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The Effect of a Pocketbook On Increasing Mother Knowledge Regarding Development And Stimulation of Children 0-24 Months

Diana Hartaty Angraini[1]✉, Elly Dwi Wahyuni[2], Aticeh[3], Rivani Hasan[4]

[1,2 ,3,4] Midwifery Departement, Poltekkes Kemenkes Jakarta III, Indonesia

✉ diana.hartaty@poltekkesjakarta3.ac.id; Tlp: +6281395451525

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Abstract

Failure to invest in early childhood development can cause developmental delays and stunt growth, optimal performance, and performance of children throughout their lives. Through knowledge, parents can help these children achieve the required potential to invest in early childhood development and develop physically cognitive, emotional, and social capacity. One solution to improve Parental knowledge is to provide health education through pocketbook media. This study is to determine the effect of giving pocketbooks of mother's knowledge of the development and stimulation of children 0-24 months at Posyandu, Klender Jakarta Timur. The method of this study is a quantitative research design with Quasi Experiment Non-Equivalent Design Control Group. Sampling with consecutive sampling technique. Total respondents were 58 mothers who have children 0-24 months. This research using the primary data collection method using a questionnaire. On Statistical calculations, Wilcoxon test results showed an increase in significant knowledge, between before and after treating the group intervention (p = 0,000) while the Mann Whitney test shows a difference significant between the control and intervention groups (p = 0,000).Based on the results It concluded that the pocketbook had a significant effect on improving the mother's knowledge of the development and stimulation of children 0-24 months.

Keywords: Development; Stimulation; Knowledge; Children 0-24 months; Pocketbook

INTRODUCTION

The Ministry of Health 2016 reported that 0.4 million (16%) of Indonesian toddlers experience developmental disorders, both fine and gross motor development, hearing loss, lack of intelligence, and delays in speaking. Based on the preliminary study, the number of children under five conducted by SDIDTK in 2018 has not reached 100% in the area of Duren Sawit health center. Data obtained for children 0-24 months at SDIDTK on Posyandu RW. 09, which is 63.3%. In 2018 the number of children under five reported having been delayed in development at the RW Posyandu 9 of 6.6%.

Indonesia commits to achieving the Sustainable Development Goals (SDGs) target by 2030, especially related to child development. Children are one of the targets in the SDGs. Of the 17 targets set in the SDGs, one of the goals related to children is to meet the educational needs of children, especially education at an early age. The future fate of children in Indonesia in the next 13 years determined by the extent to which the strategies that have been prepared by the government can be implemented continuously from now on.

Based on the Centres For Disease Controls in 2018, the early years of a child's life are significant for health and subsequent development. One of the main reasons is that a child's brain proliferates before birth and continues into early childhood. Although the brain continues to develop and change into adulthood, it is

from before birth to age that this can build the foundation for successful learning, health, and future life. Development is the increase in the structure and function of the body, which is more complicated in the ability to rough motion, smooth motion, speech, and language as well as socialization and independence. One way to get quality children is to monitor development regularly so that if detected, a disturbance can intervene immediately. Early childhood intervention can have long-term effects on intellectual capacity, personality, and social behavior. Therefore, it is essential to detect the development of childhood. Failure to invest in early childhood development can cause developmental delays and hamper the optimal growth and performance of children throughout their lives (UNICEF).

Evidence in The Lancet Early Childhood Development Series (2016) highlights the profound benefits of investing in early childhood development for learning, productivity, health, and social interaction along the journey of life. In this case, it is the importance of the early years or the first 1000 days starting from conception and continuing in the parenting process based on parental knowledge as the main principle of needed for responsive care at the beginning of learning. Parental education can help these children reach the required potential by investing in early childhood development and developing physical, cognitive, emotional, and social capacity. Therefore parents must have insight into the importance of rapid childhood development at every stage of a child's life from before conception to throughout life.

The results of research conducted by Silvia Marischa in the year 2016 states that 56.5% have good knowledge, and 74.8% had a gross motor skill.

This result shows there is a relationship between parents' knowledge about stimulation with the development of gross motor skills of children aged 0-5 years in Bumi Aji Village Central Lampung**.**

Since 2007, the Ministry of Health, in collaboration with the Indonesian Pediatrician Association (IDAI) has developed instruments for the stimulation, detection and early intervention of growth and development for children aged 0 to 6 years.

