[Original Paper]

Importance of delivery observation in education for maternal nursing

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Abstract

Forty-seven nursing students of Tokai University Junior College of Nursing and Medical Technology, took a practice course of observing the delivery process for 2 days, 16 hours in total, after taking lectures of maternal nursing of 4 units, 30 hours per unit. They submitted a report after each observation, and the reports were classified into 12 categories by three evaluators. The major categories were: (1) motherhood and femininity, (2) mystery of the human body and dignity of life, (3) Mutual interactions, and (4) understanding the pains accompanying delivery. The students not only reconfirmed what they had learnt from the lectures but also obtained new knowledge and even new moral and philosophical views concerning the value of human life. As a result of analysis of reports submitted by students it is important to include four major categories in the education of maternal nursing. Further the practice of attending the delivery scene is concluded to be crucially important for nursing students.

Key words: delivery, maternal nursing, nursing student, clinical practice

I. Introduction

Experiences with pregnancy and childbirth are not as common in modern times, particularly in developed countries with low rate of childbirth. Thus, nursing students often have not had opportunities to observe rare pregnancy care, childbed (post-natal) care and delivery. Accordingly, they often have difficulty to appreciate the wonders of nature and the dignity of human life and have seldom experienced being deeply moved by childbirth. Opportunities are needed for the students who will specialize in maternal nursing to lay basis for their future work (Morse, 1995).

In the present study, delivery practice reports submitted by students who had observed delivery were classified into several categories in order to clarify the process of attitude formation toward their profession.

Course requirements and contents of courses at the nursing college

The initial question is "what maternal nursing is?" in order to establish the definition of nursing specialty. Fundamentally, the aims of maternal nursing are: (1) to promote sound female growth and development, (2) to help women maintain their ability to conceive and give birth and (3) to help women realize their motherhood and fully appreciate the importance of life.

In practice, the course was set up as follows:

Purpose

Students learn basic knowledge and techniques in order to understand the maternal characteristics and promote healthy growth and development throughout a woman's life. Students also learn how to maintain and promote healthy conditions of the patient and her family and to prevent diseases, and their learning deepens their consciousness of maternal nursing and dignity of life. At the completion of the course of study, the students should be able to serve as practical helpers of motherhood.

Targets

- 1) Understanding of how to promote motherhood and of social trend regarding motherhood, and learning the role of maternal nursing in contemporary society.
- 2) Understanding of the physical, psychological and social characteristics of women throughout their lives, acquiring the basic ability to offer assistance for healthy development of motherhood.
- 3) Acquiring the basic ability to offer assistance to a woman and her family in order for them to be able to adapt themselves to changes in their lives.
- 4) Understanding the conditions of pregnant and childbed women and acquiring the basic knowledge and techniques necessary to maintain their health and prevent conditions that can prevent recovery.
- 5) Understanding the characteristics of newborn babies and acquiring the techniques to promote their normal growth and development.
- 6) Acquiring the basic ability to play the role as a member of a medical care team for mothers and infants.
- 7) Respecting motherhood and helping women's lives according to their beliefs.
- 8) Deepening one's own thinking about the dignity of life and motherhood by observing delivery.

Based on the above purposes and targets, the course were consisted of four subjects; "Basis of maternal nursing," "Childbed nursing," "Nursing of pregnancy and delivery" and "Exercise in motherhood nursing". Each subject had 1 unit for 30 hours in the second year. This was related to the roles of the male and the female in fertilization in terms of the function of each sex. It was also emphasized that maternal nursing is related to the social environment and individual thoughts of the students.

In addition to the classroom lectures, the students took a course of practice in maternal nursing, for 135 hours. The practice included observation of the delivery scene for two days (16 hours). Students discussed the following in groups: (1) difference in maternal activity between human beings and animals; (2) characteristics and concept of maternal nursing, (3) maternal nursing activity, the role of nurses. After such lectures and activities, the students were requested to express orally their ideas in 10–15 minutes. The author has been involved in preparing lectures and exercises for the students for the last few years and had the impression that the students had difficulty realizing the purpose and aims of the education. However, the students did express recognizing the dignity of life and being motivated to study further. The purpose of the present study was to analyze the students' records of the observation of delivery in order to gain a deeper insight into the significance of this education on maternal nursing.

