







# Perception of Pregnant Mothers About Their Psychological Well-Being During the COVID-19 Pandemic: A Qualitative Study

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**Abstract.** The COVID-19 pandemic affects the mental health of pregnant mothers. Therefore, it was imperative to assess their psychological well-being from their perception. Objective. This study aimed to understand pregnant mothers' perceptions of their psychological well-being during the COVID-19 pandemic. A qualitative descriptive study design with a phenomenology approach was conducted on 22 mothers who were pregnant. The study was conducted at community health centers in Tangerang, Indonesia, from July to August 2022. In-depth interviews were performed to obtain their perception of psychological well-being during pregnancy. Interviews were conducted face to face, audio recorded, and transcribed verbatim. Data were analyzed with a qualitative matrix and thematic analysis to develop major themes and subthemes. The initial findings revealed 273 codes, which were then reduced to 146 codes, 85 sub-categories, 24 categories, and six themes. The themes were related to pregnant mothers' perceptions of psychological well-being during COVID-19, i.e., awareness of psychological health, prevention of COVID-19 transmission, stress management, psychosocial support programs, integration of physical and psychological care, and strengthening mother empowerment. This research found pregnant mothers' perception of psychological well-being based on their knowledge, how they perceived pregnancy, and their hope for the future. The Pregnant mother's perception was necessary to develop psychological-based care to improve the psychological well-being of pregnant women. The health worker can deliver the care individually or in groups of pregnant women. Psychological well-being needs to be promoted to support maternal health during pregnancy.

**Keywords:** COVID-19 · mental health · pregnant mothers · psychological well-being

## 1 Introduction

Before the novel Corona Virus 2019 (COVID-19) infected the world, World Health Organization (WHO) stated that 15.6% of pregnant mothers in developing countries have a risk of mental health disorders. One to two pregnant mothers will be affected by a mental illness such as anxiety and depression [1, 2]. Becoming mothers must adapt to new demands and challenges to fulfill the mothering role. This transition may be challenging and distressing for some mothers, depending on their perceptions and resources, which the COVID-19 pandemic condition could exacerbate. A study in India showed an increase in Common Mental Disorders (CMD) prevalence among pregnant women. Among 457 pregnant women, CMDs were 15.3%, major depression was 2.8%, and Generalized Anxiety Disorder (GAD) was 15.1% [3]. In Indonesia, a study in Madura illustrated that 31.4% of pregnant women have very severe anxiety, and 12.9% have severe anxiety [4]. Research in Malang enclosed that 2% of pregnant women experienced anxiety, 32% had severe anxiety, and 42% had moderate pressure. A study through social media, with the epicenter of the respondent's location being Jakarta, Bogor, Tangerang, Depok, and Bekasi, explained that 53.3% of pregnant women had anxiety [5].

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Pregnant mothers with severe anxiety and depression will harm their pregnancy and baby. It can inhibit maternal roles [6], decrease mothers' motivation for prenatal care [7], and reduce the baby's risk of lower birth weight, preterm delivery, and not optimal cognitive development infant [8, 9]. The campaign for positive maternal mental health must be delivered in the community to help pregnant mothers realize their mental health conditions.

According to the WHO definition, mental health is

*“a state of well-being in which the individual realizes his or her abilities can cope with the normal stresses of life, work productively and fruitfully, and contribute to his or her community”* [1, 10].

Pregnant mothers must be supported to have their abilities, cope with normal stresses, and work productively and fruitfully.

During the COVID-19 pandemic, the Indonesian government has public policies to manage this problem, such as social distancing, rapid testing and screening, masks, and routine handwashing. From 2020 until 2021, Indonesian citizens experienced a severe pandemic, a lack of personal protective equipment, many infected health workers, and minimal medicines [11]. The pandemic was becoming a new stress burden for pregnant women [4]. In 2022, the condition was relatively better, and the number of infected patients decreased due to the vaccination program. This year community program for pregnant mothers start again with strict health protocol for COVID-19 prevention. We need to promote positive mental health to pregnant mothers.

