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THE EFFECT OF MATERNAL AND CHILD HEALTH EDUCATION THROUGH ANTENATAL CLASS TO IMPROVE KNOWLEDGE AND ATTITUDE OF PREGNANT WOMEN

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Abstract

Maternal Mortality Rates (MMR) in various regions in Indonesia are diverse. Maternal and child health education is generally still carried out through individual or case-by-case consultation, which is provided when the mother has her pregnancy checked. This kind of education activity is indeed useful for handling case-by-case but has weaknesses, among others, the knowledge gained is only limited to the health problems experienced during the consultation and the education provided is not coordinated. To overcome these weaknesses, a learning method through an antenatal class (a class for pregnant women) was planned. This study used a pre-experiment with a One Group Pretest- Posttest design. The sample in this study was 35 pregnant women selected by purposive sampling. The statistical test used was the t-test. The results show that there is a significant effect of providing education to pregnant women on their knowledge and attitudes, with a calculated t-value of 5.351 on knowledge and a calculated t-value of 6.000 on attitudes. These results allow a conclusion that there is an effect of providing education to pregnant women through an antenatal class on their knowledge and attitudes. The implication of this research is that it is important to conduct scheduled classes for pregnant women to increase the knowledge of pregnant women.

Keywords: Antenatal class, Knowledge, Attitudes.

INTRODUCTION

Efforts to improve the health of mothers, newborns, and children have become a top priority for the government before the Millennium Development Goals (MDGs) in 2015 were set (Saifuddin, 2016). Maternal Mortality Rates (MMR) and Infant Mortality Rates (IMR) are two of the main indicators of a country's health status. MMR and IMR also indicate the ability and quality of health services, capacity of health services, quality of education and community knowledge, quality of environmental health, socio-culture, and barriers to gaining access to health services (AYU, 2014).

Maternal Mortality Rates (MMR) in various regions in Indonesia are diverse. There are regions that are good but there are some that are far from expectations, depending on geographical conditions, poverty levels, conflicts in the area, and so on. Nowadays, maternal and child health education is generally still carried out through individual or case-by-case consultation, which is provided when the mother has her pregnancy checked. or during posyandu activities (Ekayanthi & Suryani, 2019). This kind of education activity is indeed useful for handling case-by-case but has weaknesses, among others, the knowledge gained is only limited to the health problems experienced during the consultation and the education provided is not coordinated so the knowledge provided to mothers is only the knowledge possessed by the health workers. There are no work plans so there is no cross-sector and cross-program

monitoring or mentoring, the implementation of education (counseling) is unscheduled and not sustainable.

To overcome these weaknesses, a learning method through an antenatal class (a class for pregnant women) was planned. The planned activity was a face-to-face discussion of KIA book material in groups followed by a discussion and exchange of experiences between pregnant women and health workers. This study group activity is called PREGNANT WOMEN CLASS (Dewi, 2020). An antenatal class or class for pregnant women is a health program that is expected to play a role in reducing morbidity and mortality due to pregnancy, childbirth, and postpartum (Istiananingsih et al., 2021). An antenatal class is a joint learning facility that pregnant women need to participate in to gain sufficient knowledge so they can prevent complications and increase coverage of K1 and K4 also, increase coverage of delivery performance by health workers (Dian Ekayanti & Suryani, 2019).

An antenatal class or class for pregnant women is a study group for pregnant women with a gestational age between 20 weeks to 32 weeks with a maximum number of participants of 10 people (Hariyani et al., 2021). In this class, pregnant women will learn together, discuss, and exchange experiences about maternal and child health (MCH) in a comprehensive and systematic manner (Renbarger et al., 2021). This class is carried out on a scheduled and continuous basis. This study aimed to determine the knowledge and attitudes of pregnant women before and after education through an antenatal class.

METHOD

This study used a pre-experiment with a One Group Pretest- Posttest design. The population in this study was pregnant women who came to TPMB in September 2023. The sample in this study was 35 pregnant women selected by purposive sampling. The statistical test used was the t-test. Data analysis used univariate and bivariate**.** The intervention provided was providing health education about classes for pregnant women using videos and power points. The instruments used in this research were pre-test and post-test observation sheets.

