

**Original Articles: Case Study**

**IMPLEMENTATION OF HEALTH EDUCATION USING AUDIO-VISUAL MEDIA  
ON PERINEAL WOUND CARE IN POSTPARTUM MOTHERS WITH  
KNOWLEDGE DEFICIT PROBLEMS IN THE ROSE ROOM RSI JEMURSARI  
SURABAYA**

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**Abstract**

**Introduction:** The problem that often occurs in postpartum mothers is the lack of knowledge of mothers in caring for perineal wounds.

**Objective:** The purpose of this study was to analyze nursing care for postpartum mothers by providing education through audio-visual media about perineal wound care to overcome knowledge deficits.

**Methods:** The research design uses a case study; the subject of this research is Mrs. R with knowledge deficit nursing problems. The case study was carried out on December 26-27, 2022, with a data collection method covering assessment to evaluation by means of anamnesis, physical examination, and observation. The research location was carried out in the Rose Room of RSI Jemursari Surabaya.

**Results:** The results obtained after providing education through audiovisual media about perineal wound care at Mrs. R for 2 days were that the client's knowledge was getting better, verbalization of interest in learning increased, the ability to explain knowledge about a topic increased and questions about the problems faced increased.

**Conclusions:** Case studies show that education through audiovisual media can overcome knowledge deficits in postpartum mothers about perineal wound care. It is expected that health workers will apply the provision of education through audiovisual media to postpartum mothers who experience a deficit of knowledge.

**INTRODUCTION**

The problem that often occurs in postpartum mothers is the lack of knowledge of mothers in performing perineal wound care. Improper perineal care can result in the condition of the perineum affected by lochia being moist and very supportive of the proliferation of bacteria that can cause infection in the perineum. Infection not only inhibits the wound healing process but can also cause damage to the supporting cell tissue, so that it will increase the size of the wound itself, both the length and depth of the wound. The birth canal opening is a good medium for the development of germs so that

it causes infection. Factors causing infection puerperium can come from birth canal openings which are a good place for germs to grow. This can be caused by the mother's low immune system after childbirth, poor perineal care, and poor hygiene (Nurrahmaton, 2019).

According to WHO, worldwide in 2020, there were 2.7 million cases of perineal wounds in laboring women and 26% of them experienced slow wound healing due to infection. In Indonesia, the prevalence of mothers who experienced vaginal delivery and experienced perineal wounds, which initially ranged from 60%, rose to 67.2% (WHO, 2020). In 2020 57% of mothers received perineal sutures with details 29% due to spontaneous tearing and 28% due to episiotomy from a total of 1951 spontaneous vaginal births (Indonesian Ministry of Health, 2021).

The percentage of childbirths that occurred in East Java Province in 2019 among doctors, midwives, and other health workers was 95.88%. The percentage of vaginal deliveries in East Java was 76.9% (Riskedes, 2019). The number of deliveries that occurred in the city of Surabaya in 2020 was 6,302 vaginal deliveries (Surabaya Health Office, 2021). Based on preliminary studies in the rose room, RSI Jemursari Surabaya, the results of 55 postpartum clients who did not know about perineal wound care with the problem of knowledge deficit during the last months from October to December 2022.

Maternal knowledge that is not correct in the care of postpartum perineal wounds results in the healing of perineal wounds taking longer or even the risk of infection due to germs from outside entering the genitalia. The risk of local infection can be characterized by clinical signs such as redness, heat, pain, and the presence of white blood cells in the bloodstream or what we call festering in infected perineal wounds. Perineal wounds that do not heal can cause other impacts to penetrate the birth canal and urinary tract, besides that, it can cause an increase in the size of the wound both in depth and size. The length of the perineal wound (Siti et al, 2013).

Efforts can be made to increase knowledge of perineal wound care in postpartum mothers by providing education through audiovisuals. The audiovisual method can be a supporting medium for counseling because the information provided is concise clear interesting and easy for mothers to understand and can also increase one's knowledge.

Based on the above background, the authors are interested in providing education about perineal wound care to overcome the knowledge deficit in postpartum mothers in the rose room of RSI Jemursari Surabaya.

The purpose of this study was to provide an overview of nursing care for postpartum mothers by delivering education through audio-visual media about perineal wound care to overcome knowledge deficits in the rose room of RSI Jemursari Surabaya.

## METHODS

### *Study Design*

This study uses a case method with a case method approach. This case study is to explore the application of education through audio-visuals about perineal wound care in postpartum mothers with knowledge deficit problems in the Rose Room of RSI Jemursari Surabaya.

### *Settings*

The location of this research was carried out at the RSI Jemursari Surabaya. The length of research on the client is 2 days, starting on December 25-26, 2023.