II. Subjects

Forty-seven students in the third year of the Tokai University Junior College of Nursing and Medical Technology submitted their reports after experience of the practice, namely observation of delivery and the reports were subjected to analysis. The clinical practice consisted of 16 hours for two days out of the 135 hours for the maternal nursing practice. The purpose of this practice was (1) to understand the process of delivery and accompanying changes in the mentality of the mother, and (2) to recognize the necessity of nursing and fundamental to help alleviate the pain during delivery.

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Table 1 Twelve categories of comments of reports

Category	Number of reports	%
1. Motherhood and femininity	52	89.7
2. Mystery of human body and dignity of life	50	86.2
3. Mutual interactions	32	55.2
4. Understanding the pains accompanying delivery	28	48.3
5. Characteristics of maternal nursing	19	32.8
6. Deepening of classroom learning	19	32.8
7. Mother-child relationships	19	32.8
8. Psychology of women in labor and delivery	17	29.3
9. Understanding of the delivery process	12	20.7
10. Other nursing concerns	12	20.7
11. Negative experiences	9	15.5
12. Family relationships	9	15.5

N = 58

III. Method of analysis

In practice two students, accompanied by a teacher, were in charge of one woman during labor and delivery and took care of her from the first stage to the final stage of the delivery. This practice allowed the students to grasp the natural conditions of women during labor and delivery. On the day following the observation, the students submitted their reports describing what they had learned from their experience. Data were collected from the written reports submitted by the students on what they had learned and on specialty techniques related with nursing.

Data were collected from reports that described actual labor and delivery process, as this was the purpose of the practice and those which contained subjective interpretation and comments on the assistance required by the women in labor and delivery. Reports which simply described the conditions and the process were not included.

To analyze the reports of the students, important view points were: (1) to clarify what the students learnt, (2) to classify what they learnt toward the formation of their specialty, and (3) to select items often mentioned to understanding how students develop a professional attitude to maternal nursing. The collected data were classified into following twelve categories by three expert evaluator (Table 1). And the items classified were agreed upon 76 to 97%, indicating the method was reasonable.

About the four major categories in the number of the reports: "Motherhood and femininity," "Mystery of human body and dignity of life," "Mutual interactions," and "Understanding the pains accompanying delivery" the reports were further divided into several groups and each group was divided into three viewpoints according to the content of the report. These three viewpoints are as follows: (a) Reconfirmation of knowledge, (b) Subjective significance and interpretation, (c) Necessity of assistance in Table 2 to 5.

IV. Results of the survey

For the 47 students who collaborated with the present study, 58 deliveries were observed in all including eleven cases of caesarean section and 47 cases of vaginal delivery. Each student submitted a report for each case. The total items extracted from the reports was 278, averaging 4.8 per delivery. Table 1 shows the results of the comments from the report.

Among them admiration of "Motherhood and femininity" was expressed by 89.7% of the students and the "Mystery of body and the dignity of life" by 86.2%. More than half of students (55.2%) described the need for personal interactions with women in labor, namely motivation, encouragement, sympathy, and offering information necessary for nursing. Labor pains were mentioned by 48.3% of the students.

The reports thus classified were further divided into three groups according to the content of the report:(1) Reconfirmation of knowledge, (2) Subjective significance and interpretation, and (3) Necessity of assistance.

