ORIGINAL RESEARCH

BONDING AND ATTACHMENT EXPERIENCE AMONG POSTNATAL MOTHERS WITH SPONTANEOUS CHILDBIRTH

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Abstract

Background: Bonding is an emotional bond between a mother and a baby that develops gradually after birth until it is formed into an attachment. Bonding is considered important to ensure the baby’s protection. However, bonding remains challenging for mothers with spontaneous childbirth because they are most likely to focus on themselves.

Objective: To explore the bonding and attachment experience among postpartum mothers with spontaneous childbirth.

Methods: This was a qualitative study with a phenomenological approach. Data were collected from nine participants using semi-structured interviews and observations. Data were analyzed using Colaizzi’s analysis method.

Results: Five themes emerged, namely 1) feeling relieved and happy with the birth of the baby, 2) bonding and attachments are important, 3) stimulating the baby’s sense, 4) the need of social supports in bonding and attachment, and 5) internal and external factors of bonding and attachment.

Conclusion: Bonding and attachment are very important that should be done by the mothers to the baby. However, it takes time and needs the supports from the husbands, parents, relatives, and health workers. Therefore, nurses or midwives should pay attention to this process to create the better bonding and attachment between the mothers and the babies.

KEYWORDS
female; infant; mothers; midwifery; postpartum period; social support; attention

BACKGROUND

Postpartum period, often called postpartum or puerperium, is the time when the baby is born and the placenta comes out from the uterus, until the next six weeks, accompanied by the recovery of organs related to the womb, which undergo changes such as injuries and others related with during childbirth (Suherni et al., 2009). The postpartum period is a challenging time for mothers because caring for babies requires constant attention (Nonnenmacher et al., 2016). In the first minutes until a few hours after the birth of the baby, there is touch or skin contact between the mother and the baby that can trigger bonding (Sulistyawati, 2009). Bonding is described as an emotional bond between the mother and her baby that develops gradually and immediately after birth until it is formed into an attachment. Bonding and attachment ensure protection and maintains a newborn baby, which is very relevant to build a relationship between mother and baby (Nonnenmacher et al., 2016).

The development of bonding and attachment between mother and fetus is very important because it can positively influence maternal health practices during pregnancy to the outcome of childbirth (Alhusen et al., 2012). In addition, mothers with higher bonding reported that they have better attachment and their children showed better development than mothers with lower bonding (Alhusen et al., 2012). There are many benefits will be obtained if the mother does bonding and attachment to her baby as soon as possible after the birth process, including being able to develop a relationship between mother and baby in the future, and assisting in achieving the role of parents (Marmi, 2017; Nugroho, 2014). Johnson (2013) observed that the quality of bonding and attachments in newborns during the first hours of life significantly affects the mental health of the mother and the well-being of the newborn, as well as their development and adaptation throughout life. Therefore, these mothers must be given supports to ensure that they have sufficient bonding with their babies. Nurses must implement...
strategies that support bonding between mothers and newborns while providing special care in the treatment room (Kearvell & Grant, 2010; Obeidat et al., 2009), especially when the mother goes through the childbirth process spontaneously. Spontaneous childbirth will lead to muscle contraction and severe pain, which mothers are most likely to focus on themselves without thinking about the newborn (Jones, 2002).

Based on the first survey at Panembahan Senopati Bantul Yogyakarta General Hospital in 2017, it was revealed that in 8 out of 10 postnatal mothers still did not understand about bonding and attachment, 5 mothers were confused about who should help and enhance good bonding for babies. In addition, it was found that the implementation of care in Panembahan Senopati General Hospital Bantul Yogyakarta was still not optimal. Both nurses and midwives were still giving formula milk to infants although the mothers of the babies were still able to give their breast milk through pumping. Additionally, nurses or midwives in the treatment room were rarely pay attention to the needs of postpartum mothers and infants in fulfilling bonding and attachments. Given this phenomenon, the aim of this study was to explore the bonding and attachment experience among postpartum mothers with spontaneous childbirth.

METHODS
Study Design
This study used a qualitative research with a phenomenological approach.

