PARENTING SKILL TRAINING IMPROVES PARENTS KNOWLEDGE HOW TO MONITOR GROWTH AND DEVELOPMENT OF PRESCHOOL CHILDREN

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Abstract

Monitoring Growth and development is very important, ideally every child should receive growth and development monitoring from trained health personnel on a regular basis to find out if there is a delay, this is to prevent further growth and development disorders and consequently difficult to treat. However, the unbalanced ratio of the number of health workers and children in Indonesia causes growth and development monitoring activities to be not optimal. This type of research is quantitative with a quasi-experimental method and a pre-test and post-test control group design. This study was randomly divided into two groups. The sample size in this study was 50 respondents who met the inclusion and exclusion criteria. Both groups were conducted pre-test and post-test. Then the data was analyzed by using the Wilcoxon test, a p-value of 0,000 was obtained, so that Parenting Skill Training increases parents' knowledge about how to monitor Child Growth and Development. In this case, it is necessary to provide assistance to parents to monitor the growth and development of children every month.

Keywords: *Growth, development, parenting skills, preschool children*

INTRODUCTION

Monitoring Growth and development is very important, ideally every child should receive growth and development monitoring from trained health personnel on a regular basis to find out if there is a delay, this is to prevent further growth and development disorders and consequently difficult to treat. However, the unbalanced ratio of the number of health workers and children in Indonesia causes growth and development monitoring activities to be not optimal.

Globally, the shortage of health personnel based on need in 2013 was estimated at around 17,4 million, of which nearly 2,6 million were doctors, about 9 million were nurses and midwives, and the remainder represented all other cadres of health workers. The largest shortages of health personnel by need are in Southeast Asia at 6,9 million and Africa at 4,2 million. Absolute shortages are highest in Southeast Asia due to the large populations of countries in the Region, but relatively (i.e. taking into account population size) the challenges are greatest in the African Region. The global shortage of health care workers by need is projected to remain at more than 14,5 million by 2030 (a decrease of only 17%)[1].

The prevalence of stunted growth continues to increase globally, 167 million children (25,6%) children under five experience stunted growth, with a prevalence rate of 0,40% in several countries in sub-Saharan Africa and South Asia[2]. Riskesdas data on the prevalence of malnutrition (BB/U - 3SD s/d < - 2SD) was 13.0% in 2007 and increased in 2013 by 13,9% then in 2018 by 13,8%, while the prevalence of malnutrition (W/U <-3SD) in 2007 was 5,4%, for 2013 it was 5,7%, while in 2018 it was 3,9%[2,3].

Based on the description above, monitoring growth and development is very important for parents so that growth and development problems will be quickly detected and resolved, therefore understanding parents how to monitor growth and development is very necessary. Parents should be able to use growth and development assessment instruments so that parents can do it themselves at home.

MATERIAL AND METHODS

This research is a quantitative study, the research design uses a quasi-experimental method (quasi-experimental) with a pre-test and post-test control group design (control group). This study was randomly divided into two groups. One group is the treatment group with parenting skill training given to parents and one group is the control group as a comparison. The sample size in this study were all parents whose children studied at the Samarinda Kindergarten. In this study, there were 50 respondents who met the inclusion and exclusion criteria. The instrument used is a Knowledge questionnaire on how to monitor Growth and Development. The intervention group was given parenting skill training. Both groups were conducted pre-test and post-test.

RESULTS

Profile of Respondents

Table 1. Frequency and percentage of the profile of the respondents

Characteristics	n	%
Mother's age		
17-25 years old	4	8
26-35 years old	27	54
36-45 years old	16	32
46-55 years old	3	6
Mother's education		
Elementery school	6	12
Junior high school	17	34
Senior high school	22	44
Academy	5	10
Mother's work		
Does not work	41	82
Private	6	12
Businessman	3	6

Characteristics	n	%
Parent's income		
1m -1,5m	10	20
1,5 million-2,6 million	27	54
2,6 million-5,2 million	12	24
> 6 million	1	2
Nanny		
Parent	49	98
Not parents	1	2
Resources		
Television	3	6
Book	1	2
Health workers	46	92

Based on table 1, the characteristics of respondents based on maternal age were 54% aged 26-35 years. Mother's education as much as 44% is high school. Mother's occupation as much as 82% is not working. Parental income as much as 54% is 1.5 million-2.6 million. Meanwhile, the characteristics of respondents based on caregivers as much as 98% are parents, and 92% of information sources are obtained from health workers.

