

The Correlation between Regulation Understanding by Inter-Professional first 1000 days of Life Health Workers and the Acceleration of Toddler Stunting Prevention

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ABSTRACT

Promoting exclusive breastfeeding, infant and young child feeding (IYCF) practice are strategies to solve and prevent stunting. However, in fact, this effort does not yet achieve the expected target. Regulations on exclusive breastfeeding and IYCF have been provided and widely socialized so far. This study aims to analyze the correlation between regulation understanding (focusing on exclusive breastfeeding and IYCF) by inter-professional health workers collaboration and the implementation of stunting prevention in urban areas. Observation based study with mixed method using cross sectional design was performed in Surabaya city (33 primary health care centers) and Sidoarjo district (13 primary health care centers), during September-December 2017. The subjects of 199 health workers were selected purposively. The data were collected through interview using structured questionnaire combined with Focus Group Discussion (FGD). Then, the data were evaluated using descriptive and contingency coefficient analysis. The understanding of regulation by inter-professional health workers on the exclusive breastfeeding and IYCF varied with average of 76.4% and 63.6%, respectively. The implementation of this regulations by the inter-professional health cares did not yet in line with the condition of stunting program prevention. However, the performance synergism of multisector institutions and the cross profession to achieve the exclusive breastfeeding target was stronger than that of IYCF. According to contingency coefficient analysis ($p < 0.05$), good understanding, well-organized documents availability, and the regulation conformity by health workers significantly correlated with the implementation of exclusive breastfeeding regulation. Good understanding of health workers on exclusive breastfeeding and IYCF regulations is a key factor in the practical collaboration of inter-professional health workers to educate people to achieve the target and to implement the cross sectional programs to prevent toddler stunting.

Keywords: *regulation; coloboration; inter-professional; stunting*

INTRODUCTION

The implementation of the accelerated program of nutrition improvement through the rescue movement of the first 1000 days of life in Indonesia, is one of the efforts to achieve the target of SDGs. The achievement of the SDGs targets can only be done if the majority of policy concern are given to the nutritional improvement (Input, Output) on sustainable development. According to The National Team for The Acceleration of Poverty Reduction (TNP2K) in 2017⁽¹⁾, the first 1000 days of life program has not shown encouraging results such as lack of integration planning, budgeting implementation,

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service, monitoring and evaluation, as well as the lack of common purpose and agreement of the importance of handling the first 1000 days of life issue. Similarly, policy and intervention programs as effectively stunted because policy and regulation related to stunting intervention have not been maximally used as a common ground for handling stunting.

Stunting in children is the most fundamental challenge in the world to promote development⁽²⁾. Childhood stunting, being short for one's age, has life-long consequences for health, human capital and economic growth⁽³⁾. In Indonesia, stunting prevalence of children under five are 37%. Promoting exclusive breastfeeding and IYCF are strategies to solve and prevent stunting. However, in fact, this effort does not yet achieve the expected target. Regulations on exclusive breastfeeding and IYCF have been provided and widely socialized so far.

Both regulation and policy related to the first 1000 days of life, particularly regulation on exclusive breastfeeding and IYCF, are available in form of rules: Laws, Health Ministerial Decree as well as Regional Regulation. The rules are: Law No. 36/2009 concerning health, Government Regulation (Government Regulation No. 33/2012 about exclusive breastfeeding), and Health Ministerial Decree RI No.450/Menkes/SK/IV/2004 about exclusive breastfeeding in Indonesia; and Provincial Government Regulation of East Java No 11/2011 about nutrition improvement⁽⁴⁾. However, the main challenges to execute the nutrition policy⁽⁵⁾ are the coordination complexity inter and intra sectors, the lack of concern of decision makers about scale and the impact of nutrition problem on socioeconomic as well as for the next generation growth, and lack of social pressure and advocacy leading to low commitment.

The challenges as previously mentioned give impact directly and indirectly on the achievements of nutrition improvement, which are not optimum yet such as the implementation on exclusive breastfeeding and IYCF. The earlier implementation on breastfeeding initiation is accounted as 50% out of total given birth mothers and 65% of the infants get less than 6 months

exclusive breastfeeding⁽⁶⁾. This study aims to analyze the correlation between regulation understanding (focusing on exclusive breastfeeding and IYCF) by inter-professional health workers collaboration and the implementation of stunting prevention in urban areas.