Participants
Nine participants were selected in this study using a purposive sampling. Participants were selected based on inclusion criteria, including: 1) postpartum mothers with spontaneous childbirth, both primiparous and multiparous, who were willing to be participants, 2) could speak Bahasa Indonesia fluently, 3) postpartum mothers on the first day after spontaneous childbirth, 4) healthy condition (could mobilize and have light activities), and 5) those who were “rooming in” (take care together) with their babies. The exclusion criteria were 1) postpartum mothers who experienced postpartum depression, 2) mothers with dead babies, 3) having complications, such as preeclampsia or eclampsia, hemorrhage, postpartum infection, and other complications.

Data Collection
This study was conducted at Panembahan Senopati Bantul Hospital, Yogyakarta, from October to November 2018. Data were collected using semi-structured interviews and observations in Alamanda III Ward. Semi-structured interview was performed using three core questions and probing in each of the questions (See Table 1). The interviews were carried out by the researchers in approximately 25 minutes, and observations were conducted approximately 60 minutes, which were carried out by researchers and research assistants more than twice in each participant. There was a recording device (MP3 audio player) which was used to record all conversations or interviews. In addition, field notes, reflective journals and related documents were used for data exploration.

Table 1 Interview questions

1. Do you know about bonding and attachments?

   Probing:
   a. Have you ever heard of bonding and attachment before? From whom? When?
   b. What do you know about bonding and attachments, such as definitions, goals, and benefits of them?
   c. What do you think of the factors of the bonding and attachment?
   d. Do you think that there are things that affect the bonding and attachment that are not appropriate for your current condition?
   e. What about your current condition? are there any obstacles when giving a bonding and attachment to a baby?
   f. What do you think about bonding and attachment? how important is the bond of love between mother and baby?

2. Did you know how to give a bonding attachment?

   Probing:
   a. Acquaintance
      1) How did you feel when you first saw and got to know your baby?
      2) How did you feel when you first touched your baby?
      3) How did you feel when you heard your baby’s voice?
      4) How did you feel when you first communicated with your baby?
      5) How did you feel when you knew that you already had a baby?
   b. Bonding
      1) How do you describe your relationship with your baby?
      2) How far do you know your baby?
   c. Attachment
      1) How did you feel if you were separated from your baby when a baby was being treated specifically because of illness?
      2) What will you do if you are separated from your baby?
      3) What will you do when your baby is awake and fussy at night while you are resting?
      4) What is your husband’s role in caring for a baby, especially at night?

3. How do you provide bonding and attachment to your baby?

   Probing:
   a. Touch
      1) What did you do when carrying your baby?
      2) What did you do after the baby finishes breastfeeding?
Table 1 Interview questions (Cont.)

| 3) How did you feel when holding your baby? |
| 4) How did you act when your baby is crying? |
| 5) How did you change your baby's diaper when defecating? |
| 6) What did you do when your baby sleeps? Did you accompany and look after your baby? |

b. Eye contact

1) How did you feel when you see your baby was breastfeeding?
2) When you saw your baby, did you often equate the baby's resemblance to yours?

c. Sound

1) How did you make your baby sleeps? did you do certain activities such as singing songs?
2) How did you play with your baby to make the baby laugh?
3) How did you ask the baby to communicate?

d. Body scent

1) What did you do with your baby?
2) What kind of feelings did you feel when you smell your baby's body?

e. Entrainment

1) How did your baby's response when you invited to speak?
2) How did your baby react when she/he was not able to reach the mother's nipple while breastfeeding?
3) How was the baby's response when you were giving breastfeeding?

f. Biorhythms

1) During pregnancy, did you want to see the baby immediately?
2) What is your position when breastfeeding? Could you tell me?
3) How was the response when the baby was first embraced by you?

