGA by the family planning field instructors, enabling them to view data on women of reproductive age. The researcher then proceeded to record the requisite data from these documents and

- transcribed it to support the main data from the interviews.
- 3) Data collection was also done through observation to get an overview of health promotion efforts made by family planning field instructors and family planning cadres. This observation was conducted prior to the administration of interviews with participants. The objective of this observation is to observe the activities of family cadres planning coordinating. The coordination of activities with the cadre group constitutes an important component of their community service mandate. The observation procedure entailed the participation of the researcher and one research assistant in coordination activities, while refraining from involvement in the discussion. Researchers and assistants then carried out observations and recorded conditions that occurred during coordination activities. The observation protocol encompassed a comprehensive set of parameters, including the coordination atmosphere, the family planning cadre participants in attendance, the coordination process, the subjects discussed, and the outcomes of the coordination. The observation activity was conducted on a single occasion, spanning two hours.

#### 2.4. Data Validity Test

There are four types of triangulations, a technique used to ensure validity in research that involves examining data from multiple sources. These sources can include documents, interviews with multiple people offering different perspectives, or observations. In this research, source triangulation was conducted with the Office of Population Control, Family Planning, Community Empowerment and Village, field instructors, cadres and midwives. Second, method/technique triangulation was conducted, in which similar data were collected using different techniques. In this study, interviews, observations and document recording were used as data collection techniques. In addition, triangulation of theory was utilized where multiple theories were used to ensure the quality of the data collected. Research triangulation was also conducted by comparing similar research conducted by other researchers. However, only two forms of triangulation were used in this study: source triangulation and technique/method triangulation.

#### 2.5. Processing and Analysis

Data were processed by transcribing interviews, observations, and notes, which were then combined. Once the data were verified as accurate and complete, analysis was conducted. The data were processed using categories and subjected to interpretative analysis. The process of data

processing involved three distinct stages: data reduction, data presentation, and drawing conclusions. The first stage of data analysis was to determine whether the data collected were as expected. Unnecessary data was then separated from the desired data. Once the data analysis stage was complete, conclusions were drawn regarding the issues under investigation and the solutions or actions that should be taken to improve individual-based pregnancy planning.

# 3. Result

The results of the data collection through interviews provided the following data:

#### 3.1. Social and Economic Factors

Social and economic factors were identified to understand the characteristics of the participants. The following are the results describing the characteristics of the main participants/informants (Table 2).

**Table 2.** Characteristics of main participants (women of reproductive age) (n=10)

Cha	racteristics	Frequency	Percentage
Edu	cation Level		
1.	No formal education	0	0%
2.	Completed primary school	1	10%
3.	Completed secondary school	6	60%
4.	College Graduate	3	30%
Occ	upation		
1.	Employed	3	30%
2.	Unemployed	7	70%
Fam	ily Income		
1.	Above Bantul minimum wage (> Rp. 2.066.500,00)	5	50%
2.	Below Bantul minimum wage (≤ Rp. 2.066.500,00)	5	50%

Table 2 shows that most of the participants had completed secondary education (60%), the majority were unemployed (70%), and the majority had given birth two or fewer times.

# 3.2. Individual Factors, Social Capital, Regulations/Policies, the Role of Cadres, and Health Promotion Strategies and Methods

The results of interviews with 19 participants and supporting respondents regarding individual factors, social capital, regulations/policies, the role of cadres, and health promotion strategies and methods needed by women of reproductive age in Bantul, Indonesia are presented in Table 3.

Table 3. Interview results on individual factors, social capital, regulations/policies, cadre roles, and health promotion strategies and methods (n=19)