The Guidelines for the Implementation of Stimulation of Detection and Early Development Interventions (SDIDTK) Children at the Basic Health Service Level. Health centers as primary health facilities are responsible for the delivery of health services in the area, including SDIDTK services and are carried out by trained health workers (doctors, midwives, nurses, and nutrition workers). Then the Posyandu is also the spearhead of front line service to the community through Posyandu cadres that are fostered by Local health center, in East Jakarta, there are 1158 active Posyandu as promotive and preventive efforts.

Increasing parents' knowledge, understanding, and awareness requires various efforts to disseminate information to the public about the importance of monitoring children's development. One of the information media that can increase a mother's knowledge is mothers can read in the book of maternal and child health (KIA Book). The book has already made about the stimulation of child growth and development, but the book is more often not read. It is used only at the time of the inspection. Therefore, researchers are interested in making a pocketbook about growth and stimulation. This book is small, colorful, illustrated, and exciting. So it's easy to read and carry anywhere. The preparation of this pocketbook is tailored to the needs and combined with pictures so that it attracts the attention of mothers in reading, understanding, and practicing it. .Based on preliminary studies conducted through interviews and questionnaires, 14 out of 15 mothers have an interest

in having health education media in the form of pocketbooks. Therefore the role of health workers, especially midwives, is needed in providing education to parents about child development.

The purpose of this study was to determine the effect of giving a pocketbook on a mother's knowledge of the development and stimulation of children 0-24 months.

METHOD

This quantitative research study used to describe research that aims to assess concepts or events wherever possible objectively and can apply through numerical and statistical means. The design of this study was to look at the influence of pocketbooks on increasing maternal knowledge about the development and stimulation of children from 0-24 months in the Posyandu, Klender, East Jakarta. The research design used is experimental with Quasi Experiment Non-Equivalent Control Group Design, in which the researcher gives treatment then measures the therapy. The procedure provides a pocketbook to mothers who have children aged 0-24 months.

The sample size for this study was 58 respondents, 29 respondents in the control group, and 29 for intervention groups. The sampling technique used in this study is a non-probability sampling that is using consecutive sampling. The research instrument used a questionnaire and pocketbook as a media for health education child development and stimulation.

In the experimental group, they worked pre-test before a given pocketbook, and after that, the respondent granted the post-test. In the control group, a pre-test gave before giving lecture health education and post-test after giving lecture health education. Posttest data took after the 1-week pre-test. This research has received ethical approval from the Poltekkes Jakarta III ethics commission with the number KEPK-PKKJ3 / 169 / IV / 2019.

RESULT AND DISCUSSION

Table 1 Characteristics of Respondents

Distribution	Intervention group		Control group	
	F n=29	%	F n=29	%
Age				
Reproductive (15-49 years)	29	100	29	100
Not Reproductive				
(>50 years)	0	0	0	100
Education				
Elementary	1	3.4	1	3.4
Junior High School	4	13.8	6	20.7
Senior High School	19	65.5	19	65.5
Diploma/ Bachelor	5	17.2	3	10.3
Occupation				
housewives	29	100	27	93.1
employees	0		2	6.9

From 29 respondents in the intervention group and 29 respondents in the control group, it was found that the number of respondents in the intervention group was 15-49 years old, 100% and age> 49 years 0%. Whereas in the control group the number of respondents aged 15-49 years was 100% and age> 49 years 0%. The last educational background of respondents in the intervention

group was 3.4% of respondents who graduated from elementary school, 13.8% of respondents graduated from junior high school, 65.5% of respondents graduated from high school and 17.2% of respondents graduated diploma or bachelor. While the last educational background of respondents in the control group was 3.4% of respondents who graduated from elementary school, 20.7% of respondents graduated from junior high school, 65.5% of respondents graduated from high school and 10.3% of respondents graduated diploma or bachelor. For the work of the mothers of 29 intervention group respondents, there were 100% of mothers having a job as housewives. In the control group, 93.1% had jobs as housewives and 6.9% had jobs as employees.