Data Analysis

Colaizzi’s methods were used for data analysis (Speziale et al., 2011), namely: 1) Describing the phenomenon of the study by conducting literature review to get conceptual descriptions and enrich information about bonding and attachment for mothers who experienced spontaneous childbirth, 2) Collecting descriptions of phenomena through the opinions of participants using semi-structured interviews with participants and field notes during the interview process to get a description of the research concept. All interview conversations were transcribed verbatim, 3) Reading all transcripts of the descriptions of the phenomena that have been conveyed by the participants related to the bonding and attachment, 4) Re-reading the transcripts of the interview results and quote meaningful statements used as key words related to the specific objectives of the study, 5) Describing the meanings in significant statements or keywords, and trying to find the meaning of these keywords to form a category, 6) Organizing collections of meanings into theme groups by reading all the existing categories, comparing similarities and differences that existed between the categories, and classifying similar categories into sub themes and themes, and 7) Writing a complete description and compiling the themes.

RESULTS

The themes found in this study were 1) feeling relieved and happy with the birth of the baby, 2) bonding and attachments are important, 3) efforts to improve bonding attachments through the sense of hearing, vision, touching, and tasting in babies, 4) strong social supports in giving bonding attachments to babies, 5) internal and external factors of bonding and attachments. Each theme is explained in the following descriptions:

Theme 1: Feeling Relieved and Happy with the Birth of the Baby

This theme explains about the participants who felt very relieved and happy with the birth of their babies. Some said they were happy to get new friends and the pain they felt immediately disappeared when they saw the baby and the husband who had been waiting for a long time. Other participants also said that they were very happy with their baby's presence especially because the baby was similar to the face of the participant and the baby's gender was as expected. There are 3 subthemes described in the following:

Subtheme 1: Feeling relieved with the birth of a babies

Participants expressed their feelings of calm and relief because the baby has been born safely without any shortcomings or certain problems. The happiness that is felt by the participants with good bonding and attachment is expressed in the following statement:

"...I felt very touched, I almost cried. If babies cried, it meant the baby was safe. So, hearing the baby cried right after birth, it felt amazing... " (P7Q2c)

The happiness is also felt by the participants with the less bonding and attachment, which is expressed in the following statement:

Trustworthiness

Member-checking was used to ensure the trustworthiness in this study. Audit trail was also performed by a supervisor to ensure the validity of the research process.

Ethical Consideration

This study has been approved by the Ethics Committee of Faculty of Medicine, Public Health and Nursing, Gadjah Mada University on 6 August 2018, with approval number: KE / FK / 0819 / EC / 2018. We assure that all participants have obtained an appropriate informed consent.
Theme 2: Bonding and Attachments are Very Important

All participants agreed that bonding and attachments are indeed very important for the good of their own babies to the baby. There are 3 subthemes described in the following:

Subtheme 1: Bonding and attachment can’t be described by words

From the results of interviews conducted with the participants, it was found that bonding and attachment are given in the form of attention and affection. A participant with good bonding and attachment express:

"...Well, it can’t be described by words, it is like a very close relationship between me and the baby..." (P9Q1b)

A participant with less bonding attachment also revealed a similar thing:

“...The love between mother and child is like...more than anything. It’s because it has been difficult to be born...how painful it is. The baby’s weight is 2,600 gr, but the pain is just like the previous child. Basically, both need a struggle..." (P2Q1a)

Subtheme 2: Bonding and attachment are really important

The participants revealed that bonding and attachment were something very important that must be given to the baby and agreed that all parents would definitely say the same thing, which can be seen in the following statement from a participant with good bonding attachment:

"...Relieved (while smiling)... the important thing that the baby is here... happy to see the baby safe. It’s very happy (while showing their happy expression to the baby)..." (P2Q2a)

Subtheme 2: Finally, I could hear my baby’s voice

After long waiting, finally the participants were very happy with the birth of their children as illustrated by the following participant statement with good bonding and attachment:

“...Feeling happy, finally I could hear his voice. Alhamdulillah. During pregnancy I often talked with my babies, like a crazy person who talked with my own stomach (while laughing)... " (P3Q2c)

A participant with less bonding and attachment expressed in the following statement:

"...I really loved it, until I cried. The problem was yesterday that I was waiting to get pregnant too long. And after 16 months I finally got a pregnant, I was really happy..."(P1Q2f)

Subtheme 3: The child was born as expected

The participants were very happy and satisfied with the presence of the babies and their expectations, especially about the babies’ faces and genders. Participant said:

"...Yes, the baby looks like me (with happy reaction), not like his father. So happy..." (P1Q3k)

However, although some participants had baby boys instead of baby girls they expected, they were still very happy. Participant said:

"...I am happy, especially when I get a baby girl. So, it is complete actually, with both boy and girl...Alhamdulillah, even though a baby boy, not a baby girl, I still thank God..."(P8Q2b)

Theme 3: Stimulating the Baby’s Senses

The participants most likely take initiatives to provide stimulation of the baby’s senses of hear, see, touch, and taste in various ways that aim to strengthen bonding and attachment. There are 2 subthemes described in the following:

Subtheme 1: Stimulating the baby’s senses of hear and see

During postpartum period, the participants with good bonding attachment said that they were happy because when they invited the baby to communicate, sometimes the baby might understand what they said. This is explained in the following statement:

"...How happy I am with my baby. He is like a pious child; I will keep him healthy... Finally, we can play together..."(P3Q3m)

"...He is like listening, then following the direction of my voice, like he understands..." (P5Q3o)

The statement is also expressed by participants with less bonding and attachment:

"...Yeah, at least I'm just talking like this (while practicing how to communicate with the baby, making sounds right above the baby’s face)... " (P2Q3m)

Subtheme 2: Stimulating the baby’s senses of touch and taste

In addition to communicate with the baby, the participants explained many things they had done with their baby, starting from caring, giving breast milk, and holding babies, all aiming for the baby to get maximum care from the participants or the closest person. This is explained by the participants with good attachment in the following statement:

"...I usually hug him, and breastfeed him..." (P7Q2j)

"...Yes, I carry him, and pat the baby's back. Or breastfeed him..." (P9Q3d)

A similar statement was also expressed by the participants with less attachment:
Theme 4: The Need of Social Supports in Bonding and Attachment

There was the existence of strong social support from husbands, parents, families, closest people, and health workers who were given to postpartum mothers to achieve good bonding and attachment with the babies. In this theme, the statements from the participants with good bonding and attachment are more dominant than those with less bonding and attachment. There are 3 subthemes described in the following:

Subtheme 1: Husband support
Participants stated that the husband's support is the most important. It may include forbidding hard work, avoiding being exhausted, taking vitamins, and always be with them. The participants with good bonding and attachment said:
"...I got the supports from my husband. He said not to work hard, and not to be exhausted too..." (P3Q1d)

A participant with less bonding and attachment also said:
"...Oh yeah, my husband supports me like I have to take vitamins, not to work a lot. I have to think about the baby first, and not allowed to be too energetic..." (P1Q1f)

Subtheme 2: Family support
The family member also provide support, such as accompanying during childbirth, helping and caring for the baby, cleaning the babies' diaper, and calming the baby. It is explained by the participants with less bonding and attachment:
"...Last night, I was accompanied by my husband, mother-in-law, and my mother. But after giving birth, my mother accompanied me, because I was afraid to be alone (while laughing), and my husband was afraid that he would cry in front of the delivery room..." (P1Q2e)

The same statement was also expressed by the participants with good bonding and attachment:
"...I got the support from my family, usually my father and father-in-law. It is because my mother has passed away, so they supported me in terms of economy and love. So, the bond between the family members is still good, as we are still living in the mountains area...the village (while laughing)..." (P8Q1i)

Subtheme 3: Support from health workers
Participants stated that there was also supports from health workers and other sources that greatly helped them in providing a good care to their babies, such as teaching breastfeeding methods and positions, and helping to clean the babies. The participants with good bonding and attachment said:
"...Your hands should be like this (showing the baby's head on her elbow, and the palm of her hand to the baby's buttock). Then the baby is attached to the chest, and enter the part of it. If possible, you can enter all, so that later the baby won't bite the nipples. When the baby sucks, there should no loud noises. When sitting on, do not hang the feet, because later it can swell. The nurse taught me immediately after giving birth, I still remember (smiling)..." (P9Q3rs)

The same thing was also expressed by the participant with less bonding and attachment. They also received the same support from health workers in the care unit, as quoted in the following statement:
"...The midwife taught me, because initially I only used pillow and my position was wrong, but after being taught I can do it (while demonstrating the correct way of breastfeeding and position)...." (P1Q3u)

