

THE EFFECTIVENESS OF DEVELOPMENTAL PRE-SCREENING QUESTIONNAIRE MONITOR BOOK IN INCREASING KNOWLEDGE : QUASI PRE EXPERIMENTAL

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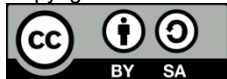
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ABSTRACT

Child development monitoring is very important. The prevalence of developmental delays in children under 5 years of age in Indonesia in 2018 was reported by WHO as 7,512.6 per 100,000 population (7.51%). The purpose of this study was to determine the effectiveness of the Developmental Pre-Screening Questionnaire (DPSQ) monitoring book in increasing caregivers' knowledge in conducting early detection of early childhood development. This study was a quasi-pre-experimental study with a one-group pretest and posttest design. The sample in this study were all caregivers at the Metta Mama & Maggha Foundation. The results of the study showed that the average level of caregiver knowledge in conducting Early Detection of Early Childhood Development before being given the DPSQ monitoring book was 74.81. The average level of knowledge of caregivers in conducting Early Detection of Early Childhood Development after being given the DPSQ monitoring book was 95.19 (p value = 0.000). From the results of this study, it is expected that caregivers can carry out early detection of development with the DPSQ so if there is a developmental delay, appropriate handling can be carried out.

Keywords: DPSQ monitor book; early childhood development; knowledge

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INTRODUCTION

Development is a change from the beginning of conception to the ongoing life. Early childhood development includes all aspects starting from physical, cognitive, social-emotional, social context, moral, language, self-identity and gender development (Sulaiman et al., 2019). The World Health Organization (WHO) reported that globally, 149.2 million children under the age of 5 had developmental disorders in 2020. The prevalence of children with developmental disorders living in low- and middle-income countries is 95%. The prevalence of developmental delays in children under the age of 5 in Indonesia in 2018 was reported by WHO as 7,512.6 per 100,000 population (7.51%) (Herawati Yanti, 2022).

It is estimated that around 5 to 10% of children experience developmental delays, while

the incidence of general developmental delays in children under 5 years of age is not yet known for certain. However, it is estimated that around 1 – 3% of children experience general developmental delays (Inggrani et al., 2019). If deviations are discovered too late, intervention will be more difficult to carry out and this will also affect the growth and development of the child (Sinaga et al., 2021).

The role of parents in family life can determine the steps that must be taken to help the development of children. The role of parents can be replaced by caregivers for children who do not have parents (abandoned children). The assistance provided between parents and caregivers can be different, therefore efforts to improve the ability of caregivers to detect child development are very important. This effort is made to pay attention to the development of abandoned children without parental care into

children who grow normally as children who are cared for by parents, namely in guiding, educating, and teaching children to be responsible for themselves and living in society.

For that, screening efforts are needed in child growth and development. There are several efforts to conduct child development screening examinations, one of the instruments that can be used is the DPSQ (Developmental Pre-Screening Questionnaire). DPSQ is a screening instrument applied to primary health services and is required by the Ministry of Health (Kemenkes RI, 2016). Child development screening is a significant thing. Pre-screening development questionnaires can be used to determine the development of gross motor skills, fine motor skills, language skills, socializing and independence of children (Wati, 2017).

Research related to the use of books as a medium to increase knowledge was also conducted by Desi, et al. (2023) which states that education with media books that are packaged attractively has a significant influence ($p=0.000$) on increasing knowledge. Media from printed technology such as pocketbooks or pocket books, as an alternative media that can be used to support the smooth running of health education in health services (Desi et al., 2023). The book media also explains about DPSQ, how to monitor development with the DPSQ at each stage of the child's age and how to read the results (interpretation) of the completed DPSQ and what caregivers should do according to the results of monitoring the child's development.

Metta Mama & Maggha Foundation is a shelter where individuals (abandoned children) are accepted and nurtured to grow into happy, loving, caring and self-confident individuals. This foundation strives to help abandoned babies and children become the best individuals possible (Metta Mama Maggha, 2022). When interviewed with one of the administrators, it was said that they had never conducted development screening for early childhood using DPSQ because the caregivers had never received materials related to DPSQ. This is the basis for conducting research on the effectiveness of the DPSQ monitoring book in increasing caregivers' knowledge in conducting

early detection of early childhood development at the Metta Mama & Maggha Foundation.

METHOD

The type of research that will be used in this study is quantitative research using a quasi-pre-experimental research type with a one group pretest and post-test design. The sample selection in this study used the total population, namely all caregivers at the Metta Mama & Maggha Foundation who met the inclusion criteria which are caregivers who work at the foundation and are willing to be respondents. Caregivers will be measured for their level of knowledge before and after being given the DPSQ monitoring book with a gap of 2 weeks. The sample in this study amounted to 36 people. This study has been submitted for ethical clearance with the number 028 / KEPK / DI / PKKB / 2024.

Univariate analysis used to find the mean, median, mode, minimum and maximum values of caregiver knowledge in the form of a frequency distribution table in the pretest and posttest. Bivariate analysis using Wilcoxon sign rank to assess the effectiveness of providing DPSQ monitoring book to improve caregiver knowledge in conducting early detection of development.

RESULTS

The study was conducted on 36 respondents who were caregivers at the Metta Mama and Maggha Foundations, whose level of knowledge was measured using a questionnaire before and after being given the DPSQ monitoring book.

