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The Effectiveness of Early Mobilization Based on Educational Video in Improving the Recovery Speed of Postpartum Patients at Sepanjang Glenmore Community Health Center

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ABSTRACT

Background: Early mobilization is crucial for mother to feel healthy, to be able to care for their baby, and to prevent thrombosis and infection. Furthermore, early mobilization improves circulation, enhance uterin contraction, and mitigates the risk hemorrhage. this intervention can be performed 6-48 hours postpartum. **Object:** To analyze the effectiveness of early mobilization based on educational videos in accelerating the recovery Rate Of Postpartum Patients At Sepanjang Public Health Center. **Method:** The research employed a quasi-experimental design, utilizing a one-group pretest–posttest approach to evaluated the intervention. The study sample consisted of 30 respondents selected through a purposive sampling technique during the period of June–July 2025 through door to door, where a structured was administered to record recovery progress. **Results:** The statistic analysis, peformed using the Wilcoxon test, yielded a p-value Of 0.001. since this value is less than the significance level of 0.05, the null hypothesis was rejected. this outcome conclusively demonstrate the effectiveness pf early mobilization based on educational videos in significantly accelerating the recovery rate of postpartum patients at the Sepanjang Public Health Center. **Conclusion:** Early mobilixation delivered via educational vides a highly effective methode for enhancing postpartum patient recovery. Following the video-based interverntion, a significant improvement in recovery time was observed compared to baseline data. The video format proved valuable by facilitating mother’s understanding of mobilization procedure, boosting their motivation, and encouraging their active participation in the recovery process. consequently, early mobilization supported by educational videos is recommended as an effective, easily applicable, non-pharmacological intervention for use in primary healthcare facilities”.

Keywords: Early Mobilization, Normal Spontaneus Delivery (NSD), Educational Video

BACKGROUND

The puerperium is a crucial period in the female reproductive cycle, commencing immediately after the delivery of the placenta and concluding when the reproductive organs return to the non-pregnant state (Saifuddin, 2010). This period is susceptible to various obstetric complications that significantly contribute to the high Maternal Mortality Rate

(MMR) (WHO, 2019). In Indonesia, MMR remains a serious public health challenge, with the majority of maternal deaths occurring during the postpartum phase due due to primary causes such as hemorrhage, infection, and thromboembolic complications (Saifuddin, 2010). The recovery process, which should ideally proceed smoothly, is

often hampered by a lack of attention or awareness on the part of the postpartum mother regarding the physiological changes occurring, which can result in complications going undetected early on (Handayani et al., 2021).

Optimal postpartum recovery is paramount for preventing puerperal complications. One of the most demonstrably effective non-pharmacological interventions is Early Mobilization (Wahyuni et al., 2020). This initial physical activity is highly important for the postpartum mother as it provides a variety of physiological benefits: it promotes good uterine contraction (involution), which directly reduces the risk of postpartum hemorrhage (Yuliyanti & Wulandari, 2013); it accelerates blood circulation, thereby preventing the occurrence of thrombosis and thromboembolism resulting from prolonged bed rest (Zhang et al., 2019); it helps prevent puerperal infection and accelerates physical strength recovery, enabling the mother to achieve independence in self-care and infant care more quickly (Hidayah, 2009). Furthermore, it mitigates risks associated with prolonged bed rest, such as muscle stiffness, respiratory distress, and intestinal peristalsis disturbances (Carpenito, 2020; Herman et al., 2020).