Aspect	Elements	Results	Solution
Individual factors	Knowledge	The participants still lacked an understanding of what a quality family is. According to them, a quality family is a happy family and a family that can fulfill their needs and is healthy. Five out of ten women of reproductive age interviewed said that a quality family is a well-off family, while two out of ten women of reproductive age did not know what a quality family meant.	Educating women of reproductive age on the quality of the family, according to the Family Development Indicators (I-Bangga), will provide
		P2 said that a quality family is ' a well-off family' while looking at the interviewer.	a basis for making informed decisions on pregnancy planning.
		P3 said ' well-off and the most important thing is to be able to eat' while laughing.  P5 said ' a family that has sufficient economic and nutritional	
		needs' while feeding her child.	
		P7 said ' a family that can meet the needs of' while looking focused during the interview.	
		P9 stated ' a family that can provide everything for its own family'.	
	Attitude	Nine women of reproductive age agreed with the Quality Family Program. They agreed that all families should be of good quality.	
	Self-Efficacy	Eight women of reproductive age expressed that they would be confident that they were able to make their family a quality family, while two of them were not confident.	
	Pregnancy Planning	The pregnancy planning of women of reproductive age is still not firm as indicated by the fact that there are women of reproductive age who plan pregnancies with a pregnancy distance that is too far (P1), still want to get pregnant with the number of children 3 (P9). According to one woman of reproductive age (P7), getting pregnant at the age of over 35 years is not a problem.	
Social Capital	Value	Most women of reproductive age considered that pregnancy planning should be done. However, there were participants who thought that not planning was still fine.  P2 said ' pregnancy planning is good but not planning pregnancy but still fine'.	Create cadres as people who continue to gain the trust of women of reproductive age through continuous communication. Ongoing communication will increase trust, embedding positive values in women of reproductive age in the Bantul neighborhood.
	Belief	So far, women of reproductive age trust the cadres with the information that has been provided, but for education, they more often seek information from health workers.	
	Network	Most participants said that information on family planning was provided by cadres and health workers. The activity is a program of the Department of Women's Empowerment, Child Protection, Population Control and Family Planning, which is passed on to field instructors.	
Regulation/Policy	Human resources	Family Planning Field Instructors are family planning field instructors who are responsible for capacity building of both cadres and women of reproductive age.	Utilizing what is already provided by Bantul regency to achieve family quality is maximizing the capacity of rural community
		Rural community institution are cadres from village level have the task of building the capacity of women of reproductive age.  Professionals and academics: as collaborators in capacity building of	
		both field trainers, cadre and women of reproductive age.	institution by continuing to coordinate with field
	Funding	The family planning programme is financed through village funds.  The amount of funds received depends on the activity of the Family Planning Field instructors in communicating the need for activities to the district budget department. Each village's problems will be different from the other villages, so the need for funds will also vary.	instructors.
	Rules	Indonesian Law No. 52 of 2009 on Population Development and Family Development	
		Presidential Instruction No 3 of 2022 on optimizing the Implementation of Quality Family Villages	
		Bantul Regent Regulation No 27 of 2022 on Family Development	

Table 3 continued

	Organization that play a role	Communication, coordination and agreement are essential to the Family Planning Field instructors to implement all program implementation strategies. Through Family Planning Field instructors, all information from Department of Women's Empowerment, Child Protection, Population Control and Family Planning is communicated to the rural community institution.	
Cadre Role	Organizing the management	The organizational structure with attached job descriptions for family planning cadres is known to the village head and approved by the regent of Bantul. However, this information is not shared with Family Planning Field Instructors, preventing them from passing it on to cadres.	Optimizing the role of information, education, and communication (IEC) and mentoring of women of reproductive age through hybrid classroom training with health workers
	Conducting meetings with all administrators or with other officers	Meetings were routinely held once a month, but sometimes less than 50% of the participants attended each meeting.	
	Conducting IEC and counselling to couples	Information, Education, and Communication (IEC) and counselling are not routinely once a month because the midwives lack of confidence to do IEC themselves.	
		<ul> <li>The cadres do not have guidelines that can be used for counselling couples.</li> </ul>	
		Training has often been conducted by the Department of Women's Empowerment, Child Protection, Population Control and Family Planning, Family Planning Field instructors and experts in accordance with their fields of expertise	
		<ul> <li>Cadres express that they have limited knowledge about family quality, so they have never counseled couples.</li> </ul>	
	Conducting Recording, Data Collection and Target Mapping related to the use of contraceptives in couples	The Population and Family Information System registration forms remain incomplete	
	Conducting services by means of coaching, mentoring and referral	There has been coaching, mentoring and referral in collaboration with health workers from the Bambanglipuro Community Health Center and practicing midwives, especially for the use of contraceptives.	
	Having independence in their organization	There is no agreement to establish a business unit for family planning cadres. This is due to the lack of funds that can be managed specifically to strengthen cadres	
Learning Strategies and Methods	Methods	Women of reproductive age said that if there is counseling, it should be face to face to make it easier and more understandable. In addition, it can also be shared through women of reproductive age. Women of reproductive age cannot attend if it is face to face due to work and childcare.	Establishing small classes as learning centers with cadre facilitators and health worker resource persons. The learning sessions
	Strategies	It should be conducted by healthcare professionals as a competent person.	will be conducted in a hybrid format.
	Material	Women of reproductive expressed a need of information on how to take care of children, how to keep their families healthy, and women's health	

