

ORIGINAL**The experiences of husbands present at their wives' emergency cesarean sections**

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Abstract : The aim of this study was to clarify the experiences of husbands present at their wives' emergency cesarean sections. Semi-structured interviews were conducted for nine husbands who attended their wives' emergency cesarean sections. The results were analyzed using a qualitative inductive approach. Several categories such as [wife's labor pain will be unbearable if I look], [situation was beyond one's control], and [sense of relief experienced by midwife care] were extracted from the husbands' experiences the need for an emergency cesarean section was established. Additional categories such as [sense of relief at cesarean section decision], [convincing oneself], and [anxiety for life and hope for safety] were extracted at the time of the emergency cesarean section decision. Other categories [anxiety while waiting for prolonged periods], [ease of mind with family], and [pleasure in meeting the baby] were extracted from the husbands' experiences while waiting for their wives' cesarean section. Finally, the categories of [unloading of responsibilities], [to thank my wife], and [remaining anxious and fearful] were extracted from the husbands' experiences on their wives return to their hospital rooms. Husbands were anxious about the life and safety of their wife and child, and considered their futures in case of an unexpected occurrence. *J. Med. Invest.* 65 : 268-273, August, 2018

Keywords : emergency cesarean section, father, experience, midwife

INTRODUCTION

In the declining birth rate, there have been many investigations of the anxieties and difficulties associated with childbirth and parenting. In general, women who are satisfied with childbirth are also confident with attachment to the infant and nursing (1-3). On the contrary, women who are not satisfied with childbirth are more prone to postpartum depression and high levels of stress (4). Hence, the mother's perception of the childbirth experience affects parenting (5). The goal of the "Healthy parents and children 21," a national plan for the health of mothers and children in the 21st century, is to increase the number of women who are satisfied with pregnancy and childbirth to enhance the quality of life of women during pregnancy and childbirth.

Satisfaction with childbirth differs according to mode of delivery. Most women have negative emotions associated with cesarean section as compared with vaginal delivery (6). Reports from the 1970s found that women experience fear of pain and death with an emergency cesarean section (7). In Japan, the feelings of women with regard to cesarean section have been investigated since the 1980s. These studies found that cesarean section was associated with feelings of disappointment, dilemma, fault, anger, and guilt (8). Moreover, women experience trauma, remorse and fear of death with emergency cesarean section, which can continue for 1-2 months after childbirth (9, 10). Husbands of women who undergo emergency cesarean sections also experience pain and regret at not sharing in the childbirth experience nevertheless they feel relief at the end of the delivery (11).

Husbands and wives also experience nervousness during unex-

pected emergency cesarean section. Therefore, they wouldn't be satisfied with childbirth.

The experiences of husbands who were present at their wives' emergency cesarean sections when they present for bringing satisfy have not been sufficiently clarified.

Because of recent increase in late marriages and late childbirths, the cases of emergency cesarean sections in present of husbands are increasing. Therefore, this study elucidates the experiences of husbands present at emergency cesarean sections for the support of satisfaction to childbirth.

STUDY METHOD*Setting and participants*

The character of the survey place is an emergency hospital staffed with midwives and an established birth system that allows for the husband to witness delivery. Inclusion criteria were that husbands who were present at childbirth from the onset of labor to recovery following the cesarean section were aged > 20 years and the first experience of their wives' cesarean section. And their wives gave birth to first child by cesarean section. Exclusion criteria were noticeably bad health of the father, mother, or infant.

Survey period

The survey period was from April to November 2014.

Survey methods

Semi-structured 30-min interviews were conducted with husbands who were presented at childbirth on emergency cesarean sections of their wives in a private room. Those interviews were taken place from one day to six after the emergency cesarean section. Consent was obtained to record the interviews. If consent for recording was refused, responses to the interview were written down. The interviewer inquired about "the husbands' experiences

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once the need for an emergency cesarean section was established," "at the time of decision for an emergency cesarean section," "the husbands' experiences while waiting for the cesarean section to be completed," and "the husbands' experiences regarding their wives return to their hospital rooms" because of the rise and fall in husband's feeling above four sections. Basic demographic data were also collected.