Table 2 Motherhood and femininity (from category 1)

Content	Reconfirmation of knowledge	Subjective significance and interpretation	Necessity of assistance
Strength of mothers	4	27	2
Self affirmation as a woman	4	15	0

N = 52

Table 3 Mystery of human body and dignity of life (from category 2)

Content	Reconfirmation of knowledge	Subjective significance and interpretation	Necessity of assistance
Significance of self existence	0	15	0
Vital power of infants	2	4	0
Mystery of human bodies	6	2	0
Dignity of life	3	18	0

N = 50

Table 4 Mutual interactions (from category 3)

Content	Reconfirmation of knowledge	Subjective significance and interpretation	Necessity of assistance
Sympathy	0	3	5
Offering information	2	1	2
Relief of anxiety	0	5	4
Motivation and encouragement	2	2	6

N=32

Table 5 Understanding the pains accompanying delivery (from category 4)

Content	Reconfirmation of knowledge	Subjective significance and interpretation	Necessity of assistance
Method of respiration	2	1	1
Necessity of care	2	2	6
Reason for labor pain	2	0	1
Individual differences of labor pain	4	4	3

N=28

Presented here are some examples of student reports and the classification given in Table 2 to 5.

In "Motherhood and femininity" the number of reports on "Subjective significance and interpretation" was 42(80.8%) but that of "Assistance suitable for need" was only 2(3.8%) (Table 2). Such a tendency was also seen in "Mystery of human body and dignity of life" and especially no reports concerning with "Necessity of assistance" were recognized (Table 3). About "Mutual interactions" and Understanding the pains accompanying delivery" characteristic number of contents was not seen (Table 4 & 5).

Presented here are some examples of reports submitted by students to which categories and groups were given.

Report 1

"I repeatedly encouraged the woman in labor and grasped her hands when she took rest. She had tears in her eyes, then went into labor again. During the time I was thinking only the mother." This report is classified into the category No. 1: Motherhood and femininity—Necessity of assistance.

Report 2

"I am strongly impressed by the delivery. When a baby was born, the mother is looked so happy that she could tolerate the pain of delivery. The delivery of the baby also brought warm feelings not only to mother but also to other people including doctors, nurses and observing students. I admire the power of a newborn baby." This is classified into the category No. 2: Mystery of the human body and the dignity of life — Subjective significance and

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interpretation.

Report 3

"We previously learnt that the body weight of a newborn baby by Caesarean operation would probably smaller than that by normal delivery. It was true as far as we saw today. The baby delivered by the operation we observed today was an immature one with a body weight of 1,850 grams. The baby was brought to NICU. I was a little worried about the baby because it did not cry. However, I was relieved to know that its Apgar score recovered from point 6 to 9. I do hope that the baby will grow up healthy as its mother wishes". This report was classified in the category No. 2: Mystery of the human body and the dignity of life — Subjective significance and interpretation.

Report 4

"I did not know how painful it was at the first step of the delivery. I thought that the most painful stage was the second step of the delivery because it was my understanding that the women in labor did not feel much pain when the ostium uteri was dilated but when trying to deliver the baby from her vagina. Therefore, by observing the real delivery process I realized that I should revise my knowledge." This is classified in the category No. 4: Understanding the pain accompanying delivery — Reconfirmation of knowledge.

Report 5

"I understood by observing the delivery scene today that all the persons, doctors, nurses and midwives work together to soothe women, and help the delivery. I was particularly impressed by the attitude of the midwife who loudly said to the woman "Let's try together!" I am now certain that a baby's birth is not possible without the close cooperation of the medical team." This is classified into the category No. 5: Characteristics of maternal nursing — Necessity of assistance.

Report 6

"It was my strong impression that the newborn baby should be happy when it is born with blessing from its parents and family. I observed that its father was waiting outside of the delivery room with anxiety and at the same time with expectation. I also observed that the mother and the family of the woman in labor were all waiting for the baby with great expectation. I am, on the other hand, afraid that there could be some babies who will be born without such blessing." This is classified into the category No. 8: Family relationships — Subjective significance and interpretation.

Report 7

"A pregnant woman was brought to the delivery room and we followed her. She must have been at the second stage of delivery because as soon as we saw the head of the baby, the face, the shoulders and then the legs appeared. I thought that the whole process would be much slower but in fact the delivery process was much faster to my surprise. I suppose that the speed of the delivery process depended upon the individuals. The process of the present case was fast probably because the delivery was by a multipara."