(Ref: Primary Data)

Table 3 shows that the knowledge of women of reproductive age about quality families is still not in accordance with the I-BANGGA indicator. participants said that a quality family can fulfil all the needs of the family. The definition of a quality family based on the participants' knowledge at that time was in line with the attitude that the participants had, which was a positive attitude towards a quality family. Participants' positive attitudes towards quality families resulted in participants' self-efficacy towards their ability to realize quality families. Most of the participants believed that they were able to make their family a quality family. Positive attitudes and good self-efficacy by participants are still within the perspective of each participant's definition of a quality family. As for pregnancy planning, there are still three participants who have not been able to plan their pregnancy properly.

The values about pregnancy planning that participants have are that pregnancy planning is a good thing to do, but there are still those who think that not doing pregnancy planning is not a problem. Furthermore, participants (women of reproductive age) have trust in cadres who have been providing information to them. Information provided by cadres was about the use of contraceptives and place of service activities. As for the network in Bantul, Indonesia, according to participants, it is from cadres and health workers.

The regulation/policy component implemented in the family quality program is very clear. The availability of human resources, funding, rules, and organization is expected to assist in the achievement of family quality. Some of the roles of cadres have been carried out, although not perfectly. The organisational role of the Rural Community Institution has been established and a decree is issued by the district head. This forms the basis for cadres in carrying out their duties. The family planning field extension workers have not received a copy of the decree until the end of 2023, so they have not been able to pass it on to all cadres. However, the cadres appointed at the neighborhood, hamlet and village levels have been carrying out their duties well.

Regular meetings have been held once a month between cadres at the hamlet level. However, attendance remains below 50% of all the family planning field extension workers. The absence of the family planning field extension workers is due to the work of the cadre that cannot be set aside. Nevertheless, the meeting outcomes will also be conveyed to absent cadres to ensure that information does not stop. The implementation of Information, Education, and Councelling (IEC) by cadres is still not conducted regularly due to the lack of confidence among cadres in providing IEC independently, and insufficient educational material to support counselling to couples of reproductive ages.

The implementation of data collection on contraceptive use has been conducted but several hamlets still have incomplete records. This is due to the cadres' busy schedules, which require free time to complete the data collection. However, family planning field extension workers continue to monitor progress, so that they can remind cadres who have not collected data to immediately register couple regarding contraceptive use. Assistance for individual families has been provided, especially in relation to contraceptive use, with the assistance of health workers. As for the independence of the Rural Community Institution, the absence of a business unit makes it still dependent on village funding. Establishing a business unit would require cross-sector collaboration to ensure financial sustainability.

The methods chosen by women of reproductive age in the education process are offline and online. When education is conducted offline, many working women of reproductive age cannot attend, besides that women of reproductive age who have small children cannot be present in full, so they cannot listen to the information properly. However, some said that learning should be done offline to get better understanding. So far, information has been provided by health workers, and cadres also provide information but limited. The materials that are still needed by participants are about parenting, reproductive health, and family quality.

#### 4. Discussion

#### 4.1. Social and Economic Factors

The social and economic factors in this study were related to the education level, occupation and income of women of reproductive age. The results showed that most of the participants had a secondary education. Women of reproductive age tend to have a secondary education, either junior or senior secondary education [17]. In developing countries, highly-educated women tend to have fewer children compared to poorly-educated women. In addition, highly-educated women are more likely to understand that modern contraceptives help to control births [18]. Women with no education or primary education are more likely to engage in risky fertility behavior than women with higher level education [19]. Furthermore, women with primary education and above have better pregnancy planning, preparedness for labor and delivery emergencies than women with no education [20,21]. Thus, the educational level of women of reproductive age is related to pregnancy planning. The higher the level of education, the better the pregnancy planning. Secondary education is something that can be assumed that the majority of women of reproductive age in Bantul, Indonesia may have good pregnancy planning.