Date analysis

The interviewer listened to each tape, made of interview transcript, extracted the husband's experiences from each interview, and collected similar responses each four sections. The investigators made subcategories from similar responses. The investigators generated categories by raising the level of abstraction of similar subcategories. All analyses were conducted under the supervision of an expert in midwifery to assure confirmability.

Ethical considerations

The following was explained both verbally and in writing to the study participants : the purpose of the study, that participation in the study was voluntary, that there was no penalty or disadvantage for refusing to participate, that confidentiality would be maintained, that withdrawal from the study was possible after giving consent, and that the data obtained would not be used for any other purpose apart from the study. This study protocol was approved by the Ethics Committee of Tokushima University Hospital (approval no. 1881).

Definition of a word

Experience : moved events, sentiments, and feelings

RESULT

1. Participants

Nine husbands with a mean age of 36.1 ± 7.2 years participated in this study. Two husbands attended all parenting classes which were change of a body and a mind on pregnancy, the breast feeding, childcare and process of childbirth, two attended parenting classes about process of childbirth, and five attended no parenting class. The main reasons for emergency cesarean section were fetal distress ($n = 3$) and abnormalities of rotation causing arrest of labor ($n = 6$).

2. The experiences of husbands present at an emergency cesarean section

Experiences of the husbands were divided into 12 categories and 28 subcategories. Categories are shown in brackets ([]), subcategories are shown in braces ({ }), and the responses of the participants are shown in quotation marks (" ").

(1) The husbands' experiences of the need for an emergency cesarean section were established.

Husbands' experiences included the following : [wife's labor pain will be unbearable if I look], [situation was beyond one's control], and [sense of relief experienced by midwife care].

① [wife's labor pain will be unbearable if I look]

This category was divided into two subcategories : {toughness for wife to bear labor pain} and {impression of childbirth difficulty}.

{toughness for wife to bear labor pain}

"I was overcome with tears when I witnessed my wife's labor pain." (H)

"I have bitter tears when witnessing labor pain." (G)

"I can't endure seeing my wife sweat and never ending labor pain." (G)

"I thought, 'how can we end my wife's labor pain.'" (I)

The husbands were uncomfortable with their wives' labor pain and feared that the labor pain would never end.

{impression of childbirth difficulty}

"I greatly felt my wife's expressions and anxiety." (A)

"My wife's delivery was desperate with bitter pain." (I)

"Whether right or not, I thought that my wife tolerated the labor pain." (I)

"My wife had a hard time dealing with labor pain." (B)

"I thought my wife would turn to mud." (G)

The husbands felt awful about the childbirth because of the desperate looks and anxiety of their wives.

② [situation was beyond one's control]

This category was divided into three subcategories : {I must do something that I can}, {I couldn't change anything} and {I can only pray for you to endure the labor pain}.

{I must do something that I can}

"I must do something, although I am not experiencing labor pain." (B)

The husbands had feelings of "doing what I can do during labor pain." (I)

{I couldn't change anything}

"I couldn't change places with my wife." (E)

"I witnessed her endure labor pain, though I want to change places with my wife." (C)

"Although I wanted to replace my wife during labor pain, I couldn't change anything." (I)

The husbands were unable to ease the pain of their wives, even though they wished to endure the labor pain themselves instead of their wives.

{I can only pray for you to endure the labor pain}

"I stood by my wife while enduring fear for my wife and child." (C)

"I stood by praying to have a healthy baby." (E)

③ [sense of relief experienced by midwife care]

This category was divided into two subcategories : {relief with many cares} and {understanding the wives situation from midwifery care}.

{relief with care from a midwife}

"I was very glad to receive midwife care." (F)

"I was eased by the presence of many midwives." (F)

"I could see a little part because the midwives and midwifery students gently maneuvered her hips." (G)

The husbands were put at ease by offering care for labor pain.

