

# "Si-ULIN" (Ready to Childbirth) as Pocket Book to Improve Knowledge and Attitude of Pregnant Women in Mantang Island

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### ABSTRACT

In Indonesia, preparation for childbirth is generally obtained through classes for pregnant women which are routinely held by the puskesmas or midwife clinic, but for the archipelago sometimes the presence of pregnant women is constrained by geographical conditions, limited transportation facilities, weather conditions and currently the Covid-19 pandemic situation. This condition can be overcome by presenting educational media for childbirth preparation. The purpose of this study was to analyze the effect of health education using "Si-ULIN" (Ready to Childbirth) pocket book on the knowledge and attitudes of pregnant women on Mantang Island, Bintan Regency, Riau Archipelago Province. This type of research was a quasi-experimental with one group pretest posttest design. The study was conducted in October 2020, involving 36 third trimester pregnant women on Mantang Island, who were selected using a purposive sampling technique. Data about knowledge and attitudes were collected through filling out a questionnaire, then analyzed using a paired sample t-test. The results showed that the average knowledge of pregnant women increased by 19.83 and the average attitude increased by 17.53 after being treated in the form of health education using the "Si-ULIN" pocket book. The p-value for differences in knowledge and attitudes before and after treatment were 0.000. This study concludes that "Si-ULIN" pocket book is effective in increasing the knowledge and attitudes of pregnant women about preparation for childbirth. It is hoped that all pregnant women with limited access to attend classes for pregnant women can use the "Si-ULIN" pocket book as an educational medium for preparation for childbirth.

Keywords: pregnant women; pocket book "Si-ULIN"; knowledge; attitude

### INTRODUCTION

#### Background

Maternal Mortality Rate (MMR) is one of the important indicators for public health status. In Indonesia, the maternal mortality rate in 2019 was still high at 205 per 100,000 live births. This figure is still higher than the Sustainable Development Goals (SDG's) target of 70 per 100,000 live births in 2030 <sup>(1)</sup>. Riau Archipelago Province, is one of the provinces in Indonesia, with an MMR in 2019 of 98 per 100,000 live births, the causes of which are still dominated by bleeding and hypertension <sup>(2)</sup>.

One of the efforts to reduce and prevent maternal mortality is to prepare for childbirth. Childbirth is an important event in a mother's life, but some deliveries that are predicted to take place normally can turn into complications. For this reason, preparation for childbirth will be a very important part of the delivery process with the aim that pregnant women can improve optimal health before delivery and can immediately provide lactation <sup>(3,4)</sup>. Preparation for labor can also be described as a means of written communication by pregnant women regarding their preferences for labor and delivery management <sup>(7,8)</sup>. Good delivery preparation includes delivery management (selection of type/delivery assistant, selection of place of delivery, preparation of equipment and needs of mother and baby, transportation to the place of delivery, preparation in case of emergency/referral). Preparation for labor also includes husband's participation in accompanying childbirth, management of the delivery process such as recognizing early signs of labor, contraction management, position selection, pain reduction, implementation of lactation and newborn care practices <sup>(8-11)</sup>.

Preparation for childbirth in various countries has names such as birth planning programs, childbirth preparation classes, parenting education classes, pregnant women classes, antenatal classes and so on <sup>(5,6,18)</sup>. In Indonesia, preparation for childbirth is generally integrated into antenatal care at the puskesmas in the form of classes for pregnant women or classes for preparation for parents held by private clinics. Likewise in the Riau Archipelago Province, there has been a delivery preparation program inserted in the pregnant women class, but



since the Covid-19 pandemic, pregnant women's access to this class of pregnant women has decreased, plus geographical conditions which are mostly a group of islands. and surrounded by the ocean. Especially on Mantang Island as a small island on the outskirts of Bintan Regency, pregnant women's access to midwifery services is sea transportation which depends on the availability of sea transportation facilities, weather and water conditions and the distance traveled. This sometimes makes it difficult and restricts pregnant women to attend classes for pregnant women at the puskesmas or midwife clinics, so that true and complete knowledge about childbirth preparation is also inadequate.