METHOD

Observation based study with mixed method using cross sectional design was performed in Surabaya city (33 primary health care centers) and Sidoarjo district (13 primary health care centers), during September-December 2017. The subjects of 199 health workers (head of primary health care unit, medical doctor, nutritionist, midwife, and others health workers) were selected purposively. The data were collected by interview using structured questionnaire and combined with focus group discussion (FGD).

Data collection was performed by trained enumerator and inspected by investigator team work. The data were collected through surveillance to health workers, and then FGD was conducted on them. The data were further analysed descriptively using frequent distribution, presented in tables and narations. The correlation between variables was performed with contingency coefficient. Ethical clearance was obtained from the ethics committee of Faculty of Public Health, Universitas Airlangga, no 503-KEPK.

RESULTS AND DISCUSSION

The characteristics of health workers selected for this study were presented in Table 1. The average age of both planner (head of primary health care unit) and program executor (medical doctor, nutritionist, midwife, and others health workers) were 39.6 years old. The head of primary health care unit as planner, around 48.9 years old; and medical doctor, nutritionist, midwife and other health professionals as program executor, around 37.7 years old. Most of the selected health workers were female, with the education level of BSc and medical doctor (72.7%) for planner, and D3/D4 for nutritionist, midwife, and others.

Table 1: Characteristics of Health Workers

Variable	Head of Primary Health Care Unit	Medical Doctor	Nutritionist	Midwife	Other Health Professionals	Total
Age (years)	48.9 ± 6.2	38.3 ± 7.2	42.2 ± 9.4	36.8 ± 9.6	33.3 ± 9.8	39.6 ± 9.9

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Gender						
Male	8 (24.2%)	3 (9.4%)	11 (31.4%)	0 (0)	4 (20%)	26 (13.2%)
Female	25 (75.8%)	29 (90.6%)	24 (68.6)	77 (100%)	16 (80%)	171 (86.8%)
Education Level						
D1	0 (0)	2 (5.7)	0 (0)	0 (0)	0 (0)	2 (1)
D3/D4	0 (0)	0 (0)	25 (71.4)	74 (96.1)	9 (40.9)	108 (54.3)
Bachelor (BSc)	24 (72.7)	26 (81.3)	8 (22.9)	2 (2.6)	13 (59.1)	73 (36.7)
Graduate (master)	9 (27.3)	6 (18.8)	0 (0)	1 (1.3)	0 (0)	16 (8)

Regulation and Understanding: In general, policies that become national programs will be strengthened institutionally with local regulations. The regulation and policy related to the first 1000 days of life, especially regulation on exclusive breastfeeding and IYCF are provided in 19 regulations in different level such as Laws, Health Ministerial Regulation, Health Ministerial Decree as well Government Regulation. If traced further, not all region follow up the Presidential Regulation No 42/2013 about the Movement of the first 1000 days of life. East Java is the only province in Indonesia that has a Provincial Government Regulation for the nutrition improvement, and the district of Sidoarjo is also the first district that has a Regional Regulation No 1/2016 concerning nutrition improvement and exclusive breastfeeding⁽⁷⁾. Among 19 regulations, 14 regulations (8 on exclusive breastfeeding and 6 regulations on IYCF) were asked to health workers regarding to their understanding, documentation, reading and implementation.

The knowledge of regulation on exclusive breastfeeding: The knowledge of health workers on exclusive breastfeeding regulation is presented in Table 2. Government regulation no. 33/2012 on Exclusive Breastfeeding regulation and Law No. 36/2009 on Health, are the most widely known regulations by the subjects (health workers). Regulations on exclusive

breastfeeding such as Government regulation no. 3/2012 (Exclusive breastfeeding), Health Ministerial Decree RI No. 15/2013 on provision of nursery facility, Kepmenkes RI no.450/Menkes/SK/IV/2004 on exclusive breastfeeding to infant in Indonesia, are well known by head of primary health care unit, nutritionist and midwife. Other regulations known by the health workers particularly in Sidoarjo district is Regional Regulation Sidoarjo District no. 1//2016 on nutrition improvement and exclusive breastfeeding.

Documentation of Regulation on Exclusive Breastfeeding: Based on the documentation, more than 50% subjects did not have the document about exclusive breastfeeding regulation. Among the subjects who told that knowing well and have the document regulation, regrettably they couldn't showed the document. Among the regulations which were well known by the subjects (Government Regulation No. 33/2012 on Exclusive Breastfeeding), only 30% of the health workers could showed the document.

