



Factors Associated With Interprofessional Collaboration for Handling Stunting In Children

Sri Utami¹, Rekawati Susilaningrum¹, Taufiqurrahman¹, Nursalam^{2*}

¹. Polytechnic of Health Surabaya, Ministry of Health the Republic of Indonesia.

². Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia.

*Corresponding Author: *Nursalam*

Abstract

Objective: An estimated in every 4 (25%) infants and toddlers were stunted in Surabaya. With slow progress in stunting reduction in this many regions is not due to insufficient diet alone, it needs interprofessional collaboration (IPC) which will improve the performance of health workers in the management of stunting. The aimed of this study is to understand the knowledge, attitude, self-efficacy, collaboration, communication about interprofessional collaboration to handle children aged < 5 years were stunted. Methods: The research used a cross-sectional study. The population in this study was 128 health workers. Samples were taken by simple random sampling. Independent variables were knowledge, attitude, self-efficacy, collaboration communication. The dependent variable was interprofessional collaboration. The instrument used a questionnaire. Data were analyzed by using correlation and logistic regression with a significance level of $p < 0.05$. Results: The focus of this study is to understand the knowledge, attitude self-efficacy, collaboration communication in interprofessional collaboration as a way to handle stunting aged < 5 years; for self-efficacy $p=0,027$. A health worker who had good knowledge, attitude self-efficacy, collaboration communication, impacted and improve interprofessional collaboration as a prevention effort against stunting. Conclusion: From this study, we can conclude that the knowledge, attitude, self-efficacy, collaboration communication improve interprofessional collaboration in handling stunting in children under five. The better knowledge, attitude and belief about interprofessional collaboration, the better the implementation of interprofessional collaboration.

Keywords: *Factor personal, Interprofessional collaboration, Stunting, Children.*

Introduction

The existence of growth and or developmental disorders in infancy often has an impact on health problems or disorders in the next life period. For that, we need growth detection efforts to determine the nutritional status of children. The parameters that are often used for growth detection are body weight, height, head circumference and arm circumference [1,2]. In the goal of sustainable development Sustainable Development Goals (SDGs) [3], the handling of nutritional status was formulated in the 2nd Goals namely 'Ending hunger, achieving food security and improving nutrition, and encouraging sustainable agriculture'[1,4]. One of the targets to achieve these goals is by 2030, ending all forms of malnutrition, including achieving the international target of 2025 for reducing stunting and wasting in infants and

addressing the nutritional needs of adolescent girls, pregnant and breastfeeding women, and the elderly [5]. In the 2015-2019 Health Development Indicator also explained about the target of stunting reduction that is the stunting prevalence (short and very short) in under-two children (under two years) in 2013 by 32.9% in 2019 is targeted to decrease to 28, 0% [6,7]. An estimated 155 million, or 23% of children aged < 5 years worldwide are stunted, 1 defined by the World Health Organization (WHO) as a height-for-age (HAZ) score < -2 [8] In East Africa, where there is the second-highest regional prevalence, 36.7% of children remain malnourished-representing 1 in every 3 stunted children worldwide [4, 8]. The proportion of nutritional status is very short and short on Baduta of 29.9%, still above the

2019 RPJMN target of 28% [9]. For the proportion of nutritional status is very short and short in infants for the period 2007-2018 experiencing variations. The proportion of nutritional status is very short for 2007, 2013, 2018 has decreased, namely 18.8; 18.0; 11.5. Whereas the proportion of short nutritional status in infants experienced an increase of 18.0; 19.2; 19.3 for 2007, 2013 and 2018. When combined the proportion of nutritional status is very short and short in toddlers from all provinces in Indonesia, in 2013 amounted to 37.2 and in 2018 amounted to 30.8 [10]. If explored further, East Java is among the ten provinces that have high stunting rates for the Baduta group. In Surabaya, from measurements of Height per age (TB / U) data obtained from 20,472 toddlers found very short toddlers of 2,189 toddlers and 2,922 toddlers with a normal height of 15,361 toddlers and none of which included high criteria [1].