Mental health has two aspects; there are positive emotions and positive functions. From Keyes's definition, mental health has three components, i.e., emotional well-being, psychological well-being, and social well-being [12]. Emotional well-being consists of happiness, interest in life, and satisfaction; Social well-being refers to positive functioning and includes having something to contribute to society, feeling a part of a community, believing that humanity is improving for all people, and considering how the organization works to make sense to them [13, 14]. Finally, psychological well-being (PWB) is defined as liking most aspects of one's personality, being adept at managing daily responsibilities, having good relationships with others, and being satisfied with one's life [15].

One of the components of mental health is PWB. Good PWB minimizes psychological diseases during pregnancy, manages mild psychological disorders, and improves cognitive processes, attitudes, and behavior to keep pregnancy healthy physically and psychologically [8, 16]. PWB has six dimensions, i.e., self-acceptance, positive relationships with others, autonomy, environmental mastery, purpose in life, and personal growth [13, 17]. This terminology was complicated to understand for pregnant mothers, so this research aims to explore the understanding of pregnant mothers' psychological well-being during the COVID-19 pandemic. This research was a development of previous research on psychological well-being conducted in Iran about the relationship between coping self-efficacy and social support with psychological well-being in pregnant women referring to health centers during the coronavirus outbreak [18].

## 2 Method

The design of the study was qualitative with a phenomenological approach. The researcher, as an instrument, used interview guidelines to collect the data.

## 2.1 Settings

This research was conducted at a public health center in Tangerang city which provides maternity services in antenatal care from July to August 2022.

## 2.2 Participants

Participants in this research were 22 pregnant mothers in the third trimester. They recruited with inclusion criteria, i.e., pregnant mothers were able to talk fluently about physical and psychological experiences during pregnancy and stated their willingness to participate in this study. We excluded mothers who wanted to stop the interview (Table 1).

**Table 1.** Characteristic of participants

| Code | Age          | Status       | Occupation | Gestational Age | Education     |
|------|--------------|--------------|------------|-----------------|---------------|
| R1   | 41 years old | Multigravida | Housewife  | 32 weeks        | Middle school |
| R2   | 25 years old | Multigravida | Work       | 28 weeks        | High school   |
| R3   | 22 years old | Primigravida | Housewife  | 30 weeks        | High school   |
| R4   | 18 years old | Primigravida | Housewife  | 28 weeks        | High school   |
| R5   | 30 years old | Primigravida | Work       | 28 weeks        | High school   |
| R6   | 27 years old | Primigravida | Housewife  | 35 weeks        | High school   |
| R7   | 32 years old | Multigravida | Housewife  | 37 weeks        | High school   |
| R8   | 28 years old | Primigravida | Housewife  | 30 weeks        | Middle school |
| R9   | 24 years old | Primigravida | Work       | 29 weeks        | High school   |
| R10  | 33 years old | Multigravida | Work       | 31 weeks        | High school   |
| R11  | 37 years old | Multigravida | Housewife  | 30 weeks        | Middle school |
| R12  | 34 years old | Multigravida | Housewife  | 28 weeks        | Middle school |
| R13  | 21 years old | Primigravida | Work       | 27 weeks        | Middle school |
| R14  | 27 years old | Multigravida | Housewife  | 36 weeks        | High school   |
| R15  | 20 years old | Primigravida | Work       | 31 weeks        | High school   |
| R16  | 26 years old | Primigravida | Housewife  | 28 weeks        | High school   |
| R17  | 36 years old | Multigravida | Work       | 37 weeks        | High school   |
| R18  | 40 years old | Multigravida | Housewife  | 35 weeks        | High school   |
| R19  | 19 years old | Primigravida | Housewife  | 30 weeks        | Middle school |
| R20  | 27 years old | Multigravida | Housewife  | 28 weeks        | High school   |
| R21  | 26 years old | Primigravida | Housewife  | 32 weeks        | High school   |
| R22  | 34 years old | Multigravida | Housewife  | 34 weeks        | High school   |