RESULT AND DISCUSSION

Univariate

A. Descriptive Test Results of Knowledge

Table 1.

Descriptive Test Results of Pre and Post-test Knowledge of Pregnant Women at TPMB R Depok

Knowledge	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test	35	8	15	11.66	1.814
Post-test	35	10	17	14.09	1.652

Table 1 shows that in the pre-test scores, 35 respondents obtained a minimum score of 8 and a maximum score of 15, with a mean of 11.66, and a standard deviation of 1.814. Meanwhile, in the post-test scores, 35 respondents obtained a minimum score of 10 and a maximum score of 17, with a mean of 14.09 and a standard deviation of 1.652.

B. Knowledge Levels of Pregnant Women before being provided with education

Table 2. Knowledge Levels of Pregnant Women before being provided with education

Knowledge	F	Percentage (%)
Good	14	40
Poor	21	60
Total	35	100

Table 2 shows that of the 35 respondents, knowledge levels of pregnant women before being provided with education were dominated by poor knowledge, namely 21 respondents (60%), while the remaining was by good knowledge, namely 14 respondents (40%).

Knowledge Levels of Pregnant Women after being provided with education

Table 3. Knowledge Levels of Pregnant Women after being provided with education

Knowledge	F	Percentage (%)
Good	30	85.7
Poor	5	14.3
Total	35	100

Table 3 shows that of the 35 respondents, knowledge levels of pregnant women after being provided with education were dominated by good knowledge, namely 30 respondents (85.7%), while the remaining was by poor knowledge, namely 5 respondents (14.3%). There is a possibility that knowledge levels of pregnant women before and after being provided with education increase.

C. Descriptive Test Results of Attitudes

Table 4 Descriptive Test Results of Pre and Post-test Attitudes of Pregnant Women at TPMB R Depok

Attitudes	N	Minimum	Maximum	Mean	Std. Deviation
Pre-test	35	51	81	59.94	10.175
Post-test	35	51	83	68.49	9.472

Table 4 shows that in the pre-test scores, 35 respondents obtained a minimum score of 51 and a maximum score of 81, with a mean of 59.94 and a standard deviation of 10.175. Meanwhile, in the post-test scores, 35 respondents obtained the same minimum score as in the pre-test score, namely 51 and a maximum score of 83, with a mean of 68.49 and a standard deviation of 9.472.

D. Attitudes of pregnant women before being provided with education

Attitudes	F	Percentage (%)

Positive	11	31.4
Negative	24	68.6
Total	35	100

Table 5 shows that of the 35 respondents, those who had a positive attitude were 11 respondents (31.4%), while those who had a negative attitude were 24 respondents (68.6%).

E. Attitudes of pregnant women after being provided with education

Table 6. Attitudes of pregnant women after being provided with education

Attitudes	F	Percentage (%)
Positive	29	82.9
Negative	6	17.1
Total	35	100

Table 6 shows that of 35 respondents, those with a positive attitude are more than those with a negative attitude. Based on the results obtained, 29 respondents (82.9%) had a positive attitude and 6 respondents (17.1) had a negative attitude. Therefore, it can be concluded that after being provided with education (counseling), the majority of respondents showed a positive attitude.

Bivariate

A. The Effect of Antenatal Class Education

Table 7

The Effect of Antenatal Class Education on Knowledge of Pregnant Women at TPMB R Depok

Knowledge	Mean	Std. Dev	95% CI of difference		t	df	Sig
			Upper	Lower			
Pre-test Post-test	0.457	0.505	0.284	0.631	5.351	34	0.000

Table 7 shows that the calculated t-value is 5.351 with a probability (Sig) of 0.000 < 0.05, meaning that there is a significant effect of providing education (counseling) on knowledge levels of pregnant women regarding an antenatal class.

Table 8. The Effect of Antenatal Class Education on Attitudes of Pregnant Women at TPMB R Depok

Attitudes	Mean	Std. Dev	95% CI of difference		t	df	Sig
			Upper	Lower			
Pre-test Post-test	0.514	0.507	0.340	0.688	6.000	34	0.000

Table 8 shows that the calculated t-value is 6.000 with a probability (Sig) of 0.000 < 0.05, meaning that there is a significant effect of providing education (counseling) on the attitudes of pregnant women regarding an antenatal class at TPMB R Depok.