One service approach that can improve the quality of services is the service provided in collaboration with various health professions. The approach is often called Interprofessional Collaboration (IPC). Interprofessional collaboration occurs when two or more professions work together to achieve common goals and are often used to solve complex problems. The benefits of collaboration allow team members to achieve greater targets than if they were working individually, and are beneficial in addition to individuals as well as to the organisation [11]. Teamwork has also been proven to provide benefits for healthcare providers, including reducing additional workload and increasing job satisfaction [12]. Therefore, the personal factors of health workers need to be examined in their effects on the handling of interprofessional collaboration (IPC) based stunting. However, until now, factor analysis affecting the Interprofessional Collaboration prevention efforts for a health worker to

handling stunting still cannot be explained. From the results of this study, it can be concluded that knowledge, attitude, self-efficacy, collaboration communication impact on the interprofessional collaboration for handling stunting in health worker as an effort to prevent stunting.

Materials and Methods

The research used a cross-sectional study. The population in this study was 128 health workers who work at the Puskesmas such as doctors, nurses, midwives, nutrition workers and health promotion. Samples were taken by simple random sampling. Independent variables were knowledge, attitude, self-efficacy, collaboration communication. The dependent variable was interprofessional collaboration. The instrument used a questionnaire. This questionnaire was adopted from the theory of Stucky [13], which was modified by researchers related to stunting.

The question item consists of 25 questions. These aspects of personal factors include knowledge, attitude, self-efficacy, collaboration, communication in the implementation of IPC. Data were analyzed by using correlation and logistic regression with a significance level of $p < 0.05$. This study has received ethical approval from the Health Research Ethics Committee of the Health Ministry of S Surabaya health ministry number EA / 017 / KEPK-Poltekkes_Sby / V / 2019.

Results

All of the respondents were health worker; the highest percentage was midwifery (51.6%). Overall, of the female, most respondents in the age criteria were in the range of 31-35 years. Majority education was diploma with the length of work ranged > 10 year and 81,3% health worker have received training on stunting.

Table 1: Demographic data of respondents

Characteristics	Frequency	Percentage
Profession		
Doctor / dentist	23	18,0
Midwife	66	51,6
Nurse	14	10,9
Nutritionists	16	12,5
Sanitarian	5	3,9
Health Educator	4	3,1
Age		
21-25	15	11,7
26-30	30	23,4
31-35	34	26,6
36-40	16	12,5

Characteristics	Frequency	Percentage
41-45	9	7,0
46-50	8	6,3
>50	16	12,5
Gender		
Male	11	8,6
Female	117	91,4
Education		
D3	76	59,4
D4 / S1	49	38,3
S2	3	2,3
Length of work		
1-3	37	28,9
4-6	14	10,9
7-9	17	13,3
≥ 10	60	46,9
Long been involved		
1-3	86	67,2
4-6	9	7,0
7-9	11	8,6
≥ 10	11	8,6
Training		
Yes	104	81,3
No	24	18,7
Amount	128	100

Table 2: Frequency distribution of personal respondent factors

No.	Parameter	Category	Frequency		Mean	SD
			Σ	%		
1	Knowledge	Good	79	61,7	0,60	0,30
		Enough	9	7,0		
		Less	40	31,3		
2	Attitude	Positive	93	72,7	10,59	4,27
		Negative	35	27,3		
3	Believe in IPC	Very belief	40	31,3	66,08	20,34
		Belieft	59	46,0		
		Not	29	22,7		
4	Cooperation	Well	31	24,2	61,52	22,47
		Enough	48	37,5		
		Less	49	38,3		
5	Communication	Well	37	28,9	61,02	23,62
		Enough	43	33,6		
		Less	48	37,5		

From the table 2, in terms of personal aspects, the majority of respondents with good knowledge followed by a positive attitude and trust in the IPC. In contrast, respondents with insufficient knowledge also participated with a negative attitude, lack of communication and cooperation

Table 3: Distribution frequency interprofessional collaboration respondents in Region Health Center in Surabaya, from March to May 2019

No.	Parameter	Category	Frequency		Mean	SD
			Σ	%		
1	Understanding each other's role	Well	78	60,9	83,79	13,01
		Enough	38	29,7		
		Less	12	9,4		
2	Dependent on each other	Well	79	61,7	86,67	14,17
		Enough	41	32,0		
		Less	8	6,3		
3	Ability to exchange knowledge	Well	83	64,8	86,67	14,17
		Enough	36	28,1		
		Less	9	7,0		
4	Have a common goal	Well	71	55,5	83,92	13,48
		Enough	47	36,7		
		Less	10	7,8		
5	The ability to manage the team	Well	43	33,6	77,34	13,97
		Enough	73	57,0		
		Less	12	9,4		
6	Provide patient-centered services	Well	71	55,5	85,47	13,55
		Enough	49	38,3		
		Less	8	6,2		