{understanding the wives situation from midwifery care}

The husbands understood "their wives were safe because of the calmness of the midwives even while their wives endured labor pain." (I)

(2) At the time of deciding on emergency cesarean section

The husbands' experiences included the following : [sense of relief at cesarean section decision], [convincing oneself], and [anxiety for life and hope for safety].

① [sense of relief at cesarean section decision]

This category was divided into two subcategories : {sense of relief that my wife was free from labor pain} and {sense of relief that my wife survived}.

{sense of relief that my wife was free from labor pain}

"As I looked at my wife in labor pain, I soon wanted to relieve her pain by deciding on cesarean section." (H)

"I was relieved by the decision for cesarean section to liberate my wife from labor pain, at least a little." (C)

"I was worried that my wife would continue to be in labor during vaginal delivery. So, I was relieved at the time of the decision for emergency cesarean section." (I)

The husbands felt relief at the time of deciding on emergency cesarean section because their wives were no longer experiencing labor pain.

{sense of relief that my wife survived}

"I thought that my wife would give birth to a child without incident and would not die in cesarean section, so I was relieved." (G)

"If my wife would deliver the child by cesarean section, she would be relieved of pain." (I)

At the time of deciding on an emergency cesarean section, the husbands were relieved that their wives gave birth and were no longer in danger.

② [convincing oneself]

This category was divided into three subcategories : {the benefits of cesarean section}, {necessity of cesarean section}, and {trusting the doctor}.

{the benefits of cesarean section}

The husbands affirmed that cesarean section was beneficial for both the mother and newborn (A), was safe for the mother (F), the long labor pain was reduced (G), and was safe for delivery (H).

{necessity of cesarean section}

The husbands thought that cesarean section was necessary for their wives' benefit (A) to prevent harm to the baby (B), cesarean section was necessary (F), and the doctor decided against vaginal delivery (I).

Although the wives felt that their safety was in danger, they nevertheless wished for vaginal delivery, but considered the necessity of cesarean section.

{trusting the doctor}

The husbands thought that the doctors performed well during surgery (G) and trusted the doctors. (D)

③ [anxiety for life and hope for safety]

This category was divided into four subcategories : {doubting the decision for cesarean section}, {fear from the explanation of risk}, {thoughts of future life}, and {care for wife}.

{doubting the decision for cesarean section}

"I thought that if my wife experienced labor pain, cesarean section may be a good decision from beginning. Since the doctor didn't decide to perform a cesarean section at the initial stage, I couldn't prepare with zeal. I felt it was best to wait to the last." (A)

"The doctor had better decide that caesarian section was best in the case of declining physical strength." (B)

The husbands had doubted the decision for cesarean section.

{fear from the explanation of risk}

The husbands received an explanation of the cesarean section procedure, but experienced anxiety about possible unexpected complications after surgery (B), anxiety about infectious disease after blood transfusion because of the loss of blood by cesarean section (D), anxiety about the risk of the thrombosis (F), anxiety about the many risks (H), and feelings of anxiety.

{thoughts of future life}

Once informed of the risk of surgery, the husbands responded as follows :

"I wanted to think first about my wife. No matter what happens, I thought about her life." (A)

"I always thought about the anxiety of mother and child." (B)

"What should I do in the case of death?" (D)

The husbands contemplated future life.

{care for wife}

"I tried to disguise the fact that my wife was afraid to have a cesarean section." (D)

"I held my wife's hand firmly and said cheerful things." (D)

"I said to her 'cheer up' when the stretcher was brought into the room." (A)

The husbands offered relief by holding hands with their wives to ease the fear of cesarean section.

(3) The husbands' experiences while waiting for their wives' cesarean section

The husbands' experiences included [anxiety while waiting for prolonged periods], [ease of mind with family], and [pleasure in meeting the baby].