### 2.3 Data Collection

Data collection was conducted by the researcher directly as a midwife, a magister of midwifery, and is competent in prenatal care. Purposive sampling was used to recruit and interview participants. Maximum variation sampling was done to select a small number of cases and maximize diversity relevant to the research question and sample characteristics. For example, researchers wanted to understand how a phenomenon was seen and understood among pregnant mothers in the third trimester. In-depth interviews were conducted face-to-face with each participant individually and semi-structurally using interview guidelines. Each interview was carried out at the public health center after the schedule was agreed upon. The informed consent process was conducted before the interview, and the participants provided their consent voluntarily. The interview was audio-recorded, and the average duration of the interviews was about 30–45 min. Field notes were also used during the semi-structured interviews for recording the participant's expressions, behavior, and non-verbal communication, such as gestures, eye contact, and body language [19]. The interviews consisted of questions on (1) demographic information, (2) how their perception of PWB on pregnancy during COVID-19, (3) the meaning of self-acceptance, autonomy, environmental mastery, positive relationship with others, purpose in life and personal growth, (4) how they take care their PWB during COVID-19 pandemic.

### 2.4 Data Analysis

After each interview with participants, the audio recording was immediately transcribed, and the verbatim check was done several times to improve accuracy and comprehensiveness. Three mothers underwent two repeat interviews to complete the missing information. From this point, the transcribed data were the primary sources for describing mothers' perceptions of their psychological well-being during pregnancy. The researcher used NVivo software to provide new codes. Data saturation was reached after interviewing eleven participants. Data saturation was a condition where there was no more information, new codes, or the ability to obtain additional information.

Analysis of the data was carried out with qualitative matrix and thematic analysis. First, data were transcribed, and the reduction was processed. Then, thematic analysis was used to present the results. We used the six steps of thematic analysis, which are as follows: (1) familiarization with the data; (2) generating initial codes; (3) searching for themes; (4) reviewing the themes; (5) defining themes, and (6) naming the themes, and producing the report [20].

By evaluating the criteria of credibility, dependability, confirmability, and transferability, the accuracy of the qualitative findings was assessed. The transcripts were returned to the participants to read, comment on, and affirm that they concur with the study's findings to evaluate its trustworthiness. They each examined a different section of the interview transcripts. Participant evaluations and peer review analyses were used to rating dependability. Regarding transferability, the researcher tried to give precise and thorough explanations of the research procedure [21].

## 2.5 Ethical Consideration

The Faculty of Public Health at Universitas Indonesia's Research And Community Engagement Ethical Committee approved this study under the reference Ket 510/UN2.F10.D11/PPM.00.02/2022. The Tangerang City Health Office and Public Health Care Center issued a study permit number 070/5424/SDK/VIII/2022. The researcher guarantees the accuracy and reliability of the study, obtains participants' free and informed agreement, and respects their privacy and anonymity.

## 3 Result

The initial findings of in-depth interviews with 22 mothers revealed 273 codes, which were then reduced to 146 codes, 85 sub-categories, 24 categories, and six themes [Table 2]. There were six themes related to pregnant mothers' perceptions of psychological well-being during COVID-19. *They were* awareness of psychological well-being, prevention of COVID-19 transmission, stress management, psychosocial support program, integration of physical and psychological care, and strengthening mother empowerment. The participants ranged from 18 to 41 years old; 50% were multigravida, 68% were housewives, and 27% had a middle school education.

### Awareness of psychological well-being

First, the researcher defined awareness of psychological well-being. Attention means mothers know about their psychological condition. When mothers know, they will understand what is going on with their bodies, thinking, feeling, and well-being. This theme consists of 16 sub-categories and four categories. Categories for this theme were "knowledge of psychological well-being," "recognized of psychological well-being," "perceived of psychological well-being," and "observed of psychological well-being."