DISCUSSION

Frequency distribution of knowledge and attitudes of pregnant women before and after being provided with education

From the results of statistical tests, it can be seen that there is a very significant effect because it obtained a p-value of 0.000, which was smaller than the alpha value (0.05). This shows that knowledge can increase with information. There are two kinds of media, namely print media and electronic media, print media include posters, leaflets, brochures, magazines, newspapers, and stickers. Meanwhile, electronic media include television, radio and tape recorder, VCD, and video (D. E. Lestari et al., 2021).

An antenatal class is a facility for pregnant women to learn together about health, in the form of face-to-face learning in groups which aims to increase the knowledge and skills of pregnant women regarding pregnancy, pregnancy care, childbirth, postpartum care, newborn care, myths, infectious diseases, and birth certificates (Naharani et al., 2018).

Better methods to gain knowledge can be done through the visual sense (eyes) or direct experience and sharing the experience of other people. Thus, it can be understood that education, both individually and in groups, includes various methods such as counseling, demonstrations, and providing print media that enable the transfer of knowledge that can affect people to increase or change their knowledge levels for the better (Sitorus & Fransisca, 2014).

Knowledge, according to Notoadmodjo (2012), is the result of information that is then paid attention to, understood, and remembered. In the process, knowledge is the result of knowing after a person has sensed a particular object, but most human knowledge is produced from the eyes and ears (Notoatmodjo, 2012).

Before being provided with education (counseling), knowledge levels of the majority of respondents in this study were in the poor category, however after being provided with education (counseling), knowledge levels of the majority of respondents in this study were in the good category. This condition is in line with the theory proposed by Notoadmotjo (2012) that most human knowledge is obtained through the eyes and ears.

Knowledge is influenced by the factor of formal education (Pinheiro et al., 2016). But it doesn't mean that a person with a low formal education level has absolutely low knowledge. This is because increasing knowledge can be obtained not only from formal education but also from non-formal education (Syam, 2016).

Attitude is a response to liking or disliking an object. Increased knowledge and attitudes are a result of the ease of access to information (Suciadi et al., 2022). Health education is a learning process. Neisser formulated that the learning process is a transformation of input, then the input is reduced, described, stored, rediscovered, and utilized (Suryati et al., 2023). The learning process has three components, namely, input, process, and output. In the process component, there is a reciprocity between

various factors, including learning subjects, teachers, methods, tools/media, and the materials studied. Then the output component consists of new changes in the subjects (Wijaya & Yuniawan, 2022).

The results of a study carried out in Puskesmas Buleleng I working area show that antenatal classes are effective in increasing the knowledge levels of pregnant women. This is proven through the implementation of antenatal classes for 4 times (D. Lestari et al., 2022). The results of this study show that there is an increase in the knowledge levels and attitudes of pregnant women after being provided with education through an antenatal class for pregnant women compared to before being provided with education.

The effect after providing antenatal class education for pregnant women

From the results of data processing, it was found that of the 35 respondents, 85% had good knowledge and 14% had poor knowledge. The calculated t-value is 5.351 with a probability (Sig) of 0.000 < 0.05, meaning that there is a significant effect of providing education (counseling) on the knowledge levels of pregnant women regarding an antenatal class at TPMB R Depok. This shows that the knowledge levels become better after the education is provided.

Knowledge is a very important domain for the formation of actions of a person (Kirana, 2022). Health education is an educational activity carried out by spreading messages and instilling confidence, so people are not only aware, know, and understand, but also want and can carry out quality recommendations related to health (Kinanti et al., 2022).

Knowledge can be a cause or motivation for someone to act and behave, which can be the basis for the formation of actions taken. Behavior is guided by attitude so that it will act according to what is expressed. Knowledge and attitudes are things that greatly affect the actions of a person (Sihabudin, 2022). Antenatal classes are one way that can be used to disseminate information related to health during pregnancy (Harahap et al., 2023).