### *Research subject*

The research was conducted on postpartum mothers who experienced knowledge deficit problems about perineal wound care, namely Mrs. R.

### *Instruments*

Using nursing care sheets using observation and interviews as well as patient medical records.

### *Data collection*

Data collection using analyses, examination, and observation.

### *Data Analysis*

After the data was collected, the research team conducted an analysis and synthesis of the research data. From the results of the analysis and synthesis, the researchers presented the data in the form of a description.

### *Ethical Consideration*

This research has received approval from RSI Jemursari Surabaya and the University of Nahdlatul Ulama Surabaya.

## RESULTS

Data obtained through examinations, interviews, and observations were conducted on December 26, 2022, when conducting an assessment on Mrs. R aged 25 years 9 months 23 days, female gender, Muslim religion, last education junior high school, current work is self-employed and lives with parents and husband. The main complaint expressed by the client is that the client does not know how to care for the suture wound in the vagina after childbirth. The client said she had no history of infectious or hereditary diseases such as hypertension, tuberculosis, asthma, diabetes mellitus, heart, kidney, or HIV/AIDS. The client also said she had no family history of hereditary diseases. The client said she had no history of food or drug allergies. The client said that the first menarche was at the age of 12 years, the cycle was regular, the duration of menstruation was 7 days, the nature of the blood was thin, the smell was typical of menstruation, experienced dysmenorrhea only on days 1-2 of menstruation and changed pads 3 times a day.

During pregnancy, the client did ANC six times, namely in the first trimester 1 time, the second trimester 2 times, and the third trimester 3 times. She went to the health center for the first time when

she was 4 weeks pregnant.

Obtained data during pregnancy the client complained of nausea and vomiting in the trimester I. Feels frequent urination, hands and feet often tingling in the second trimester, the body feels uncomfortable, and the back often feels sore in the third trimester. The client's obstetric history is G0P1A0. The client gave birth 11 days back from the HPL. HPL dated December 14, 2022, HPHT March 28, 2022. The amount of blood that came out was  $\pm 150$  ml. The client stated that she felt heartburn, tightening on December 24 at 21.00 WIB. From medical record data TFU 29 cm, head presentation, fetal heart rate 140 times per minute, HIS occurred 2 times in 10 minutes with a duration of 20 seconds for each contraction. On December 25, 2022, at 08.00 WIB, HIS occurred 3 times in 10 minutes with a duration of 20 seconds for each contraction, DJJ 140 times per minute. At 08.30 am, HIS occurred 3 times in 10 minutes with a duration of 35 seconds for each contraction, DJJ 148 times per minute. Delivery on December 25, 2022, at 09.15 pm with spontaneous vaginal delivery. According to the observation, the baby was male and alive. Baby anthropometry results from medical records show BW: 3000 grams, PB b:44 cm, LK: 31 cm. LD: 34 cm. LILA: 11 cm.

Physical examination was found to be conscious G4C5S6, and general condition was good. When measuring vital signs, the blood pressure was 129/88 mmHg, pulse 97x/min palpable strong and regular rhythm, RR 20x/min, and body temperature 36°C. The client stated that she had gained 12 kg during pregnancy, from 62 to 74 kg. client says height her body is 160cm. Symmetrical head shape, predominantly black hair color, and clean. There is no dandruff. There is no edema on the face. Eyes are clean, conjunctiva pink and sclera not icteric, no dark circles around eyes. Nipples are prominent and blackish; milk has been released but is still small. Abdominal examination revealed dark brown striae gravidarum. The abdomen is slightly convex at the bottom. No lesions, and icteric. Quadrant I-IV tympanic sound. When palpated there is no tenderness, or flabby, TFU is centered. An examination of the thorax obtained data on symmetrical right and left breathing rhythm, no additional breath sounds, no tenderness, and no respiratory muscles. Heart sounds S1 S2 are heard, ictus cordis is not visible, and there is no mass in the heart. From the assessment results, there was a grade 2 perineal rupture with 7 longitudinal stitches using Vicril 2.0 thread. From medical record data, the perineum is red and swollen and still wet. The client's upper and lower extremities can be moved normally. There were no abnormalities or edema in the client's extremities. The muscle strength of each right-left extremity was 5.

The main nursing diagnosis that arose in Mrs. R was a Knowledge Deficit characterized by a lack of exposure to information the client stated this was her first experience giving birth, the client's education was a junior high school graduate, the client stated that he did not know about how to care for suture wounds on the perineum. the client stated that he had not received an explanation from the midwife regarding perineal care. After giving birth, the client stated that she did not look for information on the internet regarding postpartum care because she was working more, G0P1A0, BP: 129/88 mmHg, N: 97 x/min, RR: 20 x/min, S: 36°C.