Parents' Knowledge of How to Monitor Children's Growth in the Control Group and the Intervention Group

Table 2. Frequency Distribution of Parents' Knowledge of How to Monitor Children's Growth in the Control Group and the Intervention Group

	Group Control		Group Intervention			
			Pre Test		*Post Test*	
Category	**n**	**%**	**n**	**%**	**n**	**%**
Well	7	14	14	28	38	76
Not enough	43	86	36	72	12	24
Amount	50	100	50	100	50	100

Table 2 shows that from 50 respondents before the training intervention was carried out as much as 72% of respondents' knowledge was lacking, after the intervention the knowledge of respondents increased by 76% good knowledge. In the control group, as much as 86% of respondents' knowledge was lacking.

Parents' Knowledge of How to Monitor Child Development in the Control Group and the Intervention Group

Table 3. Frequency Distribution of Parents' Knowledge of How to Monitor Child Development in the Control Group and the Intervention Group

	Group Control		Group Intervention			
			Pre Test		*Post Test*	
Category	**n**	**%**	**n**	**%**	**n**	**%**
Well	1	2	4	8	24	48
Not enough	49	98	46	92	26	52

	Group Control		Group Intervention			
			Pre Test		*Post Test*	
Category	**n**	**%**	**n**	**%**	**n**	**%**
Amount	50	100	50	100	50	100

Table 3 shows that of the 50 respondents before the training intervention was carried out as much as 92% of respondents' knowledge was lacking, after the intervention the knowledge of the respondents increased by 48% good knowledge. In the control group as much as 98% of respondents' knowledge is lacking.

Normality test results with Shapiro Wilk in the Intervention Group

Table 4. Normality test results with Shapiro Wilk in the Intervention Group

Variable	*p*
Growth	0,001
Development	0,017

The results of the normality test as listed in table 4 using the Shapiro Wilk test in the intervention group obtained all variables with a test value of p < alpha (p < 0,05) it can be concluded that all of these variables obtained data that were not normally distributed, therefore the test will be carried out using a non-parametric method, in this case using the Wilcoxon test.

Normality test results with Shapiro Wilk in the Control Group

Table 5. Normality test results with Shapiro Wilk in the Control Group

Variable	*p*
Growth	0,002
Development	0,004

The results of the normality test as listed in table 5 using the Shapiro Wilk test in the control group are known to all variables with a test value of p < alpha (p < 0,05) it can be concluded that all these variables obtained data are not normally distributed, therefore the test will be carried out using a non-parametric method, in this case using the Wilcoxon test.

Results of Testing the Effectiveness of Parenting Skills Training on Parents' Knowledge of How to Monitor Growth and Child development

Table 6. Results of Testing the Effectiveness of Parenting Skills Training on Parents' Knowledge of How to Monitor Growth and Child development

Variable	Test	*p value*
Growth	*Pre-Test* *Post Test*	0,000
Development	*Pre-Test* *Post Test*	0,000

Based on table 6, the results of the bivariate test for each variable are as follows, knowledge of how to monitor growth obtained a p-value of 0,000, knowledge of how to monitor progress obtained a p-value of 0,000. When compared with alpha, all of these values are smaller than 0,05 which means H0 is rejected. This shows that there is a significant difference between the pre-test post-test of Parenting Skills training on knowledge of how to monitor growth and development.

DISCUSSION

The results showed that the Parenting Skills training intervention in increasing people's knowledge about how to monitor children's growth and development was very effective with p=0.000. This is in line with several studies thatIt is very important to develop programs to monitor and promote children's growth, growth instruments need to be understood by parents so that they are not misinterpreted because weight and height measurements are taken simultaneously.[2,4,5]

Knowledge of the use of KMS as well as use in growth monitoring. It is very necessary so that the nutritional status, stunting in children when deviations occur can be known quickly. Education on growth and development, can increase the knowledge of parents, cadres about the concept of growth and development. Parental education also plays an important role in behavior. The education factor has a significant relationship with the mother's behavior in giving MPASI. Monitoring development is no less important than growth monitoring. The lack of knowledge and skills of parents regarding parenting can lead to mistreatment of children. Parenting education for parents is important so that the correct way of parenting can be applied. Parenting patterns of working mothers and non-working mothers have no difference in the growth and development of children, meaning that the knowledge and education of parents greatly determine the growth and development of children. Another factor related to the nutritional status of children is infectious diseases[9,10,19,20,11-18].

Parental knowledge and lack of time in caring for children cause low levels of toddler cognition, increased knowledge about nutrition in caregivers has an impact on optimal child feeding, changes in Body Mass Index in children with changes in parental behavior in feeding practices[18–20].

CONCLUSION

Parenting Skill Training increases parents' knowledge on how to monitor Child Growth and Development.