Among 8 regulations as shown in table 2, the most frequently read and implemented regulations by the subjects were Government Regulation no. 33/2012 and Law no. 36/2009. Between those regulations, Government Regulation no. 33/2012 was the most widely known regulations, available documents, reads, and implemented by health personnel.

Table 2: The Health Workers Who Knew the Exclusive Breastfeeding Regulations

Regulation	Head of Primary Health Care Unit	Medical Doctor	Nutritionist	Midwife	Other Health Professionals	Total
Government regulation (PP No. 33/2012)	26 (83.9)	18 (56.3)	32 (91.4)	61 (85.9)	18 (81.8)	155 (81.2)
Health Ministerial Decree RI No. 15/2013	24 (77.4)	12 (37.5)	25 (71.4)	52 (73.2)	13 (59.1)	126 (66)

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Health Ministerial Decree RI No. 450/Menkes/SK/IV/2004	22 (71)	11 (34.4)	26 (74.3)	49 (68.1)	13 (59.1)	121 (63)
Ministerial regulations on women's empowerment and child protection RI No. 3/2010	18 (58.1)	8 (25)	21 (60)	40 (54.1)	5 (25)	92 (47.9)
Law No. 36/2009 about health	28 (90.3)	19 (59.4)	29 (82.9)	62 (84.9)	15 (75)	153 (80.1)
Presidential Regulation No. 42/2013	19 (61.3)	5 (15.6)	22 (62.9)	41 (56.2)	5 (25)	92 (48.2)
Health Ministerial Decree RI No. 25/2014	18 (58.1)	11 (34.4)	22 (64.7)	44 (61.1)	7 (35)	102 (54)
Health Ministerial Decree RI No.15/2014	19 (61.3)	9 (28.1)	23 (65.7)	43 (59.7)	8 (40)	102 (53.7)

Based on the contingency coefficient study, there is a significant correlation ($p < 0.05$) between knowledge, availability of document, regulations read, and the implementation of exclusive breastfeeding regulations. This result supports the urgency of regulation socialization, document provision physically, regulation that can be read by health personnel so the regulation can be optimally implemented.

IYCF regulation knowledge: About 6 regulations were asked to health workers (subjects). There were fewer subjects who knew the IYCF regulation compared to the exclusive breastfeeding one (Table 3). As shown in the table, less than 50% subjects knew the IYCF regulation. Among 6 regulations asked, only Health Ministerial Decree RI no. 39/2013 about infant formula milk and other products was known by half of the subject especially head of primary health unit, nutritionist, and midwife.

As shown in table 3, more than 60% of the subjects did not have the document of IYCF regulation. Among the health workers possessing the regulation document, less than 15% of them could show the document. The document shown by 11% of the health workers was Health Ministerial Decree RI No. 39/2013 about infant formula milk and other products, and Health Ministerial Decree RI No. 224/2007 about technical specification on complementary food.

There is less than 30% of the health workers have read the IYCF regulation. This regulation was most widely read by nutritionist. Overall, IYCF regulation which was most widely read by health workers was Health Ministerial Decree RI No. 240/MENKES/

PER/V/1985 about breastfeeding meanwhile, the IYCF regulation which was most widely read by nutritionist was Health Ministerial Decree RI No. 224/2007 about technical specification on complementary food.

The IYCF regulation was more implemented by nutritionist than other health professionals. The most implemented regulations were Health Ministerial Decree RI No.39/2013 about infant formula milk and other products, Health Ministerial Decree RI No. 240/MENKES/PER/V/1985 about breastfeeding substitution, and Kepmenkes RI No. 224/2007 about technical specification on complementary food.

Based on the contingency coefficient test, there was a significant correlation ($p < 0.05$) between knowledge, document availability, regulations read, and the implementation of IYCF regulation. This result also supports the urgency of regulation socialization, document provision, and regulation reading to achieve optimum implementation of IYCF regulation.

The understanding of regulation by inter-professional health workers on exclusive breastfeeding and IYCF varied with average of 76.4% and 63.6%, respectively. The implementation of these regulations by these inter-professional health workers did not yet in line with the condition of stunting program prevention.

According to contingency coefficient analysis ($p < 0.05$), good understanding, well-organized documents availability, and the regulation conformity by health workers significantly correlated with the implementation of exclusive breastfeeding regulation.