This report was classified into the category No. 9: Understanding of the delivery process — Reconfirmation of knowledge.

Report 8

"Contrary to my anticipation, the delivery process I observed today was terrible. The woman in labor severely suffered from strong pains which causing her to lose herself, and finally became confused. I was terribly afraid that I might have the same pains when I have babies in the future. I think that I would want to avoid having babies." This

is classified into the category No. 11: Negative experience — Subjective significance and interpretation.

The above reports are only a few examples of the students' reports but they indicate rather frankly how they felt when they observed the delivery process. As mentioned in the "Methods," although the classification of the reports by the students into the categories was done by three specialists, the range of accordance rate was 76 to 97%. There remains a room for disagreement due to the lack of quantitative standards for the judgment. However, the rate of agreement among the three was rather high as indicated above. Therefore, the results are presented as the number of the reports classified into the categories as judged by all three or two of the three experts.

By the same method the reports submitted by the students were classified into groups depending upon what they mentioned in terms of several aspects and the data are presented in the following tables.

Studies on the delivery suggested the involvement of the value and dignity of human beings, nursing by families, and basic concept of nursing and nursing practice. The results of the present study confirmed this. Admiration of "Motherhood and femininity" was expressed by 89.7% of the students, and the "Mystery of body and the dignity of life" by 86.2%, implying that they not only gained understanding of respect for delivering women who created a new life but also were able to connect their study with the dignity of life (Table 1). Some of them described their impressions from multiple angles by the nursing practice of delivery as the following: ties between mothers and babies, value of lives after overcoming hardship, mystery of women's bodies in conceiving new life, vitality of babies, etc. However, there was no description on the help in response to patient needs (Table 2 & 3).

Of the students, 55.2% described the need for personal interactions with women in labor, namely motivation, encouragement, sympathy, and offering information necessary for nursing (Table 4). They also described the importance of teamwork among the medical staff for successful delivery. Observation of the delivery process has been considered to have a strong emotional effect on students and this was true for the students in the present study. These description emphasized the importance of human relationships between woman in labor and the nurses. The students recognized the need to relieve the anxiety of the woman and to encourage her.

The students who were young girls also described their interest in and sympathy with the women in labor, as the same sex, who were able to conceive and changed their expressions when they saw newborn babies. Thus, the students expressed an enormous amount of common feelings and interest with the women in delivery. They have had invaluable experiences through the nursing care practice of labor and delivery experience (Table 4).

Pains accompanying delivery were mentioned by 48.3% of the students. They recognized that the severity of labor pains varied depending on individual and they pointed out the need to offer care to alleviate the pain (Table 5).

Less than 30% described the thinking of the mother in the case of normal delivery but more was mentioned for abnormal delivery, Caesarean operation. However, the students were strongly impressed their patients and seemed to learn feeling of their patients through subtle movements.

The number of reports classified in other categories was too small to offer general trends, but the results are briefly described here. In general, Caesarean operation was carried out under urgent conditions to save both the mother and the baby, and were seldom observed in practice. Some students described the significance of normal deliveries and their sympathy with the mothers when they observed operations or cases in which the newborn babies did not cry.

About 33% of the students described the characteristics of maternal nursing, the relationship between mothers and babies, and how their learning had deepened through their observation. As for maternal nursing, they interpreted the meaning of the help extended to the women in labor through their relationship with the midwives. The students thus reconfirmed what they had learnt from the classroom lectures on the definition of women in labor, the work of nurses, and the importance of health management.

The students interpreted the close relationship between mothers and babies as the joy after painful labor. Very few students noticed the need to extend help in response to the requirements of their charges.

Only 20.7% students described their understanding of the process of delivery and other nursing care, although this was one of the targets of the nursing. They had already acquired basic knowledge, such as prevention of infection in 30 hours of classes in addition to maternal nursing class. In the case of observation, they could not actively use their knowledge but were able to reconfirm it.