Table 2 Average Respondent Knowledge Level Regarding Development and Stimulation Children 0-24 Months

Intervention Group	Average	Median	Min	Max	SD	N	Score
Pre -Test	83.45	80.00	75	95	5.686	29	100
Post - test	92.07	90.00	80	100	5.904	29	

The average mother's knowledge about the development and stimulation of children 0-24 months in the intervention group was 83.45, with a minimum value of 75 and a maximum value of 95. The pre-test means the score was 80.00, with a standard deviation of 5.686. At the time of the post-test, the average cost of maternal knowledge increased to 92.07, with a minimum amount of 80 and a maximum value of 100. The middle value is 90.00 and a standard deviation of 5.904

Table 3 Average Respondents Knowledge Level Regarding Development and Stimulation Children 0-24 Months

Control group	Average	Median	Min	Max	SD	N	Score
Pre -test	74.48	75.00	55	90	9.097	29	100
Post - test	80.69	80.00	60	100	8.735	29	

The average mother's knowledge about the development and stimulation of children 0-24 months in the control group was 74.48 with a minimum value of 55 and a maximum value of 90. The pre-test means the score was 75.00 with a standard deviation of 9,097. At the time of post-test, the average value of maternal knowledge increased to 80.69 with a minimum value of 60 and a maximum value of 100. The middle value increased to 80.00 and a standard deviation of 8,735.

Table 4 Average Respondent Knowledge Based on Providing Health Education Handbook Regarding Development and Stimulation of Children 0-24 Months

Intervention Group	N	Negative Rank	Positive Rank	Ties	Mean Rank	Z	P-*Value*
Pre -test Post - test	29	0	29	0	15.00	-4.788	< 0,01

A positive rank value of 29, which means that 29 mothers experienced an increase in knowledge from the pre-test value to the post-test value, the average increase in value (mean rank)

was 15.00, and no respondent experienced a decrease in value. The statistical analysis results obtained a p-value of 0,000, so there is a relationship between the provision of health education in the pocketbook media to changes in maternal knowledge about the development and stimulation of children 0-24 months.

Table 5 Average Respondent Knowledge Based on Providing Health Education Lectures Regarding Development and Stimulation of Children 0-24 Months

Control Group	N	Mean	SD	SE	Mean (Paired)	P-*Value*
Pre –test	29	74.48	9.097	1.689	-6.207	<0,01
Post - test	29	80.69	8.735	1.622		

Knowledge in the pre-test was 74.48, with a standard deviation of 9,097. In the post-test, the average value of the knowledge level was 80.69, with a standard deviation of 8,735. The mean difference between the pre-test and post-test is -6,207. The statistical analysis results obtained p-value 0.000, then there is a relationship between giving health education lectures to changes in maternal knowledge about the development and stimulation of children 0-24.

Table 6 Average mother's knowledge regarding child development and stimulation

Group	N	Mean Rank	Z	P-*Value*
Intervention	29	33.79	-4.708	< 0,01
Control	29	19.21		

The increase in the value of maternal knowledge about the development and stimulation of children 0-24 months in the intervention group was 39.79. In the control group, the average increase in the value of knowledge level was 19.21. Based on statistical analysis obtained p-value of 0.000, this result indicates there are significant differences in the intervention group and the control group, and it can conclude that there is the influence of a pocketbook with increased maternal knowledge about the development and stimulation of children 0-24 months.

Characteristics of Respondents

The results of the study showed that the analysis conducted showed that the mother's knowledge was entirely dependent on the age factor of the mother, who was mostly in the productive group (20-35 years) of 88.3%. One factor that influences knowledge is age. The more mature age will affect the level of knowledge possessed and how to obtain that information. Anyone who receives productive (young) is more receptive to knowledge than someone who receives unproductive (more mature) because adults have experiences that change the mindset that is difficult to change. Educational background of the last respondent in the intervention group, the majority of respondents graduated from high school, 65.5%.

Previous research is in line with research Fitria Sunanti (2016), the results of the Chi-Square statistical calculation results obtained a value of P = 0,000, so it concluded that there is a relationship between parental education and toddler development, parents who have low education have children who experience developmental delays.

Education is one of the factors that influence the formation of behavior. For the work of mothers of 29 intervention group respondents, there are 100% of mothers having a job as Housewives. In the control group, 93.1% had a career as a housewife.