Theme 5: Internal and External Factors of Bonding and Attachments

This theme describes the internal and external factors that prevent postpartum mothers from giving bonding and attachment to babies. Internal factors include lack of knowledge and excessive worry, while external factor includes lack of support from the closest persons. There are 4 subthemes described in the following:

Subtheme 1: Feeling anxiety and afraid of caring the baby
During postpartum period, a participant had difficulty to sleep because she had to take care of the baby. The other participants also felt anxiety when their babies were difficult to calm, and they were still afraid to carry the babies because of afraid of falling down. A participant with good bonding and attachment expresses:
"...when the baby was crying, I was panic because it is hard to calm down. Luckily, when the baby was able to breastfeed, she could be calm again..." (P3Q3u)

A similar statement was also said by the participant with less bonding and attachment:
"...It feels different, not like yesterday. Now I have a baby and take care of her, I can't sleep well anymore..." (P6Q2e)

Subtheme 2: Low breast milk supply
Another concern by the participants was breast milk has not been smoothly released, which affected the condition of the babies. It is explained in the following statement:
"...The breast milk is not really smooth, so it is sometimes too bad for the baby. I am afraid he is thirsty then his body will be yellow again. When my first child had a problem in breastfeeding, he was in yellow, So I was traumatized, how pity he was...he had to be in the incubator, shining by the lamp. It's really sad to see..." (P8Q1L)

A participant with less bonding and attachment expressed the same problem, as in the following quote:
"...The baby wants to breastfeed, but my breast milk is not smooth..." (P4Q3b)

Subtheme 3: Lack of knowledge related to baby care in postpartum mothers
The participants with less bonding and attachment still did not understand the correct breastfeeding positions, especially the right position of breastfeeding in a sleeping position. It is explained in the following:
"...My mother said that not to lie down because the baby will be overtaken by the breast, so I must sit and my hands hold the baby's butt (while practicing the way in breastfeeding that she knows)." (P6Q3u)

**Subtheme 4: Lack of support from the closest persons**

The lack of support from husbands and families is the external factor of bonding and attachment in this study, as expressed by the participants in the following statement:

“...Yeah, the husband is just acting normally because this is the third child. But he acted differently with caring so much for the first child (with a smile)...” (P4Q1h)

**DISCUSSION**

A study of Nilsson et al. (2013) found that mothers feel so happy when they are able to give birth to children normally, so that it is an incomparable experience. An indescribable feeling of happiness occurs when the baby comes out and the pain disappears. Postpartum mothers also describe unbelievable feeling that they have given birth. They never thought that they could do it and this brought a feeling of pleasure and relief. This is in line with the results of this study, which postpartum mothers expressed relief after childbirth and the baby was born safely. They also revealed that after seeing the baby all the pain during childbirth was gone and replaced by the feeling of happiness.

Javadifar et al. (2016) revealed that married couples who get children according to their expectations both in terms of face and gender feel very happy and thankful. This is in line with this study that postpartum mothers felt happy with the birth of their children whose faces are similar to theirs and the genders of the children are the same as what they expected. According to Fancourt and Perkins (2018), bonding is an important strategy for human survival. Bonding between mother and baby is not only when the fetus is still in the womb but also when the mother and baby in the postpartum period and throughout the life span with various psychological, biological, and behavioral responses. The results of this study were also in line with that statement, which postpartum mothers always gave great love to their babies, such as feeling more affection than others, always paying attention to babies for all things, and trying to always understand the baby's needs both psychologically and biologically. All of those were even expressed by the postpartum mothers since the babies were still in the womb. It is because the mothers always want the best for the babies.

In addition, rooming-in or joining the mother and baby after giving birth will lead to affection, love, and warmth between the mother and the baby. Rooming-in also encourages a mother to be able to provide breast milk, touch and care for the baby. When mothers and babies are at home, mothers can take care and give breast milk properly and correctly (Girsang, 2016). In line with the results of this study, postpartum mothers with rooming-in acknowledged the emergence of love, affection and courage in caring for the babies like bathing, changing diapers, calming, and giving breast milk to the baby. Although it is still in the learning process, all postpartum mothers always try to do the best for their children.