The second, social and economic factors are employment. Employment is related to contraceptive use as part of pregnancy planning efforts. The results of this study showed that most of the participants were not working. Previous research has shown that the type of work

will affect the choice of contraceptives [22]. This is supported by other studies that for women who work in the non-agricultural sector, work is associated with fertility, unmet need for family planning and the use of modern contraceptives. Women who limit their fertility may be able to use their time to work or, conversely, women who work may limit the number of children they have [23]. In Indonesia, a study found that non-working women were more likely to use modern contraceptives than working women. This is not due to working schedule, but because nonworking women have more family support than working women, and because non-working women are more compliant than working women [24]. In contrast, the results of a study in Turkey found that women who do not work are less likely to use contraceptives and are therefore less able to plan pregnancies well [25]. Thus, based on the results of this study and some previous research literature, it appears that women who do not work are not necessarily unable to plan pregnancy well. Some factors that influence pregnancy planning may be more dominant than employment factors, such as education.

The third, social and economic factors are income. Family income has significant relationship with pregnancy planning [7]. Women who have low family income have the potential to experience unwanted pregnancies which can lead to conditions of stress and depression and delays in pregnancy care [26]. Additionally, lack of preparation for pregnancy, including not using contraceptives even though they do not want to have children, also occurs in women with low family income [27]. Another study found that women of reproductive age who have high income are at higher risk of gestational diabetes mellitus compared to middle income. This condition can negatively affect fetal condition [28]. According to the results of this study, between women of reproductive age who have income below the minimum wage and above the minimum wage, the percentage was equal, namely 50%, while poor pregnancy planning was only 30%. Therefore, it can be concluded that income below or above the minimum wage is equally likely to result in better pregnancy planning.

#### 4.2. Individual Factors

Individual factors in this study include knowledge, attitude, self-efficacy, and pregnancy planning of women of reproductive age. The first individual factor is knowledge. A person's knowledge is influenced by several factors including sociodemographic. One of the sociodemographic factors is education level. The results of a previous study mentioned that a person's level of education will affect pregnancy planning and will ultimately determine his or her preconception care behaviour [29]. The number of children and marital status also affect the level of knowledge of women of reproductive age [30]. However, knowledge does not always affect the practice. This may be due to other factors that influence certain practices such as the presence or

absence of motivation [31,32]. This means that even though the knowledge of women of reproductive age about pregnancy planning and quality families is good, it does not necessarily mean that they will be able to plan pregnancies appropriately to achieve quality families. So, this is an important thing to study further.

The second, individual factor is attitude. The pregnancy intention among women of reproductive age can be seen from their attitude. Attitudes are divided into 2, namely cognitive attitudes (beliefs and knowledge) and affective attitudes (feelings and emotions). Both forms of attitude are important to be able to improve the practice of continued use of contraceptives [33]. Based on previous research, pregnancy planning attitudes are different from pregnancy intentions. In addition, most women of reproductive age say that it is important to plan pregnancy [34]. The results of previous studies show that most women of reproductive age who have positive attitudes exhibit ambivalence in their pregnancy planning [17]. In contrast to this, women who have a positive attitude towards pregnancy will tend to have better intentions in caring for their pregnancy [35]. Additionally, a positive attitude towards contraceptive use is associated with the utilization of modern contraceptives [36]. Thus, attitude is one of the factors that influence a person's behaviour. In accordance with the results of this study, participants had a positive attitude towards pregnancy planning. In line with this study's findings, participants generally had a positive attitude toward pregnancy planning, agreeing that women of reproductive age should plan their pregnancy. However, there are still 30% who do not have good pregnancy planning. This may be due to other factors.

The third, individual factor is self-efficacy. Based on the theory of planned behavior, self-efficacy indirectly influences contraceptive use [37,38]. Self-efficacy can be developed through training that improves skills [39]. Other studies also suggest that interventions that can be done to increase self-efficacy in pregnancy planning are to increase women's understanding of fertility [40]. This is consistent with the findings of the study that exposure to information is necessary for proper pregnancy planning. Exposure to information received through women of reproductive age forms good self-efficacy and subsequently forms positive behavior, namely appropriate pregnancy planning.

Each woman and her partner have different backgrounds and reasons for reproductive planning. Therefore, counselling is necessary to help woman and their partners clarify their reproductive goals [41]. Discussions with women are an essential part of efforts to plan preconception care interventions so that they have a positive impact on pregnancy outcomes for both the mother and the fetus [42]. For women of reproductive age who have noncommunicable diseases such as hypertension, heart disease, and diabetes mellitus, health workers need to proactively communicate with them to ensure their pregnancy intentions and how to avoid unwanted pregnancies. This needs to be an educational effort for health workers [43].