Knowledge of childbirth preparation is very necessary for pregnant women so as not to experience confusion at the time of delivery. In addition, good knowledge about childbirth preparation will encourage mothers to develop positive attitudes and behaviors in dealing with childbirth <sup>(13,14)</sup>, giving time to be physically and psychologically ready to face childbirth while preventing stress and childbirth complications <sup>(12,13)</sup>. Several studies have shown that labor preparation can affect labor satisfaction and readiness to face childbirth complications. <sup>(15,17)</sup>

There are many ways to increase the knowledge of pregnant women about preparation for childbirth, one of which is to use pocket books as media. A pocket book is a small book that can be put in a pocket and easy to carry everywhere, facilitating understanding and increasing enthusiasm for learning and can be used as one of the media for health promotion <sup>(19-21)</sup>. The use of the "Si-ULIN" pocket book (ready to give birth) in this study is expected to help increase the knowledge of pregnant women so that they can develop positive attitudes about childbirth preparation, especially for pregnant women who are on Mantang Island, Bintan Regency, Riau Archipelago Province, where the geographical condition of being on an island surrounded by oceans causes limited access to attend classes for pregnant women. The information in the "Si-ULIN" pocket book is expected to be a guide for pregnant women to prepare for childbirth.

#### Purpose

The purpose of this study was to determine the effect of using the "Si-ULIN" pocket book on the level of knowledge and attitudes of pregnant women on Mantang Island, Bintan Regency, Riau Archipelago Province.

### METHODS

This type of research was a quasi-experimental with one group pre and post test design, namely observations made before and after being given treatment to the respondents. The treatment given to the respondents was health education using the "Si-ULIN" pocket book to find out changes in knowledge and attitudes before and after being given the "Si-ULIN" pocket book. The study was conducted in October 2020 on Mantang Island. The population of this study were 36 pregnant women on Mantang Island. The sample size was 36 people selected by total population sampling technique. The inclusion criteria was pregnant women who have a smartphone.

The independent variable was counseling using the "Si-ULIN" pocket book, while the dependent variable were the knowledge and attitude of pregnant women. The data were collected twice, namely during the pre-test and post-test with a distance of 2 weeks. The instrument used in the data collection process was a questionnaire about knowledge and attitudes distributed online in Google Form format. The collected data were analyzed using paired sample t-test.

#### RESULTS

Table 1. Distribution of characteristics of pregnant women

Characteristics	Frequency	Percentage
Age		
- < 20 years old	2	5.6
- 20-35 years old	26	72.2
- >35 years old	8	22.2
Occupation		
- Work	12	33.3
- Does not work	24	66.7
Education		
- Low (elementary school / middle school)	14	38.9
- High (high school / college)	22	61.1
Parity		
- Primigravida	6	16.7
- Multigravida	23	63.9
- Grandemultigravida	7	19.4



Table 1 shows that from 36 pregnant women, the most age was 20 to 35 years, the most occupation was not working, the most education was high school and the most parity was multigravida.

Table 2. Changes in knowledge and attitudes of pregnant women as a result of health education using the "Si-ULIN" pocket book

Variable	Mean	SD	р
Knowledge			
• Pretest	53.75	8.28	0.000
• Posttest	73.58	10.67	
Average increase	19.83	9.01	
Attitudes			
• Pretest	35.53	4.41	0.000
• Posttest	53.06	1.94	
Average increase	17.53	5.00	

Table 2 shows that after conducting health education using the "Si-ULIN" pocket book, there had been an increase in the average knowledge and attitudes of pregnant women by 19.83 and 17.53, respectively. Both of these increases were significant which was indicated by the value of p = 0.000.

#### DISCUSSION

The results showed that among pregnant women who were the research subjects, the most age group was 20-35 years, the most occupational status was not working, the highest education level was high school/college and the highest parity was multigravida. The results of the difference test show that there has been an increase in knowledge and attitudes of pregnant women after being given health education using the "Si-ULIN" pocket book. This proves that the "Si-ULIN" pocket book is an effective medium to increase knowledge and attitudes of pregnant women about preparation for childbirth. Based on the results of this study, the 'Si-ULIN' pocket book can be used as a guide for pregnant women, especially in the third trimester so that they can still prepare for childbirth optimally even though due to geographical conditions and the Covid-19 pandemic situation, they cannot attend classes. pregnant mother.