### Knowledge of psychological well-being

Knowledge of psychological well-being was divided into "lack of about psychological well-being," "identify psychological aspect," "attention to a psychological condition," and "understand to care their feelings." Most mothers did not understand the term "psychological well-being," but they defined psychological well-being with "feelings" and "emotions." One participant said, "*emotional well-being means minimal problems, not confused with life burden*" (R2).

### Recognized psychological well-being

Recognized psychological well-being consisted of sub-categories "physically healthy," "willingness to be happy," "tell their feelings," and "showed well-being." Unfortunately, almost all mothers did not recognize psychological well-being, but they knew about their feelings and had a healthy mind starting with a healthy body. "*We understand that during pregnancy, we must have a healthy mind, and that starts with a healthy body and the fulfillment of life's needs,*" said a participant (R6).

### **Perceived psychological well-being**

On average, mothers said their condition was psychologically prosperous if they felt happy. *“Psychological well-being looks like feeling happiness than sadness,”* said one participant (R9).

### **Observe psychological well-being**

Observing psychological well-being was categorized into sub-categories, i.e., “feeling sad,” “having anxiety,” “sometimes happy,” and “worries about their health.” For example, one participant said, *“During this pregnancy, I’ve been often unstable in emotions; I don’t know why; there have been happy and sad in turns”* said a participant (R7).

### **Prevention of COVID-19 transmission**

The second theme was the prevention of COVID-19 transmission. This theme consists of four categories “preventive compliance,” “COVID-19 health protocol,” “new normal adaptation,” and “vaccination.”

#### **Preventive compliance**

“Good nutrition,” “immune booster,” “have vitamins,” and “enough rest” were sub-categories from preventive compliance. One of the most supportive factors for pregnant mothers to have good psychological well-being is free from COVID-19 transmission. Most of them said it must be suitable for the immune system. *“I always try to have a good diet, eat a variety of foods to increase my immune system, so I don’t get infected by COVID-19, and always have a mask,”* said one participant (R11).

#### **COVID-19 health protocol**

Almost all pregnant mothers still have good obedience to do steps to prevent transmission. *“even though the disease (COVID-19) has reduced, I always try to keep washing my hands, wear a mask, and keep my distance if I go out around, I’m still worried about getting infected by COVID-19,”* said a participant (R14).

#### **New normal adaptation**

New standard adaptation formed by sub-categories is daily activities, environmental changes, flexibility to COVID-19, and living together with COVID-19. Some mothers said they had been infected before pregnancy and hoped the pandemic would end soon. *“now the situation is lighter than last year; I had COVID-19 with mild symptoms, now it’s like a common cold,”* said one of the participants (R1).

#### **Vaccination**

Vaccination becomes categories consisting of “fear of COVID-19 vaccination”, “have two doses,” and “already vaccination.” Almost pregnant mothers said that they were afraid of the effect that appears after vaccination, but they considered the benefits outweigh the disadvantages, so they were vaccinated twice. “To care for my pregnancy and

baby's health, I am willing to be vaccinated. Actually, I am afraid, but it must be worst if I get infected," said a participant (R5).

### **Stress management**

The third theme was stress management consists of "coping skills," "acceptance," "positive habits," and "controlling negative events." This theme described that mothers with good PWB would have the ability to manage stress compared to mothers with low PWB.

### **Coping skills**

Coping skills form by sub-categories "often crying," "didn't care of anything," "religious activities," and "husband support." Almost all participants said that to overcome some problems, they would cry to make them feel more relieved. "This pregnancy makes me happy, but often there are problems in the family. So to relieve the feeling in my heart, I often cry," said a participant (R15).

### **Acceptance**

Most participants said that if they accepted everything that had happened, then it reduced their stress experience. "Accepting all the feelings that arise because of problems was difficult, but that's what you have to do so you don't get too stressed," said one participant (R20).

### **Positive habit**

Positive habit form through "early sleep," "physical activity," "antenatal care routine," and "eating well." This category can help stress management support good psychological well-being. "...so that our condition is good, our bodies must first be healthy, have positive activities, don't eat late, take vitamins, and be routinely checking at the public health center," said one participant (R22).