There is an increase in the level of knowledge before and after the education (counseling) was provided. After the education, almost all respondents intended to take antenatal classes for pregnant women. This change in intention is affected by the increase in the knowledge levels of respondents after the education (counseling) was provided. This means that the awareness of respondents grows due to increased knowledge. Good knowledge will form a good attitude and a good attitude will foster the intention to do good things.

The researchers assumed that the knowledge levels and attitudes of respondents increased because they were curious and their knowledge improved. The knowledge a person has about a disease will indirectly affect them to take precautions. Everyone has knowledge, whether it is knowledge from within themselves or from outside themselves. Thus, having knowledge can make a person do something according to their knowledge.

CONCLUSION

Providing antenatal class education can significantly influence the knowledge and attitudes of pregnant women. This research will investigate the positive impact of pregnant women's participation in antenatal classes. Survey and interview methods will be used to analyze changes in knowledge and attitudes of pregnant women throughout the program. The research focus will also include understanding the relationship between levels of participation and reduced risk of pregnancy complications and improved maternal and infant well-being. It is hoped that the results of this research can provide in-depth insight to health service providers and pave the way for further improvements in the provision of antenatal classes to achieve optimal maternal and baby welfare.

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REFERENCES

AYU, N. (2014). *ANALISIS SISTEM PELAKSANAAN KELAS IBU HAMIL DI PUSKESMAS MALALAK DAN PUSKESMAS BIARO KABUPATEN AGAM TAHUN 2014* [Masters, UNIVERSITAS ANDALAS]. http://scholar.unand.ac.id/9584/

Dewi, M. U. K. (2020). *Pemanfaatan Kelas Ibu Hamil dengan Perencanaan Persalinan*.

Dian Ekayanti, N. W., & Suryani, P. (2019). *Edukasi Gizi pada Ibu Hamil Mencegah Stunting pada Kelas Ibu Hamil | Ekayanthi | Jurnal Kesehatan*. https://www.ejurnal.poltekkes-tjk.ac.id/index.php/JK/article/view/1389/1032

Ekayanthi, N. W. D., & Suryani, P. (2019). Edukasi Gizi pada Ibu Hamil Mencegah Stunting pada Kelas Ibu Hamil. *Jurnal Kesehatan*, *10*(3), 312. https://doi.org/10.26630/jk.v10i3.1389

Harahap, M. S., Lina, L., Veri, N., Fazdria, F., Arli, S., & Nurhayati, N. (2023). Pembelajaran kelas ibu hamil terhadap pengetahuan dan sikap ibu tentang pencegahan anemia dan Kurang Energi Kronis (KEK). *Jurnal SAGO Gizi dan Kesehatan*, *4*(2), 287–292. https://doi.org/10.30867/gikes.v4i2.1176

Hariyani, T., Nursinta, A., & Tribintari, W. E. (2021). *Journal of Community Enggagement and Empowerment*. *3*.

Istiananingsih, Y., Suhaid, D. N., & Mansyur, S. (2021). *HUBUNGAN KEIKUTSERTAAN KELAS IBU HAMIL, UMUR DAN PENDIDIKAN PADA IBU PRIMIGRAVIDA DENGAN KESIAPAN MENGHADAPI PERSALINAN DI RS PUPUK KALTIM BONTANG TAHUN 202*. *5*(2).

Kinanti, B. M. I. M., Marliana, Y., & Suwanti, S. (2022). PENGARUH PENYULUHAN MENGGUNAKAN MEDIA LEAFLET TENTANG STUNTING TERHADAP PENGETAHUAN DAN SIKAP REMAJA PUTRI. *Jurnal Midwifery Update (MU)*, *4*(1), Article 1. https://doi.org/10.32807/jmu.v4i1.133

Kirana, R. (2022). ANALISIS PENGETAHUAN REMAJA DENGAN KEJADIAN HIV-AIDS PADA REMAJA. *Jurnal Inovasi Penelitian*, *3*(7), Article 7. https://doi.org/10.47492/jip.v3i7.2206