① [anxiety while waiting for prolonged periods]

This category was divided into three subcategories : {time moving too slowly}, {anxiety about wife's safety}, and {hope for safety}

{time moving too slowly}

"I felt that I had waited much longer than an hour and a half." (D)

"I kept looking at my watch." (D)

"I was impatient waiting for the surgery to end, while looking at my watch." (I)

The husbands felt that they were waiting for prolonged periods of time and were anxious for the surgery to be over.

{anxiety about wife's safety}

"I have concerns about the cesarean section procedure." (H)

"I was very nervous about my wife's safety." (D)

"I was completely obsessed about my wife and could not eat during the surgery." (I)

"I was anxious because I couldn't see my wife's face." (F)

While the husbands waited, they worried about their wives' safety.

{hope for safety}

"I always hoped that my wife would be safe." (A)

"I hoped that my wife and baby would be safe in any event." (F)

"I prayed that the surgery would be successful and hoped that my wife and baby would return to the hospital room both safe and cheerful." (I)

"I hope to have a healthy baby." (D)

While the husbands waited, they hoped their wives were safe.

② [ease of mind with family]

This category was divided into two subcategories : {ease of mind with two persons} and {having hope for my baby}.

{ease of mind with two persons}

"Having her mother here was comforting. And I told her that my wife would be safe." (A)

"I waited with my wife's parents. So, I was relieved." (D)

"I waited with my wife's mother. So, I felt at ease." (B)

Waiting with relatives helped to relieve and comfort the husbands.

{having hope for my baby}

"I wish to have a healthy baby. I'm excited to see my baby." (H)

"I waited to talk about my child." (D)

The husbands talked about their children and anticipated the birth of the baby.

③ [pleasure in meeting the baby]

This category was divided into two subcategories : {sense of relief and pleasure} and {determination to become a father}

{sense of relief and pleasure}

"I was moved to tears while looking at my baby, but couldn't cry in front of my wife, our parents, and the midwives." (G)

"My baby is lovable. My baby is another version of me." (D)

"I wondered whether my baby would be very pretty without thinking about other babies." (C)

"I much wanted a baby. When I looked at my baby, I was close to tears and was happy." (H)

The husbands much wanted a baby and stated that they were happy and in tears.

"I was relieved that my baby was healthy and lively." (F)

"My baby moved her body and cried cheerfully. I was relieved that my baby was fine." (H)

{determination to become a father}

"I want to do my best from now on. I won't bother my child. I have to have work harder. I want to be respected by my baby as his father." (G)

"I take responsibility for parenting my child." (E)

The husbands decided to become fathers and did their best to look forward to having a baby.

(4) The husbands' experiences on their wives return to their hospital rooms

The husbands experiences were divided into three categories : [unloading of responsibilities], [to thank my wife], and [remaining anxious and fearful].

① [unloading of responsibilities]

This category was divided into two subcategories : {sense of relief upon returning to the hospital room} and {cesarean section was a good choice}

{sense of relief upon returning to the hospital room}

"I was so happy that they returned safely." (A)

"I was very relieved when my wife returned to her hospital room." (B)

"When my wife came out from the operating room while smiling, I was relieved." (I)

{cesarean section was a good choice}

"I was afraid when my wife agreed to a cesarean section, but I thought that it was a step in the right direction. So, I thanked all of medical staff very much." (F)

"Though my wife endured labor pain for a long time, I had a lively baby and she returned quite fine to her hospital room. That's all good." (I)

"I seemed at ease that my wife had a pleased expression with a cheerful baby after the cesarean section." (D)

Although the husbands were worried about the cesarean section, their wives and babies were fine. They felt that having a cesarean section was the right choice.

② [To thank my wife]

This category was divided into two subcategories : {gratitude to my wife} and {determination to help one's wife}.

{gratitude to my wife}

The husbands thanked their wives for their effort and undergoing labor pain (H). He is grateful to his wife for having a baby and bearing labor pain (G). The mother is great (G). The wife impressed me at her huge efforts to the last, although she complained of labor pain (I). The husband considered her to be a more important person before (D). He said to her "you made an effort to have a boy (A)." He appreciated his wife.