Finally, 15.5% of the students gave negative description of their experiences and family relations. For example, some were shocked by the pain due to perineal incision or the formal treatment given to the mothers after the delivery, they thought more consideration and communication were needed in some cases. A number of students described their own personal feelings toward the family relationships, particularly the important role of family members, especially the husbands. They seemed to be concerned with the relationship between wives and husbands which had a strong influence on whether or not the delivery was successful. These matters could not be experienced in the class room.

Taken together from the results, the following four categories ranked highly in the reports submitted by the students, namely: "Motherhood and femininity", 89.7%; "Mystery of human body and dignity of life", 86.2%; "Mutual interactions", 55.2%; "Understanding of the pains accompanying delivery", 48.3%.

IV. Discussion

Clearly is concrete evidence that the practice of observing delivery was truly effective for the students to build up self-recognition of their specialty as nurses, especially for child birth.

1. Motherhood and femininity

In the last half of the 1960s, there were several cases of newborn babies being killed by their mothers and thrown into coin-lockers or garbage furnaces. People were deeply shocked by the change in the general concept of motherhood. While it has been widely thought that mothers raise their children with deep affection, such unfortunate cases suggest that this might not be true any longer.

According to WHO, motherhood is defined as follows: one who fosters children not only at present but also in the future or who have played such a role in the past. Therefore, it means women who give birth to children and raise them grow (Chiga, 1981). WHO also defines women as those who affirm their feminine selves. There have been a number of reports with the view that motherhood is formed through the process of childbirth and nurturing children. Hirai (1986) reports that affectionate instincts and feelings are not formed through contacts with children but by warm experiences and kindness through their life history from childhood relationships with their family.

A study by Imaseki (1994) showed that for the abstract concept of mothers, i. e. tenderness, warmth and kindness were represented by the practical behavior of mothers such as embracing or suckling babies. From the point of view of formation of maternal affection, experiences of women since childhood such as taking care of children, how they communicated with their friends, and their feelings about their mothers are the basis of their ability to foster the growth of their children.

The present situation of a small number of babies being born and in some cases, abandoned may result from a lack of maternal feelings in young women. Therefore, the students of the college who attended the practice of observing pregnancy and the delivery process recognized themselves as also being female and consequently deepened the recognition of their femininity.

2. Respect and appreciation of life and its mysteries

The 20th century has been said to be "the century of wars and revolutions," namely, an age in which the dignity of human lives was badly defiled. Japan has had its share of brutal affaires and these problems may be related to problems we are facing today.

Also, in the world of medical science and technology, human beings are intervening in the matters of birth and death of human lives. This is causing many problems from an ethical point of view, such as in relation to organ transplants, euthanasia, and gene therapy.

With respect to reproduction and childbirth, there are issues such as "test-tube babies," artificial fertilization and clone animals. Kawada (1982) discussed issues about "clone humans": (1) cloning of persons in the past; (2) studying the relationship between heredity and environment; (3) having a good chance of internal organ transplantation from one's own clone; (4) achieving eternal life by cloning, i. e. growth and development of individual persons by culture from one somatic cell; and (5) the possibility of telepathy communication among clone human beings.

This new biotechnology can even could control human lives and needs to be deeply scrutinized from the ethical point of view. Students must consider the value and dignity of human lives created by natural or artificial fertilization. Their philosophical views on life and their mission as nurses who aid childbirth should be strongly influenced by what they experience. The student reports show that the practice of observing the delivery process can effectively contribute to the formation of their views on the mystery of human bodies and the dignity of life.

3. Mutual interactions — human relationships

Nursing has a solid basis on both direct and indirect human relationships. Travelbee (1981) has defined nursing as follows: nursing is a process in human relationships and is achieved by establishing relationships between individuals. The purpose of nursing is to help people and society by preventing disease or extending help when necessary. To be kind and affectionate to others is the basis of human relationships and it is particularly important for obstetrics nurses. Students, when they observe the delivery process, seem to gain an understanding of the importance of human relationships.