The results of this study are in line with research by Anggraini, et al. <sup>(23)</sup> which proves that the use of pocket books increases mother's knowledge about the development and stimulation of children aged 0-24 years. Likewise with the research of Widiastuti & Hapsari <sup>(24)</sup> which proves that the use of pocket books increases mother's knowledge about the danger signs of pregnancy; and research by Sianturi, et al. <sup>(26)</sup> which proves that pocket books increases the knowledge and attitudes of women of childbearing age towards the prevention of tuberculosis transmission.

Educational media such as pocket books are packaged in such a way as to be more attractive, small in size to fit in a pocket, equipped with colorful pictures and easy to carry everywhere <sup>(19,21-23,25)</sup>. This interesting educational media can be used as an educational media for childbirth preparation for third trimester pregnant women. By reading the pocket book on their own, pregnant women can absorb the information provided, determine their own reading speed, repeat the parts that need special attention and with interesting colors and pictures to support the information can help pregnant women to better absorb the information presented in the pocket book. <sup>(21-24)</sup>. The increase in knowledge and attitudes of pregnant women after being given the educational media of the "Si-ULIN" pocket book may also be influenced by the age of pregnant women, the majority of whom are in the healthy reproductive age range (20-35 years) so that the level of age maturity allows pregnant women to be more capable. absorb information, also due to the large amount of free time to read pocket books because the majority of pregnant women to be able to process information in pocket books and develop a positive attitude towards childbirth preparation as well as experience facing delivery because the majority are multigravida <sup>(12,14)</sup>.

This "Si"-ULIN" pocket book can be used as an alternative educational media for pregnant women in the archipelago where there are obstacles to attending classes for pregnant women or classes to prepare for parenthood due to geographic and weather conditions as well as limited means of sea transportation. By using this "Si-ULIN" pocket book, pregnant women in the area can still increase their knowledge and develop positive attitudes about childbirth preparation so that labor can be prepared optimally.



# CONCLUSION

Based on the results of the study, it can be concluded that the pocket book "Si-ULIN" is effective for increasing the knowledge and attitudes of pregnant women about preparation for childbirth. It is hoped that this "Si-ULIN" pocket book can be used by all pregnant women, especially those in the archipelago as a guide for optimally preparing for childbirth.