{determination to help one's wife}

The husband decided to help his wife with parenting. For example, the husband wanted to do his best for his wife (E). The husband waited to rest and relax for a year after delivery. He offers support as often as possible (F).

The husbands help their wives with parenting, even though their wives will have a hard time.

③ [remaining anxious and fearful]

This category was composed of a single subcategory : {remaining anxious and fearful}.

{remaining anxious and fearful}

The husband supposes real delivery is harder than scenes on television. He realizes that he has no experience with delivery, unlike his wife. The experience was hard rather than valuable (C).

The husbands think that delivery is akin to risk. They kept the risk of delivery in mind. The husbands felt that delivery is risky and the mother and child are in danger.

DISCUSSION

1) The husbands' experiences

(1) The experience of the need for an emergency cesarean section was established.

The husbands felt anxious about their wives having to bear labor pain and had the impression that childbirth was difficult : "wife's labor pain is unbearable if I look." They felt that they wanted to do something, but could not take the place their wives while bearing labor pain, and could only offer cheer. They had a feeling of ambivalence and believed the situation was beyond their control.

These feelings were similar to those described by the husbands in the present study. The husbands who witnessed the vaginal delivery felt that labor pain was beyond their expectations and that they could not do anything to help (12). They also felt stress in response to the severe labor pain of their wives (13, 14). These studies would include wives who faced a matter of life and death. The husbands who witnessed a delivery found that the experience was stressful. They could not do anything but look at their wives enduring prolonged labor pain.

Half of the participants attended the delivery after taking parenting classes. Regardless of whether the husbands took a class, they felt helpless that their wives had to endure the pain of delivery. They did not comprehend the role of the husband during the first stage of delivery because they looked at their wives enduring labor pain. It is reported that support from the husband during childbirth enriched the experience of their wives in every aspect of childbirth (15). So, the husbands could find reason to support their wives during childbirth. The midwife should inform the husband about the process of childbirth, how to care the mother and to be sufficient to stand close.

On the other hand, the husbands felt a sense of relief by care from a midwife because they were able to rest and relax with the assistance of the midwives. The husbands who looked at their wives while enduring the severe conditions of delivery wanted to believe that their wives would be alright and at ease. The husbands

found that their wives were in good condition because the midwives offered advice about what to expect during delivery. The husbands viewed the care of midwives as beneficial. The husbands tried to interpret the situation from the care and attitudes of the medical staff.

(2) The husbands' experience at the time of emergency cesarean section.

The husbands were relieved that the decision to undergo cesarean section freed their wives from prolonged deliveries and the procedure was safe for both the mother and the child. After making the decision to undergo cesarean section, the wives were freed from unpleasant labor pain (16). The attitudes of the wives were similar to those of the husbands.

Although the wives tried their best for vaginal delivery, the husbands could not help but think about the safety of the mother and the child during the cesarean section because of offering support as best as they could to the wives. So, the husbands thought of convincing oneself and having confidence in the doctor.

On the other hand, the husbands were not initially receptive to emergency cesarean section. Some husbands doubted the decision to undergo a cesarean section, as they concluded that the decision was made too lately.

Moreover, the husbands' experienced fear when receiving an explanation of the risks of cesarean section. They felt stress about future life in case of the death of their wives. In the present study, approximately 15%–20% of the husbands reported fear of the death of their wives (17). In this study, three (33%) husbands thought ahead about the death of their wives and began to think about life in the future.

Also, the husbands eased the fear of their wives by holding their hands while being advised of the risk of cesarean section. They managed to reduce the anxiety of their wives, as most thought that their wives were more anxious about the operation. As they cared for their wives while being advised of the risks of cesarean section, they still had anxiety for life and hope for safety regarding the mother and child. The midwives should understand anxiety for life of the husband, give a detailed cesarean section and have a opportunity of talking with him about the problem of it.

(3) The husbands' experiences while waiting for their wives' cesarean section.