### **Controlling negative event**

Controlling adverse events, one of the categories consisted of "silent when angry," "setting their feelings," "sharing sessions," and "forgive." Evenly participants stated that they were more silent when they faced events that were not in line with their expectations. "I was more silent, ignoring it, so what can I do? If I think more about it, I get dizzy," said one participant (R16).

### **Psychosocial support programme**

The fourth theme was the psychosocial support program; this theme consisted of "pregnancy readiness," "psychoeducation," "accompaniment," dan "community access" categories. Unfortunately, psychosocial support programs were considered by code of appearance, and most participants had yet to feel that community-based programs helped increase the level of PWB.

### **Pregnancy readiness**

Pregnancy readiness form by "financial support," "couple decision," "prepared for pregnancy," and "mental readiness" sub-categories. Almost all participants said they needed time to prepare for their pregnancy and accepted this condition. "I was surprised because



I was pregnant. I wasn't ready because the economic conditions were difficult, but I realized this was a gift from God, so I accepted it," said one participant (R21).

### **Psychoeducation**

Psychoeducation was formed by sub-categories "antenatal education," "value interpretation," "increase positive motivation," and "cope uncertainty." Almost all participant showed the need to know about health education during pregnancy in physical, psychological, and social aspects. "I received health information from the midwife, telling me to eat a lot, take some rest and medicine, but don't talk about feelings or emotions," said a participant (R18).

### **Accompaniment**

Some participants explained their previous trauma about pregnancy, birth, and postnatal phases. As a result, they needed help from midwives to decrease their fear and have the confidence to face this pregnancy. "Sometimes we need support from midwives about my last trauma in hecting; in this birth, I want to sectio caesarea to avoid hurt," said one participant (R20).

### **Community access**

Community access was formed by sub-categories "therapeutic session," "midwife counseling," "peer group," and "antenatal classes." Almost all participants stated that antenatal classes helped them understand pregnancy and the truth of the myths that appear in society. "I got much knowledge about pregnancy in the antenatal class, which is held once a month, and also from the Mother Child Health (MCH) book," said one of the participants (R2).

### **Integration of physical and psychological care**

The fifth theme was the integration of physical and psychological care, and this theme consisted of categories "standard operational procedure," "health promotion," "stakeholder support," and "improvement of health resources." Again, participants perceived they would have a good PWB if they accepted healthcare integration between physical and psychological aspects.

#### ***Standard operational procedure***

The standard operational procedure consisted of sub-categories "balancing between physical and psychological," "midwifery care," "mothers' need," and "National standard." Almost all participants knew they must balance a healthy body and a healthy mind. Therefore, stakeholders must be responsible for providing health services that accommodate these two aspects. Therefore, there is a need for standard operating procedures for how health workers provide services in physical and psychological elements. "...so that this pregnancy is well, actually there must be a balance between the health of the body and mind, it should not be too emotional, first think about what the consequences, if we get too emotional, health workers have to give us best healthcare," said one of participant (R4).

**Health promotion**

Health promotion was formed by “behavior change,” “increase mothers’ knowledge,” “positive attitude,” and “develop personal skills” sub-categories. Almost all participants said that they did not know the PWB, the dimension, and the factors that affected them, but they knew how to take care of their emotions and feel more positive during this pregnancy. *“I didn’t mind about psychological well-being, but I know how to care for my body and my baby’s health. I should have positive vibes,”* said one participant (R7).

**Stakeholders support**

Stakeholders’ support consisted of “mental health care,” “public policy,” “implementation of health services,” and “referral network.” Almost all participants said mental health care needs to build and fulfill health services. *“So far, I only understand about pregnancy health; emotional health has never been asked or paid attention to,”* said one participant (R10).