Interventions are carried out for 2 days, after nursing care for 2 days it is hoped that the knowledge deficit in Mrs. R can be resolved with the criteria for verbalizing interest in learning from a scale of 2 (moderately decreasing) to a scale of 4 (moderately increasing), the ability to explain knowledge about a topic from a scale of 2 (moderately decreased) to an increase in scale 4 (moderately increased), questions about the problems faced from a scale of 2 (moderately increased) to a scale of 4 (moderately increased). Nursing interventions or actions taken on the problem of knowledge deficit by applying audiovisual education about perineal wound care for 2 days.

Implementation is carried out for 2 days while the client is hospitalized. The first meeting with the client was to build a trusting relationship, convey the purpose and objectives, conduct a physical examination, and provide an opportunity to ask questions, the client said he did not know how to care for the perineal wound when he went home. The client also asked about problems faced such as how to properly care for wounds and then provide education to clients through audiovisuals about perineal wound care. The client's response seemed interested in learning and seriously watching and listening to the video provided. The second meeting with the client was a review client's level of knowledge. The client's response was to have the ability to explain again about perineal wound care. Furthermore, the nurse advised the client to continue learning about perineal wound care and postpartum care.

The evaluation obtained is that the client's knowledge is getting better. Progressive results were obtained in Mrs. R's verbalization of interest in learning from a scale of 2 (moderately decreased) to a scale of 4 (moderately increased), the ability to explain knowledge about a topic from a scale of 2 (moderately decreased) to an increase in scale 4 (moderately increased), questions about the problems faced from a scale of 2 (moderately increased) to a scale of 4 (moderately increased), this is supported by the ability to answer the topic of the education provided such as explaining again about perineal care correctly. The second can ask questions according to the topic of education provided. The third verbalization of interest in learning is very high. This was also followed by the client's confidence in Mrs. R by being able to know and perform perineal wound care independently at home after returning from the hospital.

## DISCUSSION

From the results of the assessment conducted on December 25, 2022, on client Mrs. R obtained the main complaint expressed by the client is that the client does not know how to care for the suture wound on the perineum after childbirth. Supported by the results of childbirth first child, where the first child has not had experience with the care of suture wounds after childbirth. The client also has a junior high school education, so there is a lack of knowledge in perineal wound care. Clients are also busy working so they don't seek information about perineal wound care after childbirth. This is in line with the theory of Notoatmodjo (2018), namely that the low level of education, childbirth experience, and work affects a person's knowledge a person's knowledge. According to the researcher, the factor that influences the level of knowledge in Mrs. R is the educational factor. Low education tends to receive

less information and will affect the way a person views new information or due to a lack of knowledge or sources of health information.

Based on the results of anamnesis and interviews during the assessment, the author enforces the nursing diagnosis of knowledge deficit related to lack of exposure to information characterized by the client stating this is the first experience of giving birth, the client's education is a junior high school graduate, the client states that he does not know enough about how to care for suture wounds on the perineum, the client states that he has not received an explanation from the midwife regarding perineal care after childbirth, and the client states that he does not look for information on the internet regarding postpartum care because he works more work. According to (Sulistyowaty, 2017) diagnoses that often appear in postpartum mothers with perineal wound care are knowledge deficits. Deficit knowledge occurs due to a lack of knowledge of how to care for perineal wounds. According to researchers, the enforcement of nursing diagnoses of knowledge deficits based on data analysis obtained by the author, namely there is subjective data that the client says he does not know how to care for suture wounds in the vagina after childbirth, and the objective data obtained is that the client does not understand when explained, appears to ask questions, is the first to give birth and has a junior high school education.

Interventions provided according to client problems with knowledge deficits, namely health education. According to theory (Hidayat, E., 2016) with education we can convey health messages to communities, groups, or individuals. With this message, it is hoped that the community, group, or individual can gain knowledge about better health. According to the researchers, the intervention given to Mrs. R is by the theory, namely by providing health education so that individuals can gain better health knowledge and have the will related to prevention, health improvement, recovery, and healing of a disease.

According to the researcher, the implementation is carried out to the client to increase the knowledge of postpartum mothers in performing perineal wound care. This is a reference for clients with a nursing problem of knowledge deficit about perineal wound care in a room that has not been done optimally. Implementation is carried out for 2 days. The first meeting with the client is fostering a relationship of mutual trust, conveying the purpose and objectives, conducting a physical examination, provide an opportunity to ask questions the client said he did not know how to take care of the perineal wound when he went home, the client also asked about the problems faced, then provide education to clients through audiovisuals about perineal wound care. The second meeting with the client was to review the client's level of knowledge. Furthermore, the nurse advised the client to continue learning about the care of perineal wounds and care after childbirth.