The husbands had to wait until the surgery was completed and found the wait to be long and complicated by anxiousness. They felt that the waiting time was much longer by constantly looking at a clock and continued to be anxious about their wives' safety until the surgery was finished. So, they were more at ease waiting with two people, as opposed to alone. They waited to think about the arrival of the baby and be at ease with family.

On the other hand, there were some differences between men and women regarding their feelings during the surgery. The wives who underwent cesarean section had a crisis of their child's life, because of spending at pregnancy, managing at labor pain (18), whereas the husbands wished to meet the baby.

When the husbands met the long awaited baby, they were happy and some cried by being relieved that their baby was fine and felt pleasure in meeting the baby. There were few negative experiences, such as unbearable labor pain, realizing that the situation was beyond their control, fear over the many risks associated with the procedure, and convincing themselves that the choice of cesarean section was correct.

When the husbands looked at their babies, they became excited about becoming new fathers. Though each husband began to realize himself as a father from the second trimester (19), they decided to become a new father after meeting the child. The midwives should give the husband a quiet waiting room, reward for husband first

meeting the child.

(4) The husbands' experiences on their wives return to their hospital rooms.

The husbands were very relieved that the baby was born healthy, that their wives returned safely to their hospital rooms, and that the choice to undergo a cesarean section was correct. They expected unloading of responsibilities. After their wives went into the operating room, they waited with fear from the explanation of risks and hoped for safety. The stress subsided when they learned that the mother and newborn were safe.

The husbands thanked their wives for enduring the labor pain and delivering the baby. They decided that they would help their wives with parenting. So, they vowed to thank my wife.

A previous study reported that involvement of the husband in vaginal delivery made them feel that women are great and important (20). Another study reported that participation in delivery deepens the attachment between husband and wife (21), and increases his respect for her (22). The husband being present at an emergency cesarean section conveyed the same feelings.

On the other hand, the husbands feel delivery is an awful event and they remained anxious and fearful. The husbands supposed that cesarean section causes their wives pain and that the mother and the child would be in danger after cesarean section. At the time of emergency cesarean section, the medical staff explains the necessity of cesarean section and the family member has a relatively short time to understand the benefits and possible risks. Studies conducted in other countries found that husbands want as much information as possible about cesarean section from the doctors and medical staff (23). Also, the husband felt alone by being ignored by the medical staff during the cesarean section (24). It is important that the midwife comforts, helps, and informs the husband about the delivery process to make the delivery a good experience (25). Hence, midwives should offer psychological support and supply information to maintain motivation of parenting to mother and husband.

2) Suggestion for nursing

After the wife went into the operating room, the husband waited for her and was fearful of the many risks of surgery and hoped for the safety of his wife and child. He felt stress about his future life in case of the death of his wife and baby. But the midwives did not care about that their husband's anxiety. Although the primary concern of the midwives is the pregnant women and baby, they should understand such feelings. Midwives should address these concerns and prepare the family and respond to inquiries from the husbands.

CONCLUSIONS

Until the need for an emergency cesarean section is established, the husbands think that the "wife's labor pain will be unbearable if I look" and that the "situation is beyond one's control," but they had a "sense of relief by observing care from the midwives."

At the time of deciding on an emergency cesarean section, the husband is all concerned with his wife's labor pain and safety during the emergency cesarean section. In addition, the husband experiences a "sense of relief felt after deciding on a cesarean section," "convincing oneself," and "anxiety about survival and hope for safety." They care more for their wives than about their own anxiety.

While waiting for the cesarean section to be completed, the husbands experienced "anxiety because of prolonged waiting" and then experienced "ease of mind with family" and "pleasure in meeting the baby."

When their wives returned to their hospital room, they experienced an “unloading of responsibilities” and planned “to thank my wife,” but “remained anxious and fearful.”

STUDY LIMITATIONS

Because the target facility was an emergency hospital, several pregnant women took the situation very seriously and their husbands reflected on their experience with cesarean section.

In future studies, the husbands' experience during emergency cesarean section and the impact of the mother's background should be clarified.

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