# REFERENCES

- 1. Kemenkes RI. Profil Kesehatan Indonesia 2019. Jakarta: Kemenkes RI; 2019.
- 2. Dinkes Prov. Kepulauan Riau. Data Sementara Jumlah Kematian Ibu dan Angka Kematian Ibu (AKI) Provinsi Kepulauan Riau. Tanjungpinang: Dinkes Prov. Kepulauan Riau; 2019.
- 3. Lucia S, Purwandari A, Pesak E. Pengaruh Pelaksanaan Kelas Ibu Hamil Terhadap Pengetahuan Tentang Persiapan Persalinan. Jurnal Ilmiah Bidan. 2015;3(1):61-65.
- 4. Kemenkes RI. Buku Ajar Kesehatan Ibu dan Anak. Jakarta: Pusat Pendidikan dan Pelatihan Tenaga Kesehatan; 2015.
- 5. Gagnon AJ, Sandall J. Individual or group antenatal education for childbirth or parenthood, or both. Cochrane Database Syst Rev. 2007(3):CD002869.
- 6. Sioma-Markowska U, Poręba R, Machura M, et al. Paternal engagement during childbirth depending on the manner of their preparation. Ginekol Pol. 2016;87(9):639–643.
- 7. Afshar Y, Mei J, Gregory K. Birth plans: birth preferences or labor manifesto. Gynecol. Obstet. Case Rep. 2016;2(1).
- 8. Farahat AH, Mohamed ES, Elkader SA, El-Nemer A. Effect of implementing a birth plan on womens's childbirth experiences and maternal & neonatal outcomes. J. Educ. Pract. 2015:6(24).
- 9. White-Corey S. Birth plans: tickets to the or? MCN: The American Journal of Maternal/Child Nursing. 2013;38:268.
- 10. Yam EA, Grossman AA, Goldman LA, Garci´a SG. Introducing birth plans in Mexico: an exploratory study in a hospital serving low income Mexicans. Birth. 2007;34(1):42-8.
- 11. Kemenkes RI. Buku KIA (Kesehatan Ibu dan Anak). Jakarta: Kemenkes RI; 2020.
- 12. Gunawan. Psikologi Belajar. Semarang: Unnes Press; 2011.
- 13. Imam. Buku Ajar Asuhan Kebidanan Persalinan. Yogyakarta: Pustaka Rihana; 2012.
- 14. Notoatmodjo S. Pendidikan dan Perilaku Kesehatan. Jakarta: Rineka Cipta; 2012.
- 15. Turan G, Peker N, Bağlı İ. Evaluation of the effect of Birth Preparation Program on birth satisfaction with "Salmon's Item List" scale. Ginekologia Polska. 2021.
- 16. Akca A, Esmer AC, Ozyurek ES, Aydin A, Korkmaz N, Gorgen H, Akbayir O. The influence of the systematic birth preparation program on childbirth satisfaction. Archives of gynecology and obstetrics. 2017;295(5):1127-1133.
- 17. Andarge E, Nigussie A, Wondafrash M. Factors associated with birth preparedness and complication readiness in Southern Ethiopia: a community based cross-sectional study. BMC pregnancy and childbirth. 2017;17(1):1-13.
- 18. Güder DS, Yalvaç M, Vural G. The effect of childbirth preparation training on primiparous women's birth plans and the childbirth processes. Clinical and Experimental Obstetrics & Gynecology. 2019;46(6):924-932.
- 19. Hanif MF, Ririanty M, Nafikadhini I. Efektivitas Buku Saku PHBS di Sekolah dalam Meningkatkan Perilaku Hidup Bersih dan Sehat. 2018;6(2):47.
- 20. Kemendikbud RI. Kamus Besar Bahasa Indonesia. Edisi 5. Jakarta: Balai Pustaka; 2019.
- 21. Purnaningsari F, Maryatun M, Prajayanti ED. Pengembangan buku saku sebagai media layanan informasi tentang penanganan baby blues terhadap resiko baby blues pada ibu postpartum. Doctoral Dissertation. Surakarta: Universitas Aisyiyah Surakarta; 2020.
- 22. Mirrafiei SF, Geranmaye M, Ghadipasha M, Ghalenoei M. Comparing the Effect of Training by Booklet and Pocket E-Book on Knowledge of Working Midwives about Midwifery Rules and Regulations. Journal of Sabzevar University of Medical Sciences. 2020;27(5):684-690.
- 23. Angraini DH, Wahyuni ED, Aticeh A, Hasan R. The Effect of a Pocketbook on Increasing Mother Knowledge Regarding Development and Stimulation of Children 0-24 Months. Jurnal Kesehatan Prima. 2020;14(1):9-16.
- 24. Widyastuti DE. Perbandingan Pendidikan Kesehatan Menggunakan Buku Saku dengan Metode Ceramah Terhadap Tingkat Pengetahuan Ibu Hamil Tentang Tanda Bahaya Kehamilan. Profesi (Profesional Islam): Media Publikasi Penelitian. 2018;16(1):84-88.
- 25. Cahyani YE. Pengaruh penggunaan pocket book sebagai media edukasi terhadap peningkatan pengetahuan gizi. Yogyakarta: Poltekkes Kemenkes Yogyakarta; 2020.
- 26. Sianturi E, Pardosi M, Surbakti E. Pocket and Audio-Visual-Animated Influence to The Knowledge and Attitudes of Female-Age-Women in Prevention of Tuberculosis Transmission. Proceeding. 2021:27-36.