Based on the table 3 shows that most health workers have an understanding of their respective roles and interdependent with each other in the good category, most have the ability to exchange ideas have great category and a common goal. ost health worker also can manage teams insufficient and respect patients

Table 4: The influence of personal factors with interpersonal collaboration

	Coefficient	SE	Wald	df	Value of p	OR	95% CI	
							Min	Max
Knowledge_about_IPC	-0.379	0.390	0.945	1	0.331	0.684	0.318	1.470
Confidence about_IPC	0.247	0.726	0.116	1	0.734	1.280	0.308	5.315
Self_efficacy	-1.095	0.495	4.889	1	0.027	0.334	0.127	0.883
Cooperation	-0.648	0.750	0.746	1	0.388	0.523	0.120	2.276
Communication	0.997	0.657	2.301	1	0.129	2.710	0.747	9.826

The logistic regression test results in table 4 show self-efficacy being the most decisive factor in the implementation of stunting by workers with ($p = 0.03$ and $p = 0.05$) and Odd Ratio / Exp. (B) which is 0.334 which means that the self-efficacy and services have a relationship as much as 0.334 and 0,114 times with interprofessional collaboration

Discussion

Based on the results of the study showed that personal factors increase interprofessional collaboration in handling stunting in children under five. This is in line with the results of Noor Ariyani's research, 2017 which states that collaboration between health care providers is indispensable in any health care setting because there is no single profession that can meet the needs of all patients. As a result, good service quality depends on professionals working together in interprofessional teams [14]. According to Notoadmojo [15], the factor that influences knowledge is education. Education affects the learning process, the higher a person's education, the easier the person is to receive information [10]. The more information that comes in, the more the knowledge gained about health. Knowledge is closely related to education whereby it is expected that someone with higher education will be more knowledgeable [16].

It should be emphasized, however, that a person with a low level of education does not mean an absolute low knowledge. Based on the theory of adaptation, the level of knowledge can at least encourage having a good attitude and behaviour as well [11]. Given the knowledge about interpersonal collaboration, there is an attitude of awareness and intention to handle stunting in children. Community and Public Health nurses need to intensify education on the preparation, use and storage of local foods to prevent malnutrition in children under-5 years.

Factor personal consist of knowledge, attitude confidence, cooperation, communication to increase the interprofessional collaboration. Inline the research [17], components of effective teamwork are open communication, a flexible environment, having clear goals, clear roles and tasks for team members, and respecting, sharing responsibility for team success, balancing the participation of each member

in carrying out tasks, conflict recognition and treatment, clear specifications on authority and accountability [8,16,18,19], clear knowledge of decision-making procedures, regular and routine communication and sharing of information, a supportive environment (including access to needed resources), and mechanisms for evaluating results and adjust according to applicable regulations. Age affects the ability to capture information and the mindset of a person [12]. So, increased age will also increase the ability to capture and the mindset, so that the knowledge gained is better [20]. At middle age, more active individuals will be more active in using the time to read. New things are learned by reading. Of the majority of knowledgeable respondents, this had less impact on attitudes. It is viewed from the education taken by the respondents, who were mostly educated to high school graduates.

This knowledge of the respondents about interpersonal collaboration as an effort to prevent stunting is still lacking. Distribution data shows that the majority of attitudes respondents are positive, followed by self-efficacy and patient-oriented which is good too. This can be influenced by several factors namely affective, cognitive, and conative. The cognitive component is related to thought or the ratio of individuals connected with the consequences that result in certain behaviours. This relates to belief/trust someone about everything, negative good and positive about the object of attitude. An example is an attitude towards interpersonal collaboration.

Trust that the implementation of interpersonal collaboration could handle stunting in children [18]. The results showed that there was a relationship between self-efficacy and personal factors in health worker. Self-efficacy is a person's belief that he/she is able to do something or someone's belief that/she is able to achieve results in accordance with the stated goals.

In, a communicator already has the objectives to be achieved through his knowledge, attitude, self-efficacy, collaboration communication. This study found that most of the knowledge, attitude, self-efficacy [17, 21, 22], collaboration communication of health worker in health care were in the weak category but the students mostly had self-efficacy in the sufficient category.

In this research, a good understanding of interprofessional collaborations was demonstrated by health officers. Collaboration is a term commonly used in research, clinical practice and health professional education. Thus, interprofessional collaborations are not a new concept. In the professional literature, particularly in that pertaining to the health

sciences, it is clear that there are many benefits and challenges to encouraging employees to learn and appreciate the cultures of other professionals. This skill can be transferred to many areas in which people work together with other professionals to achieve a common goal.