REFERENCE

1. Resources H, Observer H, No S. Health workforce requirements for universal health coverage and the Sustainable Development Goals. 2016;(17).
2. Fink G, Levenson R, Tembo S, Rockers PC. Home- and community-based growth monitoring to reduce early life growth faltering: An open-label, cluster-randomized controlled trial. Am J Clin Nutr. 2017;106(4):1070–7.
3. Riskesdas K. Hasil Utama Riset Kesehata Dasar (RISKESDAS). J Phys A Math Theor. 2018;44(8):1–200.
4. Bégin F, Elder L, Griffiths M, Holschneider S, Piwoz E, Ruel-Bergeron J, et al. Promoting child growth and development in the sustainable development goals era: Is it time for new thinking? J Nutr. 2020;150(2):192–4.
5. Ben-Joseph EP, Dowshen SA, Izenberg N. Do parents understand growth charts? A national, internet-based survey. Pediatrics. 2009;124(4):1100–9.
6. . R, . K, Pamungkasiwi EP. Faktor pada perilaku Ibu dalam pemberian MPASI anak 6–24 bulan di Puskesmas Perumnas, Kendari. J Gizi dan Diet Indones (Indonesian J Nutr Diet. 2016;
7. Rochmah AM. Faktor-Faktor Yang Berhubungan Dengan Stunting Pada Balita Usia 24-59 Bulan Di Wilayah Kerja Puskesmas Wonosari I. Kebidanan. 2017;
8. Erlanti MS, Mulyana N, Wibowo H. Teknik Parenting Dan Pengasuhan Anak Studi Deskriptif Penerapan Teknik Parenting Di Rumah Parenting Yayasan Cahaya Insan Pratama Bandung. Pros Penelit Dan Pengabdi Kpd Masy. 2016;
9. Hidayah SN, Yuniastuti A, Kuswardinah A. Difference Of Maternal Parenting Style On Child's Growth And Motoric Development. Public Heal Perspect J. 2019;4(3):171–8.
10. Hayati N, - M, Fatimaningrum AS. Pelatihan Kader Posyandu Dalam Deteksi Perkembangan Anak Usia Dini. J Pendidik Anak. 2015;
11. Hertanto M, Shihab N, Ririmasse MP, Ihsan N, Rachmasari M, Wijaya MT, et al. Penilaian Perkembangan Anak Usia 0-36 bulan menggunakan Metode Capute Scales. Sari Pediatr. 2016;
12. Zogara AU. Pengetahuan Ibu Tentang Penggunaan KMS Berhubungan Dengan Pertumbuhan Anak 6-24 Bulan. CHMK Nurs Sci J. 2017;
13. Tiolong S, Malonda NS, Kapantow NH, Kesehatan Masyarakat Universitas Sam Ratulangi Manado F, Kunci K. Faktor-Faktor Yang Berhubungan Dengan Status Gizi Anak Usia (6-24 Bulan) Di Wilayah Kerja Puskesmas Mangaran Tahun 2016. Media Kesehat. 2016;
14. Simanjuntak CA, Fitri AD, S NNA, Puspasari A. Deteksi Dini Dan Edukasi Orang Tua Tentang Gangguan Tumbuh Kembang Balita. J Karya Abdi Masy. 2017;
15. Sugeng HM, Tarigan R, Sari NM. Gambaran Tumbuh Kembang Anak pada Periode Emas Usia 0-24 Bulan di Posyandu Wilayah Kecamatan Jatinangor. Jsk. 2019;
16. Ermayani M, Nuryanti A, Kurniati AW. Peningkatan Pengetahuan Kader Posyandu Balita di Kelurahan Jawa Kota Samarinda tentang Tumbuh Kembang dan Kegawatdaruratan Anak melalui Pendidikan Kesehatan. J Abdimas Mahakam. 2019;
17. Waliyo E, Marlenywati M, Nurseha N. Hubungan Pengetahuan Gizi dan Pola Pemberian Makanan Pendamping Asi Terhadap Status Gizi pada Umur 6-59 Bulan Di Wilayah Kerja Puskesmas Selalong Kecamatan Sekadau Hilir Kabupaten Sekadau. J Kedokt dan Kesehat. 2017;
18. Yue A, Shi Y, Luo R, Chen J, Garth J, Zhang J, et al. China's invisible crisis: Cognitive delays among rural toddlers and the absence of modern parenting. China J. 2017;78(78):50–80.
19. Buscemi J, Berlin KS, Rybak TM, Schiffer LA, Kong A, Stolley MR, et al. Health Behavior and Weight Changes Among Ethnic and Racial Minority Preschoolers and Their Parents : Associations Across 1 Year. 2016;41(December 2015):777–85.
20. Agbozo F, Colecraft E, Ellahi B. Impact of type of child growth intervention program on caregivers' child feeding knowledge and practices: a comparative study in Ga West Municipality, Ghana. Food Sci Nutr. 2016;4(4):562–72.