MacKay (1991) reported that 98% of nurses in USA did not notice subtle signs of emotional changes of patients. In Japan, Takii (1991) reported that 12 out of 20 students who attended psychiatry practice did not pay attention to the emotions and feelings of patients. Also, it is reported that the number of students who are not able to establish sound human relationships is increasing year by year (Shichida, 1992). Therefore, education methods should include both lectures and practice to enable students to learn about establishing human relationships. The reports by the students, after observing the delivery process, show that this offered a good opportunity for the students to understand the importance of human relationships.

4. Understanding of delivery pain

With a declining birth rate in Japan, life styles have been changing greatly. The number of large families is decreasing, while the number of so-called "nucleus families" is increasing.

Women usually give birth at hospitals rather than at home with the help of midwives, which used to be common. As modern civilization develops and the standard of living rises, so-called diseases of civilization increase, such as obesity,, diabetes, and high blood-pressure, all of which have adverse effects on pregnancy and delivery. A woman's weight increases about 10kg during pregnancy. Also different today is the psychological environment in that the pregnant woman is likely to be living in a nuclear family rather than with an extended family with many to give her support. Today, the pregnant woman is likely to have less exercise, but be over-nourished and thus over weight, which can have adverse effects on pregnancy and delivery.

Kabeyama (1993) reported a positive correlation between the age, height, weight, time needed for delivery, weight of the infant and labor pains. Particularly if the woman is short in height and the weight of the baby is large, the labor pains tend to be strong. Since the pelvis size is proportional to the body height, when the baby passes through the narrowest path in the uterus at the first stage of delivery, the labor pains could be great. This is also true for the second stage when the baby passes through the pelvis. It is therefore necessary to understand the factors

psychologically and physiologically involved in the delivery process in order to help women safely complete the delivery process.

Amemori (1993) pointed out that in obstetrics, a normal delivery is considered to be common, with both the mothers and babies being healthy. Under the present situation where the death rate of newborn babies is extremely low, obstetricians and hospitals could even be sued if something wrong happens during delivery. Therefore, more than in the past, doctors and nurses should realize much greater responsibility of their missions. Students, by observing delivering women who are usually older than they are, giving birth and suffering from labor pains, should learn the significance of labor pains, and their role in the delivery and responsibility as nurse.

Analyses of the reports submitted by the nursing students whose practice included observation of delivery, showed that this experience had a tremendous effect, not only to reconfirm what they learnt in the classroom but also acquire new views and experience philosophical and ethical thoughts to develop respect and an appreciation for the mystery of human body and the dignity of life, which are extremely important for the mission of nurses. Thus, in conclusion the practice of observing the delivery process is fundamentally necessary in the education of nursing students.

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〔原 著〕

母性看護学における学生の分娩見学の重要性について

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【要 旨】 T 短期大学では、母性看護学の講義を1単位につき30時間、4単位受講したあと、母性看護実習の分娩見学については2日間、16時間実施した。

分娩を見学した 47名の学生に 1 例ごと見学したレポートを提出させた。それらのレポートを 3 人の評価者が内容に応じて 12 のカテゴリーに分類した。最も多かったのは「母性性・女性性」で 89.7% の学生が,次いで「身体の神秘と生命の尊厳」について 86.2% の学生が言及していた。 その他,人間関係つまり「相互作用」55.2%,「産痛の理解」48.3% の順であった。

学生たちは講義や演習で学んだことを確認するだけでなく、新しい知識やモラル、哲学的な視点も含めて学習していた。学生たちが提出したレポートの分析の結果、母性看護学における教育の視点としては、少なくとも上記の4つのカテゴリーを含んだ講義や実習が重要であるといえる。さらに、分娩に立ち会う実習が看護学生にとって非常に意義のあることが確認できた。

キーワード:分娩,母性看護学,看護学生,臨床実習