

The Evaluation of My Home My Village Method to Support the Complete Basic Immunization Programme in Surabaya, Indonesia

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ABSTRACT

Introduction: The My Village My Home (MVMH) community-level tool was designed by the Maternal and Child Health Integrated Program (MCHIP) to provide the community and local health functionaries a visual depiction of the immunization status of all infants born in a village. It ensures that every child receives immunization they need. In Indonesia, MVMH tool is used at the community level (called “Posyandu”). This research objectives is to evaluate My Village My Home (MVMH) method. It supports the Complete Basic Immunization Programme in Surabaya, Indonesia.

Method: This research was an observational study with cohort retrospective design. The exposure population of this research was Public Health Center (PHC) that has received MVMH training on March-April 2018 and the non exposure population of this research was PHC that has not received MVMH training yet. It was determined by using simple random sampling.

Results: 80% of cadres in the group that had received prior training were well-informed and in the group that did not get training 85% had good knowledge of 5% enough, 10% less. Knowledge of mothers in the cadre group who received training was 85% good and in the group of cadres who did not get 75% good training. Both cadres and mothers in the group of cadres who received training and did not receive training had a good attitude.

Conclusion: Most of the cadre with or without training and mothers have good knowledge. They have a good attitude towards the My Village My Home.

Keywords: Evaluation, Immunization, My Village My Home.

Introduction

The incidence of Vaccine Preventable Disease with immunization such as measles in the East Java Province is still relatively high. It includes the number of measles cases suspects cases and positive measles cases¹. The East Java Provincial Health Office data shows that the

measles suspect cases were still found from 2012 to 2016 and continues increasingly. The highest measles suspect cases were recorded in 2016, amounting to 3,506 cases, and the lowest cases were recorded in 2012 with 398 cases. Numbers of positive measles cases are increase²⁻³).

Immunization is one of the most cost-effective public health interventions to prevent children from contracting vaccine-preventable diseases. Indonesia launched the Expanded Program for Immunization (EPI) in 1977. However, immunization coverage remains far below the United Nations International Children’s Emergency Fun (UNICEF) and World Health Organization (WHO) target of 80%⁴⁻⁵).

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Low vaccination coverage often reflected services that were not easily accessible, uncomfortable, unreliable, or unfriendly officers. It may also be related to a lack of public trust in 18 vaccination and/or vaccination services⁶⁾. The level of vaccination coverage in a given community depends on both service factors and the degree to which the public trust in immunization services⁷⁾. Most interventions purpose to raise vaccination coverage focus on improving services or on informing and motivating families⁶⁾.

The My Village My Home (MVMH) community-level tool is designed by the Maternal and Child Health Integrated Program (MCHIP) to provide the community and local health functionaries a visual depiction of the immunization status of all infants born in a village to ensure that every child receives every immunization they need. The MVMH tool designed for use at the community level by field-level workers, such as Auxiliary Nurse Midwives, Accredited Social Health Activists, and the community to efficiently and accurately track children's immunization status⁸⁾. In Indonesia, MVMH tool used at the community level (called "Posyandu") by under supervised immunization coordinator cadre at Public Health Center. The community leaders, cadres, volunteers, and health workers are allowed by MVMH to monitor the vaccination status of every young child in participating communities and reminder guiding, and motivational visits.

The MVMH shows information on all children less than 2 years of age in a community under the roof of a house. Each row (from bottom to top), composed of boxes, is indicative of one beneficiary, and each box indicates an antigen that is to be provided to the beneficiary⁹⁾.

The objective research is to evaluate My Village My Home (MVMH) method, and to support the complete Basic Immunization Programme in Surabaya, Indonesia.

Method

This research was an observational study with cohort retrospective design. It was conducted in Surabaya, since September to December 2018.