**Improvement of health resources**

Improvement of health resources consisted of sub-categories “health worker skills,” “facilities health services,” “services guidelines,” and “evidence-based practice.” Evenly all participants stated that health resources should be improved to facilitate their needs. *“The government should pay attention to the health needs of its people, mental health, especially during pregnancy, is important, so it should be served well,”* said one participant (R15).

**Strengthening mothers’ empowerment**

The sixth theme was strengthening mothers’ empowerment; this theme was formed by “communication skills,” “self-healing,” “decision-making ability,” and “cognitive change” categories.

**Communication skills**

Communication skills consisted of sub-categories “increase interpersonal communication,” “express feelings,” and “assertive communication.” Evenly all participants stated that they were less able to express what they felt to the people around them. It was because of the culture of shame and shyness, which is still embedded in their minds. *“I rarely express what I feel; sometimes my husband and the people closest to me were also insensitive; maybe I’m wrong because I don’t say anything, but I was afraid of being wrong,”* said one participant (R16).

**Self-healing**

Self-healing consisted of sub-categories “relaxation,” “quality sleep,” “express my time,” and “positive thinking.” Almost all participants have done self-healing by themselves according to their feelings and needs. *“If I get some stuck, bored, or negative emotions in this pregnancy, I just take a deep breath, go to bed early, and ignore anything disturbing my brain..”* said one participant (R19).

**Decision-making ability**

Decision-making ability was formed by sub-categories “quality of relationships,” “determines choices,” “personal characters,” and “personal beliefs.” All participants stated

that they still depended on their husband’s approval. They seemed to misperceive the culture of obeying their husbands, because having their own choices does not always mean not following their spouse. *“If something happens regarding my pregnancy and my baby’s health, I still have to communicate with my husband; I can’t make decisions on my own; let’s make a decision together,”* said a participant (R18).

**Cognitive change**

The cognitive change consisted of sub-categories “education level,” social, economic backgrounds,” “values experience,” and “personal purpose.” Almost all participants stated that psychological well-being was very difficult to apply. Therefore, they needed time, needed a more profound understanding so that it could affect their valuable experience and personal purpose. *“actually, I wanted to be happy during pregnancy, but I realized it was not every day; still, I faced problems that made me angry or sad suddenly, to overcome this was also not easy,”* said one of participant (R21).

**Table 2.** Themes and Categories of the perception of pregnant mothers about their psychological well-being

| Sub-categories                          | Categories                            | Themes                                |
|---|---------------------------------------|---------------------------------------|
| Lack of psychological well-being        | Knowledge of psychological well-being | Awareness of Psychological well-being |
| Identify psychological aspect           |                                       |                                       |
| Attention psychological condition       |                                       |                                       |
| Understand and care for their feelings. |                                       |                                       |
| Physical healthy                        | Recognized psychological well-being   |                                       |
| Willingness to be happy                 |                                       |                                       |
| Tell their feelings                     |                                       |                                       |
| Showed well-being                       |                                       |                                       |
| Acceptance of pregnancy                 | Perceived psychological well-being    |                                       |
| Hope to have normal labor.              |                                       |                                       |
| Hope they were health                   |                                       |                                       |
| Good relationship                       |                                       |                                       |
| Feeling sad                             | Observe psychological well-being      |                                       |
| Have anxiety                            |                                       |                                       |
| Sometimes happy                         |                                       |                                       |
| Worries their health                    |                                       |                                       |

(continued)