Table 3: The Health Workers Who Knew the IYCF Regulations

Regulation	Head Primary Health Care Unit	Medical Doctor	Nutritionist	Midwife	Other Health Professional	Total
Health Ministerial Decree RI No. 240/MENKES/PER/V/1985	15 (48.4)	7 (21.9)	19 (54.3)	36 (51.4)	8 (40)	85 (45.2)
Health Ministerial Decree RI No. 39/2013	17 (54.8)	7 (21.9)	22 (62.9)	41 (55.4)	9 (45)	96 (50)
Health Ministerial Decree RI No. 49/2014	15 (48.4)	8 (25)	20 (57.1)	33 (45.2)	8 (36.4)	84 (43.5)
Health Ministerial Decree RI No. 51/2016	12 (38.7)	7 (21.9)	16 (47.1)	31 (42.5)	3 (15)	69 (36.3)
Health Ministerial Decree RI No. 237/Menkes/SK/IV/1997	13 (41.9)	7 (21.9)	18 (52.9)	30 (40.5)	3 (15)	71 (37.2)
Health Ministerial Decree RI No. 224/2007	13 (41.9)	7 (21.9)	19 (54.3)	39 (52.7)	6 (30)	84 (43.8)

The commitment of multisectoral and intra professional institutions: Table 4 shows the health workers commitment at planner and executor levels. Most of the planners and the executors have strong commitment to achieve the target of exclusive breastfeeding, early initiation of breastfeeding, and IYCF.

More than 50% of the health workers both at planner and executor levels showed very strong commitment

to achieve exclusive breastfeeding, early initiation of breastfeeding, and IYCF targets. While, more than 1/3 of the health workers have strong commitment. As shown in the table, the commitment to achieve exclusive breastfeeding target was stronger as compared to both early initiation of breastfeeding and IYCF targets. The performance synergism of multisector institutions and the cross profession to acheive the exclusive breastfeeding target was stronger than that of IYCF.

Table 4: The Commitment of Health Workers on Exclusive Breastfeeding, Early Initiation of Breastfeeding, and IYCF

Variables	Head of Primary Health Care Unit	Medical Doctor	Nutritionist	Midwife	Other Health Professionals	Total
The commitment to achieve exclusive breastfeeding target						
Very strong	23 (69.7)	22 (68.8)	24 (68.6)	40 (51.9)	11 (50)	120 (60.3)
Strong	9 (27.3)	9 (28.1)	11 (31.4)	34 (44.2)	11 (50)	74 (37.2)
Moderate strong	1 (3)	1 (3.1)	0 (0)	3 (3.9)	0 (0)	5 (2.5)
The commitment to achieve EARLY INITIATION OF BREASTFEEDING target						
Very strong	21 (63.6)	19 (59.4)	17 (48.6)	37 (48.1)	12 (54.5)	106 (53.3)
Strong	9 (27.3)	10 (31.3)	14 (40)	38 (49.4)	10 (45.5)	81 (40.7)
Moderate strong	3 (9.1)	3 (9.4)	4 (11.4)	2 (2.6)	0 (0)	12 (6)
The commitment to achieve IYCF target						
Very strong	18 (54.5)	19 (59.4)	22 (62.9)	34 (44.2)	13 (59.1)	106 (53.3)
Strong	11 (33.3)	10 (31.3)	12 (34.3)	37 (48.1)	9 (40.9)	79 (39.7)
Moderate strong	4 (12.1)	3 (9.4)	1 (2.9)	6 (7.8)	0 (0)	14 (7)

More than 50% of the health workers both at planner and executor levels showed very strong commitment to achieve exclusive breastfeeding, early initiation of

breastfeeding, and IYCF targets. While, more than 1/3 of the health workers have strong commitment. As shown in the table, the commitment to achieve exclusive

breastfeeding target was stronger as compared to both early initiation of breastfeeding and IYCF targets. The performance synergism of multisector institutions and the cross profession to achieve the exclusive breastfeeding target was stronger than that of IYCF.

CONCLUSIONS

Good understanding of health workers on exclusive breastfeeding and IYCF regulations is a key factor in the practical collaboration of inter-health workers to educate people to achieve the target and to implement the cross sectional programs to prevent toddler stunting. The equal commitment of all health professionals on breastfeeding-related policies as well as regulations is urgently needed to achieve optimal target of stunting prevention acceleration.

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