The difference in Mother's Knowledge before and After Intervention

Based on the research of Havni Van Gobel (2012), that there is a relationship between the level of mother's knowledge and children's motor development (3.78> 3.481) 39. Then in the study of Helmy Betsy Kosegeran (2013), the results of his research showed that there was a significant relationship between the level of parental knowledge about early stimulation and the development of children aged 4-5 years (p = 0.005). Parental education can help these children reach the potential needed by investing in rapid childhood development and developing physical, cognitive, emotional, and social capacity.

In the study of Silvia Marischa (2016), 121 parents (56.5%) had good knowledge, and 160 children (74.8%) had healthy gross motor development. In this result found the relationship of parental knowledge about stimulation with the total motor development of children aged 0-5 years11. Increased awareness can interpret as a result of health education with a pocketbook. The selection and use of media is a crucial component. Man Whitney test results obtained an average increase in knowledge in the intervention group of 39.79 while in the control group of 19. The test results for the knowledge variable found there were significant differences between the average increase in the value of knowledge in the control group and the intervention group by 20.58.

Based on statistical analysis obtained p-value 0.000, it means there is the influence of a pocketbook with an increase in maternal knowledge about the development and stimulation of children 0-24 months. Eko Suryani's research (2016) said the influence of a child's stimulation pocketbook on the increase in parental knowledge (P = 0.007).

The pocketbook as a medium for health education acts as an effort to empower individuals, groups, and communities to maintain, improve, and protect their health through increased knowledge, willingness, and ability. At the time of conducting the research, because this media was relatively new at the place of the study, most respondents had a great curiosity about the contents of the pocketbook and the material delivered to completion. Based on The Lancet Early Childhood Development Series (2016) highlights the profound benefits of investing in early childhood development for learning, productivity, health, and social interaction along the journey of life. In this case, it is known the importance of the early years or the first 1000 days starting from conception and continuing in the nurturing process based on parental knowledge as the main principle of what needed for responsive care at the beginning of learning

Knowledge of the development and stimulation of children from 0-24 months needed by every parent to be able to assist them in monitoring the child's progress based on their age. This stated by the Ministry of Health of the Republic of Indonesia (2016) in the SDIDTK implementation manual that the critical period in child development is in infancy. Organic growth that takes place during infancy will influence and

determine the child's subsequent event. After birth, especially in the first two years of life, the growth and development of brain cells are still ongoing, and the growth of nerve fibers and their branches occurs, so that involved nerve and brain networks formed. The number and regulation of relationships between nerve cells will significantly affect all brain performance, ranging from the ability to learn to walk, recognize letters, to socialize. Therefore, health education regarding the development and stimulation of children from 0-24 months needs to be carried out and introduced to the broader community. Midwives have essential duties in counseling and health education, not only to women but also to families and communities. This activity includes one of childcare.

The primary purpose of childcare are for prevention, holistic health promotion, creative and flexible, supportive, caring, guidance, monitoring, and education as well as continuous care, as desired and not authoritarian and respectful of choices

According to the research data above, the pocketbook influences to increase the mother's knowledge about the development and stimulation of children from 0-24 months.

This pocketbook can use as a medium that is quite useful because mothers have an interest in reading. Increased maternal knowledge after being given intervention is a result of providing health education with the pocketbook media. This pocketbook media is a method of health promotion that can be used as a reference to monitor children's development and stimulate children according to age stages. Mother's knowledge can be applied directly to the child to control the progress of speech and language skills, creativity, social awareness, emotional, and intelligence. Moral development and the foundations of a child's personality are also formed at this time so that any slightest deviation/deviation, if not detected and not handled properly, will reduce the quality of human resources in the future. Thus the pocketbook media as a useful health education media is used to provide increased knowledge about the development and stimulation of children 0-24 months to mothers.

CONCLUSION

The average level of maternal knowledge increases after being given health education with a development and stimulation pocketbook of children aged 0-24 months. Pocketbook media has a significant relationship and influence on increasing maternal knowledge regarding the development and stimulation of children 0-24 months.