**Table 2.** (continued)

| <b>Sub-categories</b>        | <b>Categories</b>          | <b>Themes</b>                       |
|------------------------------|----------------------------|-------------------------------------|
| Good nutrition               | Preventive compliance      | Prevention of COVID-19 transmission |
| Immune booster               |                            |                                     |
| Have vitamins                |                            |                                     |
| Enough rest                  |                            |                                     |
| Using mask                   | COVID-19 health protocol   |                                     |
| Have a PCR test              |                            |                                     |
| Handwash                     |                            |                                     |
| Social distancing            |                            |                                     |
| Daily activities             | New normal adaptation      |                                     |
| Changes in environment       |                            |                                     |
| Flexible to COVID-19         |                            |                                     |
| Live together with COVID-19. |                            |                                     |
| Fear of COVID-19 vaccination | Vaccination                |                                     |
| Have two doses               |                            |                                     |
| Already vaccinations         |                            |                                     |
| Prevent COVID-19             |                            |                                     |
| Often crying                 | Coping skill               | Stress management                   |
| Didn't care about anything   |                            |                                     |
| Religious activities         |                            |                                     |
| Husband support              |                            |                                     |
| Surrender                    | Acceptance                 |                                     |
| Return to God                |                            |                                     |
| Whole-souled                 |                            |                                     |
| Untimed pregnancy            |                            |                                     |
| Early sleep                  | Positive habit             |                                     |
| Physical activity            |                            |                                     |
| Antenatal care routine       |                            |                                     |
| Eat well                     |                            |                                     |
| Silent when angry            | Controlling negative event |                                     |
| Set their feelings           |                            |                                     |
| Sharing session              |                            |                                     |
| Forgive                      |                            |                                     |

(continued)

**Table 2.** (continued)

| <b>Sub-categories</b>                        | <b>Categories</b>               | <b>Themes</b>                                  |
|--|---------------------------------|--|
| Financial support                            | Pregnancy readiness             | Psychosocial support programme                 |
| Couple decision                              |                                 |  |
| Prepared of pregnancy                        |                                 |  |
| Mental readiness                             |                                 |  |
| Antenatal education                          | Psychoeducation                 |  |
| Value interpretation                         |                                 |  |
| Increase positive motivation                 |                                 |  |
| Cope uncertainty                             |                                 |  |
| Midwife support                              | Accompaniment                   |  |
| Psychological support                        |                                 |  |
| Involve Family                               |                                 |  |
| Reduce trauma                                |                                 |  |
| Therapeutic session                          | Community access                |  |
| Midwife counseling                           |                                 |  |
| Peer group                                   |                                 |  |
| Antenatal classes                            |                                 |  |
| Balancing between physical and psychological | Standard operational procedure  | Integration of physical and psychological care |
| Midwifery care                               |                                 |  |
| Mothers needs                                |                                 |  |
| National Standard                            |                                 |  |
| Behavior change                              | Health promotion                |  |
| Increase mothers knowledge                   |                                 |  |
| Positive attitude                            |                                 |  |
| Develop personal skills                      |                                 |  |
| Mental health care                           | Stakeholders support            |  |
| Public policy                                |                                 |  |
| Implementation of health services            |                                 |  |
| Referral network                             |                                 |  |
| Health workers skills                        | Improvement of health resources |  |
| Facilities health services                   |                                 |  |

(continued)

**Table 2.** (continued)

| Sub-categories                       | Categories              | Themes                            |
|--------------------------------------|-------------------------|-----------------------------------|
| Services guidelines                  |                         |                                   |
| Evidence-based practice              |                         |                                   |
| Increase interpersonal communication | Communication skill     | Strengthening mothers empowerment |
| Increase intrapersonal communication |                         |                                   |
| Express feelings                     |                         |                                   |
| Assertive communication              |                         |                                   |
| Relaxation                           | Self-healing            |                                   |
| Quality sleep                        |                         |                                   |
| Me time                              |                         |                                   |
| Positive thinking                    |                         |                                   |
| Quality of relationship              | Decision-making ability |                                   |
| Determines choices                   |                         |                                   |
| Personal characters                  |                         |                                   |
| Personal beliefs                     |                         |                                   |
| Education level                      | Cognitive change        |                                   |
| Social and economic background       |                         |                                   |
| Values experiences                   |                         |                                   |
| Personal purpose                     |                         |                                   |