According to the researcher at the evaluation stage, the data obtained was that the evaluation obtained was that the client's knowledge was getting better. This is supported by the ability to answer the topic of the education provided such as explaining again about perineal care correctly. The second can ask questions according to the topic of education provided. The third verbalization of interest in learning is very high. This is also followed by the client's confidence in Mrs. R by being able to know

and perform perineal wound care independently at home after returning from the hospital. This is in line with research by Arimi (2017) that the results of the evaluation of activities show that perineal wound care education has a significant positive impact on knowledge in postpartum mothers.

Interventions have been carried out for 2 days, after nursing care, it is expected that the deficit of knowledge in Mrs. R can be resolved with the criteria for the results of verbalizing interest in learning from a scale of 2 (moderately decreasing) to a scale of 4 (moderately increasing), the ability to explain knowledge about a topic from a scale of 2 (moderately decreased) to an increase in scale 4 (moderately increased), questions about the problems faced from a scale of 2 (moderately increased) to a scale of 4 (moderately increased).

According to researchers, the results of the assessment of things that must be observed are factors that influence the knowledge deficit of the patient, then by knowing the factors possessed by the client we can plan what kind of audio-visual provision so that the client easily understands and understands the education provided. Then the thing that needs to be considered is how the patient's wound condition is so that we can provide the right education and according to what the client needs.

According to the theory of Fadyllah and Prasetyo (2021), the selection and use of media are one of the important components selection and use of media is one of the important components in delivering information to the public because the media has a major influence on shaping people's opinions and beliefs, the selection of appropriate information media can affect the knowledge and attitudes of postpartum women. The audiovisual method is a learning media or counseling media to provide important information to be conveyed. Audiovisual methods contain elements of sound and images that can be seen through videos, movies, and others. The audiovisual method can be a supporting medium for counseling because the information provided is concise and clear, interesting and easy for mothers to understand, and can also increase one's knowledge.

The use of visual and audiovisual media that involves the senses such as hearing and vision can affect the level of retention (absorption and memory) of the subject matter. A finding says that learning by using the senses and positive emotions is very important because it affects memory to be persistent, depending on how the strength of the information is first entered into the brain. Knowledge is the result of knowing that occurs in postpartum women after conducting the senses of sight and hearing to health education with audiovisual media given to them. Provided about perineal wound healing. Other studies have also suggested the need for learning media to improve understanding through increased memory and participation in learning.

According to researchers, health education using audiovisual methods has a significant effect on increasing postpartum mothers' knowledge about perineal wound healing. The videos used in this study contain animated videos, short videos, and advertisements with various durations, easy access to videos is effective in conducting health education due to the ease of receiving information. and repetition of information. In line with the results of research by Ghasani (2020), the results of the paired T-test test obtained a p-value of 0.000 and a large r-value of 0.378 means that there are differences in

the knowledge of postpartum women before and after being given audiovisual media. So, it can be concluded that providing health education through audiovisual media has a significant effect on increasing the knowledge of postpartum women regarding perineal wound healing.

## LIMITATIONS

No limitation.

## CONCLUSION

The results of the analysis of nursing care in postpartum mothers obtained the results of the assessment of the client Mrs. R obtained the main complaint expressed by the client was that the client did not know how to care for the suture wound on the perineum after childbirth. Nursing diagnoses that arise in accordance with SDKI (2017) are knowledge deficits. Interventions provided according to SIKI (2018) clients with knowledge deficits are given, namely

Education health education. The implementation carried out is to provide education through audiovisual media about perineal wound care. At the evaluation stage, data was obtained that the client's knowledge was getting better.

The results of the analysis of the application of education through audio-visual media with nursing diagnoses of knowledge deficits obtained from the reassessment results after being given education through audio-visual media with the criteria for the concluded results, namely verbalization of interest in learning from a scale of 2 (moderately decreased) to be scale 4 (moderately increased), the ability to explaining knowledge about a topic from a scale of 2 (moderately decreased) to an increased scale of 4 (moderately increased), questions about the problems faced from a scale of 2 (moderately increased) to a scale of 4 (moderately increased).

## AUTHOR CONTRIBUTION

**Authors' contributions:** All the authors contributed equally to the study.

## ORCHID

Reni Dwi Novita Wati : None.

Nurul Kamariyah : None.

R. Khairiyatul Afiyah : None.

Nur Ainiyah : None.

## CONFLICT OF INTEREST

The authors declare that there was no conflict of interest.

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