Midwives can provide health education and health checks to each client, such as mothers who have children 0-24 months and children 0-24 months to find out the development and stimulation that can give according to the age of the child. Midwives expected to network to collaborate with playgroups, kinder garden and caregivers to monitor children's development and stimulation. Midwives conduct health promotion training to cadres regarding the development and stimulation of children from 0-24 months.

REFERENCES

Hardika, M. D. (2018). Jurnal Aisyah : Jurnal Ilmu Kesehatan Praktek Stimulasi Motorik Kasar Ditinjau dari Pengetahuan Ibu Mengenai Tahap Perkembangan Bayi 0-12 Bulan, *3*(1), 29–38.

Black, M. M., Walker, S. P., Fernald, L., Andersen,C. T., DiGirolamo, A. M., Lu, C., … Lancet Early Childhood Development Series Steering Committee (2017). Early childhood development coming of age: science through the life course. *Lancet (London, England)*, *389*(10064), 77–90. doi:10.1016/S0140-6736(16)31389-7

Oms. Advancing Early Childhood Development (2017). From Science To Scale An Executive Summary For The Lancet ' S

Series “ Young Children ’ S Healthy Development Depends On Nurturing Care — Care Which Ensures Health , Nutrition , Responsive Caregiving , Safety And Se. Lancet.

Profil Kesehatan Indonesia (2016). Http://Www.Depkes.Go.Id/Resources/Download/Pusdatin/LainLain//Datadaninformasikesehatanindonesia2016-Smallersize-Web.Pdf. Profil Kesehat Indones. 2017;100.

Hardika, M. D. (2018). Jurnal Aisyah : Jurnal Ilmu Kesehatan Praktek Stimulasi Motorik Kasar Ditinjau dari Pengetahuan Ibu Mengenai Tahap Perkembangan Bayi 0-12 Bulan, *3*(1), 29–38.

Lwamba C, Mehra V, Misunas C, Mizunoya S, Murphy P, Murray C, Et Al.(2018). Progress For Every Child. Unicef Data Anal Sect.

Walter F, Wrester F (2016). Early Childhood Development : J Child Dev. page ;23(232):23

Kemenkes Ri. Depkes RI. (2010). Stimulasi, Deteksi Dan Intervensi Dini Tumbuh Kembang Anak (Sosialisasi Buku Pedoman Pelaksanaan Ddtk Di Tingkat Pelayanan Kesehatan Dasar), Jakarta. 2016;122

Dinas Kesehatan DKI Jakarta (2017). Profil Kesehatan.

Silvia Marischa O. Hubungan Pengetahuan Orang Tua Tentang Stimulasi Dengan Perkembangan Motorik Kasar Anak Usia 0 – 5 Tahun Di Desa Bumi

Suryani E, Syamsiatun Nh (2016). Jurnal teknologi kesehatan: Buku Saku Stimulasi Perkembangan Meningkatkan Pengetahuan Dan Sikap Pada Ibu Di Tk Pembina..12(2):86–91.

Susanto A (2011). Pengantar Anak Usia Dini: Pengantar Dalam Berbagai Aspeknya. Jakarta: Prenada Media Group.

Kosgeran Hb, Atas R, Babakal A (2013). Hubungan Tingkat Pengetahuan Orang Tua Tentang Stimulasi Dini Dengan Perkembangan Anak Usia 4-5 Tahun Di Desa Ranoketang Atas.

Iin Cempaka. (2016). Hubungan Stimulasi Perkembangan Terhadap Perkembangan Anak Usia 0-5 Tahun Di Rw 8 Kelurahan Kalicari Kota Semarang. Fak Kedokt.eran, 31–48

Ariani, Yosoprawoto M (2012). Usia Anak Dan Pendidikan Ibu Sebagai Faktor Risiko Gangguan Perkembangan Anak. ;27(2):118–21

Gobel H Van (2012). Perkembangan Motorik Kasar Bayi Usia 6-9 Bulan Di Posyandu Kelurahan Libuo Tahun 2012.; 40.

Roselin R. (2018) Pengaruh Media Promosi Kesehatan Booklet Terhadap Peningkatan Pengetahuan Dan Sikap Ibu Mengenai Makanan Bergizi Pada Anak Di Tk Putera Sejahtera Medan Tahun 2017.

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