Table 1. Frequency Distribution of Respondent Characteristics (n = 36)

Characteristics of respondent	N	%
Age		
< 20 years old	0	0
20 – 35 years old	33	91,7
>35 years old	3	8,3
Education		
High School	4	11,1
Diploma III	18	50
Bachelor	14	38,9
Work Experience as Caregiver		
< 1 Year	11	30,6
1 – 3 Years	20	55,6
>3 Years	5	13,9
Total	36	100

From table 1, the characteristics of the respondents are that almost all of them, namely 33 people (91.7%) are aged 20-35 years, half of them, namely 18 people (50%) have a Diploma III education, and the majority, namely 20 people (55.6%) have work experience of 1-3 years.

Table 2 Frequency Distribution of Caregivers' Knowledge in Conducting Early Detection of Early Childhood Development Before and After Being Given the DPSQ Monitoring Book

Knowledge	Mean	Med	Modus	Min	Max
Pretest	74,81	80	80	47	93
Posttest	95,19	100	100	73	100

Based on table 2, the average level of knowledge of caregivers before being given the DPSQ development monitoring book was 74.81 and after being given the development monitoring book, the average level of knowledge of caregivers increased to 95.19.

Table 3 Bivariate Analysis Results of the Relationship between Caregivers' Knowledge in Conducting Early Detection of Early Childhood Development Before and After Being Given the DPSQ Monitoring Book

Knowledge	KnowledgePosttest-KnowledgePretest
Z	-5.131 ^b
Asymp.(2-tailed)	.000

From table 3, bivariate analysis with Wilcoxon Sign Rank, a p value of 0.000 was obtained, which means that providing the DPSQ monitoring book is effective in increasing caregivers' knowledge in carrying out early detection of early childhood development.

DISCUSSION

The results of the study showed that the average level of knowledge of caregivers in conducting early detection of early childhood development before being given the DPSQ monitoring book was 74.81, with a minimum value of 47 and a maximum of 93. Initial knowledge of caregivers can be obtained through education,

experience, social relationships (socio-cultural environment), and exposure to mass media (access to information). Although in terms of education level, almost all caregivers are highly educated, not all caregivers have experience in conducting early detection of early childhood development. A person's experience greatly influences knowledge, the more experience a person has about something, the more knowledge a person will have about it (Notoatmodjo, 2018).

As stated in the research by Fazrin et al., a person's knowledge can be obtained from experience, information sources, either from books or mass media (Fazrin et al., 2018). Sources of information obtained from both formal and non-formal education can provide short-term influences that result in changes or increases in knowledge. The advancement of technology so that various types of mass media are available that can influence public knowledge about new innovations. Various forms of mass media such as television, radio, newspapers, magazines, counseling and others have a major influence on the formation of people's opinions and beliefs (Notoatmodjo, 2018). In this study, the source of information provided to caregivers was in the form of a development monitoring book with DPSQ.

After being given the DPSQ monitoring book, the average level of knowledge of caregivers in conducting early detection of early childhood development was 95.19, with a minimum value of 73 and a maximum of 100. This increase in knowledge has an impact because the provision of a development monitoring book with DPSQ to caregivers can be learned about development monitoring using the DPSQ according to age. Books as a learning medium are very good for forming knowledge (Taamu et al., 2020). Printed materials also play an important role in health research because they provide clear messages that can be taken home. They are effective in reinforcing information that is delivered orally or when used as a medium to convey the information itself (Suaebah et al., 2018). This is in line with research conducted by Achmadi (2015), which states that book media has an influence on increasing students'

knowledge about healthy snack food nutrition education (Achmadi, 2015). The results of this study are also supported by the good level of education of caregivers, so that caregivers can easily understand all the information in the DPSQ development monitoring book. Education is an important thing for humans, which can change perceptions about something. The higher a person's education, the easier it is to receive information that plays a role in a person's behavior (Ambarwati et al., 2019)

In this study, a p value of 0.000 was obtained, which means that providing DPSQ monitoring books is effective in increasing caregiver knowledge in conducting early detection of early childhood development. This study is in accordance with the results of Desi et al.'s research (2023) which states that education using books that are packaged in an attractive way has a significant influence ($p=0.000$) on increasing knowledge (Desi et al., 2023). Printed media such as pocketbooks or pocket books, as an alternative media that can be used to support the smooth running of health education in health services (Ruhmawati et al., 2022).

The first six years are the most appropriate time to monitor a child's growth and development so that their development is not delayed (Sumiyati, 2019). In this case, the role of caregivers becomes very important in the process of increasing the growth and development of a child. The role of caregivers is very important, since caregivers are the ones who provide the primary care and shape the character of children at the Metta, Mama, & Maggha Foundation, as substitutes for parents. The hope is that by knowing the growth and development of the child, caregivers can know the appropriate stimulation so that there is no delay. If there is a delay, the caregiver can carry out the right handling so that the child's growth and development can occur optimally (Kemenkes RI, 2016).

Providing DPSQ monitoring books to caregivers can improve caregivers' knowledge and skills in conducting early detection of the development of each child in the Foundation. In addition to being a source of information for caregivers, development monitoring books with

DPSQ can also be used as a development report for each child from 3 months to 72 months. The report can be used as a reference for how the child has developed so far and if there is a delay in development, early intervention can be carried out to overcome this.

CONCLUSION

The use of the DPSQ monitoring book is very effective in increasing caregiver knowledge in conducting early detection of early childhood development. In addition to knowledge, caregiver skills also improve in implementing development screening with DPSQ. It is hoped that children's foundations will ensure that children raised in institutions can receive adequate early detection of their development, and the caregivers can provide their need for stimulation. For further researchers, it is expected to conduct research with a larger sample and add other variables.

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