Unwanted pregnancies are associated with fewer developmental milestones compared to wanted pregnancies [44]. Thus, to plan pregnancy appropriately, support is needed from health workers and cadres who have information about good and healthy pregnancy. In addition, women of reproductive age also need support in making decisions about their pregnancy planning.

# 4.3. Social Capital and Need for Family Planning Health Promotion among Women of Reproductive Age

Social capital is an important factor in women's reproductive health and sexual rights. The main form of social capital is the existence of strong relationships between people in groups that share common characteristics [45]. In addition, social capital contributes significantly to the use of health services for women and children [46]. Social capital is measured by indicators such as networking, trust and social participation [47]. Social capital is associated with women's behavior. In addition, social capital influences family reproductive decisionmaking [48]. Social capital is needed to identify efforts that can be made when a disaster occurs in an area, so that social capital can minimize the impact of sexual and reproductive health system disruption on adolescents. These efforts are based on the framework of recovery capital [49]. Social capital is one of the social determinants of health whose role should be considered in addressing health inequality [50]. Social capital is also associated with the use of reproductive technologies in subsidized areas [51]. The social capital that a place possesses will have a positive impact on that place. The existence of networks, trust and participation among community members makes the place more powerful. As in Bantul, Indonesia, the relationship between the family planning field extension workers, cadres, midwives and women of reproductive age, based on the trust and participation of each, can contribute to improving the health of women of reproductive age and their families. In addition, some regulations support the achievement of appropriate pregnancy planning. These regulations include the availability of human resources, funding, regulations, and the existence of organizations that play a role in helping to achieve appropriate pregnancy planning. Furthermore, there is the role of cadres, which must be optimized to enhance efforts aimed at improving the well-being of women of reproductive age.

# 4.4. The Process of Learning about Family Planning Health for Women of Reproductive Age

Strategies and methods of learning in the community are essential for increasing participation. In accordance with the established learning strategy, a health service provider with pertinent knowledge, attitudes, and good practices related to family planning services must also be included [52]. A structured learning process that aims to influence

the behavior of individuals or groups is a well-designed strategy. This strategy will not be the same from one group to another. Learning needs, methods, or learning styles may be different. Therefore, to plan learning, it is necessary to understand the needs and preferences of individuals or groups and to create a learning plan that meets the learning objectives of a group of learners, not just specific individuals [53].

Community education aims to build the most educational social awareness strength. Community-based education is expected to add value to the formation of the character of the community itself. Community empowerment through mentoring programs is one of the participatory efforts of the community, which becomes an important component to improve the quality of the community or the individuals themselves. Through community empowerment, the community will participate in the planning of the program and the expected outcomes, so they will feel ownership of the program [54].

# 5. Implication and Limitations

Health promotion is a key strategy to empower women in creating a quality family. Regional governments should strengthen the social capital that exists in the community, because the more social capital they have, the easier it will be to increase public awareness of health. Positive behavior as a result of appropriate health promotion can be developed in various regions, according to the social capital that exists, so that it will have an impact on the health of the entire community. An appropriate approach to learning as one of the health promotion efforts will be able to help change people's behavior.

This study has limitation. In the age group < 20 years, there was only 1 participant who was willing to be interviewed, resulting in unsaturated data.

# 6. Conclusions

The need for health promotion is reflected in the social capital of the community. In addition, individual factors of women of reproductive age are also important to identify. The research findings from Bantul, Indonesia, indicate that communication, information and education activities for women of reproductive age related to pregnancy planning have been conducted, but they remain not optimal due to limited educational media and knowledge. Cadres, as the extended hands of field extension workers, lack confidence in providing information to women of reproductive age. There are still women of reproductive age whose pregnancy planning is not very good. Therefore, it is recommended that health cadres, supported by health workers, strengthen their efforts to support women of reproductive age by forming small groups so that information can reach the community more effectively. Learning strategies and media should also be developed based on community needs.

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# **Author's Contributions**

Conceptualization, W; methodology, W., S.S.; formal analysis, W.; investigation, W; data curation, W, S.S, R.S., S.M.; writing-original draft preparation, W.; writing-review and editing, W, S.S, R.S., S.M. All authors contributed to the article and approved the submitted version.

# **Conflict of Interest**

The authors have declared that no competing interest exists.

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