Lestari, D., Dewi, P. D. P. K., Tangkas, N. M. K. S., & Dwijayanti, L. A. (2022). *Efektivitas Pelaksanaan Kelas Ibu Hamil Terhadap Peningkatan Pengetahuan Ibu Tentang Kesehatan Ibu Dan Anak Di Masa Pandemi Covid-19 Di Wilayah Kerja Puskesmas Buleleng I* (2). *5*(2), Article 2. https://doi.org/10.31596/jpk.v5i2.223

Lestari, D. E., Haryani, T., & Igiany, P. D. (2021). Efektivitas Media Leaflet untuk Meningkatkan Pengetahuan Siswi Tentang Sadari. *Jurnal Penelitian dan Pengembangan Kesehatan Masyarakat Indonesia*, *2*(2), 148–154. https://doi.org/10.15294/jppkmi.v2i2.52431

Naharani, A. R., Siswati, S., & Fatkhiyah, N. (2018). HUBUNGAN PERILAKU KEIKUTSERTAAN KELAS IBU HAMIL DENGAN TINGKAT KECEMASAN DALAM MENGHADAPI PERSALINAN PADA IBU HAMIL PRIMIGRAVIDA TRIMESTER III DI DESA KALISAPU KECAMATAN SLAWI. *Siklus : Journal Research Midwifery Politeknik Tegal*, *7*(2), 300. https://doi.org/10.30591/siklus.v7i2.856

Notoatmodjo, S. (2012). *Metodologi Penelitian Kesehatan Tahun 2012* (Jakarta). Rineke Cipta. //perpus.poltekkesjkt2.ac.id/index.php?p=show_detail&id=3341&keywords=

Pinheiro, L. T., Rodrigues, J. F. M., & Borges-Nojosa, D. M. (2016). Formal education, previous interaction and perception influence the attitudes of people toward the conservation of snakes in a large urban center of northeastern Brazil. *Journal of Ethnobiology and Ethnomedicine*, *12*(1), 25. https://doi.org/10.1186/s13002-016-0096-9

Renbarger, K. M., Place, J. M., & Schreiner, M. (2021). The Influence of Four Constructs of Social Support on Pregnancy Experiences in Group Prenatal Care. *Women's Health Reports*, *2*(1), 154–162. https://doi.org/10.1089/whr.2020.0113

Saifuddin, A. B. (2016). *Kematian Ibu di Indonesia Dapatkah kita mencapai target MDGs 2015? 30*(1).

Sihabudin, A. (2022). *Komunikasi Antarbudaya: Satu Perspektif Multidimensi*. Bumi Aksara.

Sitorus, N., & Fransisca, L. (2014). *PENGARUH PENDIDIKAN KESEHATAN TERHADAP PENGETAHUAN DAN SIKAP CUCI TANGAN PAKAI SABUN PADA SISWA SD NEGERI 157 KOTA PALEMBANG TAHUN 2014*.

Suciadi, A. L., Inggrit, I., & Aritonang, A. I. (2022). *Sikap Generasi Y di Surabaya Pada Pesan Iklan Youtube OVO Versi "Pake OVO di Indomaret, Bisa Kakak!" 10*.

Suryati, S., Murwati, M., Febriani, E., & Efriana, M. (2023). *Pengaruh Promosi Kesehatan dengan Media Bukar (Booklet dan Kartu Iva) terhadap Peningkatan Pengetahuan Tentang Kanker Serviks pada Ibu Pus di Puskesmas Kota Mukomuko | Sulastri | Jurnal Ilmiah Universitas Batanghari Jambi*. http://ji.unbari.ac.id/index.php/ilmiah/article/view/4114

Syam, D. M. (2016). *Hubungan Pengetahuan dan Sikap Masyarakat Dengan Pengelolaan Sampah di Desa Loli Tasiburi Kecamatan Banawa Kabupaten Donggala*. *2*(1).

Wijaya, N., & Yuniawan, A. (2022). Efektivitas Pembelajaran Online Pada Pegawai di Lingkungan Pemerintahan Kabupaten Grobogan. *Scholaria: Jurnal Pendidikan dan Kebudayaan*, *12*(2), 168–181. https://doi.org/10.24246/j.js.2022.v12.i2.p168-181