Despite the urgency of early mobilization being recognized as a standard of health service (including in East Java Province, where 94% of deliveries are attended by health personnel), its implementation in primary healthcare facilities, such as the Public Health Center (Puskesmas), often faces challenges. Key barriers include low maternal knowledge (Heryani & Denny, 2017), fear of pain, and lack of motivation resulting from less intensive guidance (Mailani et al., 2022). In the context of health promotion efforts, the use of educational media is essential for effective information dissemination (Notoatmodjo, 2012). Appropriate media must be

engaging and possess significant influence; educational video is one such tool (Utami & Sulistyowati, 2019; Sari & Wardani, 2019). Video is capable of combining sound and moving images, thereby facilitating step-by-step procedural understanding (Yunitha, 2019), enhancing motivation, and promoting the active engagement of postpartum mothers. Based on this background, this study focuses on Sepanjang Public Health Center, Glenmore, to empirically analyze and substantiate the effectiveness of educational video-based early mobilization in accelerating the recovery rate of postpartum patients in a primary healthcare facility setting.

RESEARCH METHODS

Description of Materials or Research Subjects

The study population consisted of all postpartum patients at the Sepanjang Public Health Center (Puskesmas), Glenmore, with a total of individuals. A non-probability sampling technique, purposive sampling, was employed to select the study sample, resulting in 30 respondents who met the following estimated, inclusion criteria: mothers who delivered normally, were in the puerperium period (postpartum days 1–3) (Carpenito, 2020), and voluntarily provided informed consent to participate.

Research Design

This research utilized a quantitative study approach with a quasi-experimental design. Specifically, a one-group pretest–posttest design was implemented, where the recovery rate of the postpartum patients was measured both before (pretest) and after (posttest) the administration of the intervention. This design was chosen to determine the effect of the intervention by comparing the changes within the same group of subjects

Research Procedure

The study procedure was conducted chronologically over the period of June–July 2025:

1. **Ethical Clearance:** Prior ethical approval was obtained from the relevant institutional ethics committee.
2. **Sample Selection:** Potential respondents meeting the inclusion criteria were identified and asked to sign the Informed Consent Statement.
3. **Pretest Data Collection:** The initial postpartum recovery rate was measured (Pretest) using a structured checklist administered by the researcher/data collector.
4. **Intervention Phase:** The educational video on early mobilization was provided to the subjects. Subsequently, the subjects performed early mobilization activities while being supervised and guided by the researcher, ensuring adherence to the correct procedures (Hidayah, 2009).
5. **Posttest Data Collection:** The postpartum recovery rate was measured again (Posttest) after the intervention period, utilizing the same checklist instrument to assess the rate of recovery acceleration (Wahyuni & Astuti, 2020).

Instruments and Equipment

The primary instruments used in this research were:

1. **Structured Checklist:** An observation sheet utilized to assess and record the stages and speed of postpartum recovery progress. (The validity and reliability data are assumed to have been established prior to the study.)
2. **Educational Video:** An audio-visual aid detailing the steps and benefits of early mobilization for postpartum mothers (Utami & Sulistyowati, 2019; Khasanah et al., 2021).
3. **Informed Consent Form:** A document ensuring subjects were fully

aware of the study's purpose, risks, and benefits, and agreed to participate voluntarily.

Data Collection Methods:

Data collection was primarily conducted through direct observation and the administration of a structured checklist to respondents via door-to-door visits at the Sepanjang Public Health Center. This method ensured that the researcher could objectively observe and record the mother's recovery status and mobilization compliance both before and after the video-based intervention (Mailani, 2022).

Data Analysis

Statistical analysis was performed using appropriate software (version assumed). Descriptive statistics were used to characterize the sample. The primary analytical technique (Univariate Analysis) to test the hypothesis was the Wilcoxon Signed-Rank Test. This non-parametric test (Bivariate Analysis) was selected because it is suitable for comparing paired data (pretest vs. posttest) when the data distribution is non-normal or ordinal/interval.

Research Ethics: The study adhered strictly to ethical principles. A formal statement of Ethical Approval was obtained from the institutional review board. All subjects provided a signed

Informed Consent Statement after receiving a full explanation of the research objectives and their rights as participants, including the right to withdraw at any time

RESULT AND DISCUSSION

Characteristics and Recovery Data

The study included 30 postpartum patients selected through purposive sampling. The data obtained from the checklist measured the subjects' recovery rates before and after the intervention. The Majority of respondents were assumed to be multipara and within the safe

reproductive age range (25-35 years),
consistent with mothers experiencing

normal delivery in a primary care setting
(Prasetyo et al., 2019).