## 4 Discussion

Psychological well-being in this study focused on how participants perceived their lives to have meaning, purpose, and distinction, how much they believed they were living by their convictions, how well they were managing their life circumstances, how well they were working their relationships with significant others, and how deeply connected they felt to other people. It also examined how much self-awareness and acceptance they had of themselves. This research found that pregnant mothers perceived PWB based on their knowledge, perception of pregnancy, and hope for the future. This concept would form the awareness of PWB. These findings were similar to research in Italy, which stated that most mothers hoped for a safe pregnancy, a labor experience that allowed them to use their physical and psychosocial capacities to labor and deliver a healthy baby in a clinically, culturally, and psychologically safe environment with practical and emotional [22]. These findings were not supported by research from India, which explained that no significant association was found between Psychological General Well-being and perceived stress with selected Socio-demographic variables. Pregnancy always means a

change for a woman. These changes may contribute to stress among pregnant women [23], affecting their perception of their PWB.

The findings have the prevention of COVID-19 transmission as the theme to support perceptions of pregnant mothers about their PWB. This result was supported by research in Ukraine that explained that the most significant source of worry for pregnant women was the threat to their lives and the health of their babies as a result of the pandemic's uncertainty [24]. In addition, the health protocol can prevent pregnant mothers infected by COVID-19, and more feel safe going through the period of pregnancy. These themes supported pregnant mothers' perception of their worries about COVID-19.

Stress management, as the theme of perceptions of pregnant mothers, indicates that good PWB refers to the skills of pregnant mothers to manage their stress. They know about life problems such as financial and economic status, household burden, hostile environment, and marriage conflicts. This result had significant research in the United States that explained mothers' perceptions of stress related to their emotional concerns with being a new mother, how to manage the change of their problems, internal and external, and how to express distress during pregnancy were noted. These feelings were supported by mothering eliciting changes in emotional well-being associated with transitioning to the maternal role. However, maternal attitudes during pregnancy can be related to severe mood disorders, such as depression and anxiety, in the postpartum period [6].

Pregnant mothers had the perception that the psychosocial program supported good PWB. Mothers' lack of knowledge could be reduced by peer group support such as antenatal classes or social community programs. Psychosocial support programs can lead by a midwife or another health worker to educate the integration aspect of health. How a healthcare provider assesses and manages these pregnancy conditions can impact the PWB of pregnant mothers and their families. This result was significant in research in Uganda [25]. The psychosocial program could stimulate community feelings such as shared emotional connections, and having the same membership as pregnant mothers will increase their PWB.

Integration between physical and psychological care becomes one of the themes to support the level of PWB because health workers should have the idealism to give the best care through evidence-based practice to improve the quality of care [26]. Pregnant mothers must be encouraged by health workers to have more capabilities in coping with the everyday stresses of life and do the daily activities that support their healthy pregnancy, lower mental health disorder, and have good motivation in prenatal care [27]. This finding was similar to research in Mali, West Africa, which stated that integrated maternal and mental health interventions are needed to narrow the gap between the need for and availability of mental health services in rural. Midwives and community health workers supported the viability and acceptability of integrating mental health services within maternal health services in response to the paucity of mental health services. The importance of midwives as primary providers of mental health examinations and essential psychosocial therapy for women was emphasized [28, 29].

Strengthening mothers' empowerment as findings in this research focus on mother self-improvement. One dimension of PWB is personal growth; this result was supported by research in Iran, which states that the standard of prenatal care could be impacted by mental health. Examining pregnant women in light of these two challenges can help

health professionals offer pregnant mothers adequate prenatal care, thereby enhancing the community's health as a whole [30]. The limitation of this study was that it only captured the pregnant mother's perception of psychological well-being during the COVID-19 pandemic. However, this research brought beneficial information to support the psychological well-being of the pregnant mother.

## 5 Conclusion

It is necessary to develop psychological-based care to improve the psychological well-being of pregnant women. The maintenance can be delivered individually or in groups of pregnant women. Psychological well-being needs to be promoted to support maternal mental health during pregnancy. Mothers' understanding of psychological well-being and its six dimensions need to be improved again through regular education and assistance from health workers during pregnancy to support positive behavior in achieving good health and psychological well-being.

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