Conclusion

Personal factors improve interprofessional collaboration in handling stunting in children under five. Good knowledge and positive attitude, good beliefs about interprofessional collaboration are indispensable for the practice of interprofessional collaboration. The better knowledge, attitude and belief about interprofessional collaboration, the better the implementation of interprofessional collaboration.

References

1. Indonesia KKR (2015) Kesehatan Dalam Kerangka Sustainable Development Goals (Sdg's). Jakarta Kementerian Kesehat RI.
2. Kemenkes (2015) Rencana Strategi Kementerian Kesehatan tahun 2015-2019 Kepmenkes RI No HK.02.02/MENKES/52/2015. Jakarta: Kementerian Kesehatan RI. Sekretariat Jenderal.
3. Yanagisawa S, Soyano A, Igarashi H, Ura M, Nakamura Y (2015) Effect of a maternal and child health handbook on maternal knowledge and behaviour: a community-based controlled trial in rural Cambodia. *Health Policy Plan.*, 30(9):1184-92.
4. RI D (2017) Inilah Capaian Kinerja Kemenkes RI Tahun 2015-2017. Depkes RI.
5. Nakamura Y (2012) Is maternal and child health handbook effective?: meta-analysis of the effects of MCH handbook. *Kokusai Hoken Iryo (Journal Int. Heal.)*, 27(2):121-7.
6. Eni G (2016) Kebijakan Pelayanan Kesehatan Balita dan Anak Prasekolah. Bogor.
7. Ka Dinkes Jatim (2018) Dinkes Jatim Fokus Tangani Stunting di 11 Daerah. *Jatim News Room*. 1.
8. Organization WH (2019) Trends in maternal mortality 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division.
9. Dasar RK (2013) *Riskesmas 2013*. Jakarta Badan Litbang Kesehat.
10. Balitbangkes Kemenkes (2018) Hasil Utama *Riskesmas 2018*. Jakarta.
11. Bart N Green, DC MEd, Claire D Johnson, DC Mse (2015) Interprofessional collaboration in research, education, and clinical practice: working together for a better future. *J. Chiropr. Educ.*, 29 (1):1-10.
12. Mansel BB, H (2015) Interprofessional collaboration in health care Lessons to be learned from competitive sports. *J. List Can. Pharm. J.*, 148(4):176-9.
13. Brandt AR, Heath GA, Kort EA, O'Sullivan F, Pétron G, Jordaan SM, et al (2014) Methane leaks from North American natural gas systems. *Science* (80-) 343(6172):733-5.
14. Pender NJ (2011) *Health promotion model manual*.
15. Notoatmodjo S (2019) *Metodologi penelitian kesehatan*.
16. Sistiarani C, Gamelia E, Sari DUP (2014) Fungsi pemanfaatan buku KIA terhadap pengetahuan kesehatan ibu dan anak pada ibu. *Kesmas Natl. Public Heal J.*, 8(8):353-8.
17. Babiker A, El Hussein M, Al Nemri A, Al Frayh A, Al Juryyan N, Faki MO, et al (2014) Health care professional development: Working as a team to

- improve patient care. *Sudan J. Paediatr.*, 14(2):9.
18. Bhuiyan SU, Begum HA, Lee AS, Shao YW (2017) Maternal and child health handbook. *J. Public Heal. Dev.*, 15(2):87-100.
 19. Umayah RF (2010) Hubungan Tingkat Ekonomi Ibu Hamil Dan Tingkat Kepuasan Dengan Keteraturan Pemeriksaan Kehamilan DI RB & BP Asy-Syifa'PKU Muhammadiyah Wedi Klaten. Universitas Sebelas Maret.
 20. Widagdo L, Husodo BT (2009) Pemanfaatan buku KIA oleh kader Posyandu: Studi pada kader Posyandu di wilayah kerja Puskesmas Kedungadem Kabupaten Bojonegoro. *Makara J. Heal. Res.*, 13(1):39-47.
 21. Oktarina M (2015) The relationship among knowledge, attitude, and compliance of gravida (expectant mother) and the utilization of maternal and child health book at puskesmas geger and kedundung bangkalan east java year 2013. *Bul Penelit Kesehatan*, 353-8.
 22. Nørgaard B, Ammentorp J, Ohm Kyvik K, Kofoed P (2012) Communication skills training increases self- efficacy of health care professionals. *J. Contin. Educ. Health Prof.*, 32(2):90-7.