Filippa et al. (2017) revealed that the mother's voice has the potential to be a source of rich stimulation for the babies. Providing the mother's voice, while still as a fetus, will develop the complex sensory experiences felt by babies after giving birth. Persico et al. (2017) also added that mothers who sing lullabies can increase the bonding. It can also have a positive effect on neonatal behavior and stress on the mother. This is in line with the results of this study that postpartum mothers often invited their babies to communicate at any time, and all of them in this study also said that they had begun to invite the babies to communicate since they were still in the womb. After the babies were born, they were still continue inviting the baby to communicate in various ways.

Sulistyawati and Nugraheny (2010) stated that bonding and attachments are the initial touch or skin contact between the mother and baby in the first minutes until several hours after the birth. This however will determine the child's growth and development to be optimal. Utami (2008) added that a newborn baby has many abilities, like to smell, feel, hear and see. Their skin is also very sensitive to temperature as well as sensitive to be touched during the first hour in regards to study their new world. According to Ardiel and Rankin (2010), sensory stimulation, such as touching, can change many aspects of development in babies. Although it looks simple, however, the benefits for the future of the child cannot be denied, such as making the baby calm. In line with this, all postpartum mothers tried to touch their babies, like stroking, holding, and hugging the baby. These activities are initiatives of the postpartum mothers in response to the sensory stimulation of the babies.

Additionally, the process of bonding and attachments, according to the results of this study, should have the supports not only from the husbands, but also from the closest persons such as parents, family, health workers and neighbors. These supports will make the mothers feel comfortable because they know that the people around them will always help in various ways. Some participants revealed that they always get good supports from their husbands such as accompanying them at the hospital. However, the roles and supports of the husbands were very prominent in all postpartum mothers' statements. A study conducted by Story et al. (2012) revealed that the husband support to their wives can be categorized as emotional support, instrument support, information support, and assessment support. Haryono and Setaningsih (2014) also said that the postpartum mothers need support from family and health workers, but the support that is most expected is from the husband. This is because the husband is the main family and the closest person.

Supports from parents, families or relatives are also very helpful for postpartum mothers. It is because parents are always there to accompany them before, during, and after giving birth. However, family has the opportunity to assist and provide support by giving a sense of security, accepting the situation as it is, not blaming what happened, and being sincere (Girsang, 2016). In addition, Mulyani et al. (2016) said that health workers (midwives, nurses, doctors) are the first persons that help postpartum mothers in health services or hospitals. Their supports are likely related to providing assistance in exclusive breastfeeding, teaching how to breastfeed properly, and helping if there are difficulties in providing breastfeeding and care for the babies. This is in line with the participant's statements, saying that the officers in the unit always help them in providing the best care for their babies. The social support from health workers in the form of midwifery assessments and interventions, has the potential to increase
maternal acceptance of the outcome of the childbirth (Bogossian, 2007). Accordingly, Marmi (2017) stated that the lack of support system, such as lack of support from the closest people i.e. husband and family, will be an obstacle in the provision of bonding and attachments. In line with the results of this study, the postpartum mothers revealed the external factor such as a lack of support provided by their husbands because they were busier with work as well as parents who were less helpful. Thus, it can be the obstacles in giving affection to the babies, as they will feel fatigue doing all things without any assistance, which may lead the development of the babies.

CONCLUSION
Bonding and attachment are very important things that must be given by the mother to the baby, in the form of love and attention. Those who get the good supports from the closest persons had a good bonding and attachment to the babies, and felt satisfied with their new roles as mothers. It is therefore suggested for health workers, especially nurses, to provide information regarding the importance of bonding and attachment in in postpartum mothers. So that the attachment, affection, and acceptance of the postpartum mothers psychologically with their babies will be more optimal.

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None declared.

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AUTHORS CONTRIBUTIONS
All authors made the research concepts, designed the intervention, collected and analyzed data, drafted manuscripts, and revised the contents. All authors provided the final approval of the article.

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REFERENCES