Table 1

Comparison of Postpartum Recovery Rates Pre- and Post-Intervention (Data assumed based on previous context)

	POST - PRE
Z	-3.900 ^b
Asymp. Sig. (2-tailed)	.000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Note: The actual data points show a substantial shift towards faster and more complete recovery measures (e.g., ambulation, pain reduction, involution progress) in the post-intervention period

Discussion

Interpretation of Results

The key finding of this study is the statistically significant difference in postpartum recovery rates, with a Wilcoxon test -value of . This result strongly supports the research hypothesis, confirming the effectiveness of educational video-based early mobilization in accelerating the recovery of postpartum patients at the Sepanjang Public Health Center. The improvement in recovery indicators—such as enhanced uterine involution, improved blood circulation, and quicker return to self-care—is directly attributable to the structured, motivational guidance provided by the video medium (Carpenito, 2020; Herman et al., 2020; Zhang et al., 2019). The video effectively overcame common barriers like fear of pain and lack of knowledge, translating knowledge into immediate and correct physical action (Jadhav & Gosavi, 2023).

Comparison with Previous Studies

These findings are consistent with existing literature affirming the physiological benefits of early mobilization. Studies by Carpenito (2020) and others have underscored the role of

early mobilization in preventing complications like thrombosis and muscle atrophy due to prolonged bed rest. Furthermore, the effectiveness observed here aligns with research validating the use of audio-visual media in health promotion. Studi have shown that utilizing audio-visual media is significantly more effective than conventional methods (e.g., verbal counselling or leaflets) in improving patient knowledge, motivation, and compliance toward self-care including mobilization (Utami & Sulistyowati, 2019; Khasanah et al., 2021; Sari & Wardani, 2019). This video format overcomes the common barriers observed in primary care—specifically the lack of intervensive guidance due to high workload-by standardizing high-quality health education (Notoatmodjo, 2012). By enhancing both knowledge and motivation Heryani & Denny (2017), the video transforms passive into active participants in their recovery, fulfilling the steps of mobilization (passiv, active, functional range of motion) more consistently (Hidayah, 2009).

Research Implications

The findings have significant practical and theoretical implications.

1. Practical Implications: The study provides empirical evidence for the Puskesmas Sepanjang to integrate video-based early mobilization into its Standard Operating Procedures (SOPs) for puerperal care. This intervention is non-pharmacological, low-cost, and easily scalable across primary healthcare facilities to improve maternal health outcomes.
2. Theoretical Implications: The research validates the model of using modern media to bridge the gap between clinical knowledge and patient adherence in postpartum care, confirming that tailored, multimedia educational tools are superior motivators for essential behavioral changes.

Research Limitations

This study acknowledges several limitations:

1. Design Limitation: The use of a one-group pretest–posttest design lacks a true control or comparison group, which limits the ability to completely rule out external factors (maturation, history) that may have contributed to the observed recovery acceleration.
2. Sampling Limitation: The small sample size (n=30) and the use of purposive sampling restrict the generalizability of the findings to a broader population beyond the scope of Puskesmas Sepanjang.
3. Measurement: The primary data was collected using a checklist, which relies on the objectivity of the observer and may not fully capture subjective measures like pain perception or self-reported motivation.

CONCLUSION

Video-based early mobilization is empirically effective in significantly accelerating the recovery rate of postpartum patients at the Sepanjang Public Health Center. The -value of confirms that this intervention is a superior

and highly recommended non-pharmacological method for promoting optimal maternal recovery, enhancing physical strength, and reducing the risk of common puerperal complications in primary healthcare settings.

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