The Public Health Center (PHC) was the exposure population of this research that has received MVMH training from Faculty of Public Health Universitas Airlangga on March-April 2018 and the non exposure population of this research was Public Health Center that has not received MVMH training yet. The MVMH tool

is a large poster-sized record on which every infant in a community has his or her own row, with spaces for the child's name, date of birth, and dates of each vaccination⁶⁾. Respondents were 60 cadres and 60 mother with children under 2 years in Surabaya. The number of exposure samples used in this research was 10 PHC and non exposure samples was 40 PHC. It was determined using simple random sampling technique.

The data that had been collected was in form of primary data, that it was obtained from an interview between the cadres and mother of children under 2 years with questionnaires. Before the interview taken, respondents would be given this research explanation, they were asked to sign the informed consent. Prior to the interview, respondents were given an explanation and then asked to sign an informed consent. Then, the data that had been collected were analyzed descriptively and it was presented in the form of narration and tables that illustrated the investigated variables.

Results

The result of this research was the socio-demographic characteristics cadre and mother with children under 2 years, descriptive analyze for input, process and output components about My Village My Home in Surabaya.

Socio-Demographic Characteristics: The average age of mothers is 32.67 years with a range of 21-54 years, while the average age of Posyandu cadres is 47.58 years with a range of 25-68 years. Age distribution of respondents can be seen in table 1.

Table 1: Distribution of cadre and mother with children under 2 years based on age in Surabaya, 2018

Age (years)	n	%
Cadre		
20-30	2	3.3
31-40	10	1.7
41-50	23	38.3
51-60	19	31.7
61-70	6	10.0
Total	60	100.0
Mother		
20-30	27	45.0
31-40	27	45.0
41-50	4	6.7
51-60	2	3.3
61-70	0	0
Total	60	100.0

Descriptive Analysis for Input Components from the My Village My Home: The input component for Human Resources described is the knowledge of cadres and mothers about the MVMH. Cadre’s knowledge about MVMH was measured using 8 questions with a choice of right or wrong answers.

Table 2: Distribution of Knowledge about MVMH in Surabaya, 2018

Level	Exposure Group		Non Exposure Group	
	n	%	n	%
Cadre:				
High	16	80.0	36	90.0
Middle	4	20.0	2	5.0
Low	0	0	2	5.0
Total	20	100.0	40	100.0
Mother:				
Known	18	90.0	20	50.0
Unknown	2	10.0	20	50.0
Total	20	100.0	40	100.0

The results showed that cadres in both groups mostly had good knowledge about. But there are still less knowledgeable cadres.

Facilities and infrastructure referred to here are MVMH Sheets (seen from the quantity and quality), stationery to fill the MVMH, board or area to attach to the MVMH. More information is presented in table 3 the following.

Table 3: Distribution of MVMH media facilities and infrastructure in Surabaya, 2018

MVMH Media	Exposure Group		Non Exposure Group	
	n	%	n	%
Availability:				
Yes	19	100.0	38	100.0
No	0	0	0	0
Total	19	100.0	38	100.0
Amount & Quality according to standards				
Yes	17	89.5	32	84.2
No	2	10.5	6	15.8
Total	19	100.0	38	100.0
Availability of space to attach MVMH media				
Yes	19	100.0	27	71.1
No	0	0	11	28.9
Total	19	100.0	38	100.0

The results showed that all cadres in the two groups said that the MVMH was available at the Posyandu. The number and quality are in accordance with the standard. Posyandu still exists that does not have an area to attach to the Immunization House during the Posyandu schedule. In this study also identified the availability of the MVMH budget in each Puskesmas that was the location of the study. Most cadres said that the source of the budget came from the Puskesmas and was adequate.

Indeed the procurement of MVMH from the Puskesmas. A cadre who said that there was a budget from community self-help, was intended for stationery to fill in the columns in the MVMH.

Table 4: Distribution of Budget Availability for MVMH in Surabaya, 2018

Budget	Exposure Group		Non Exposure Group	
	n	%	N	%
Source				
Community	5	25.3	8	21.1
Government	14	73.7	30	78.9
Total	19	100.0	38	100.0
Availability				
Yes	18	94.7	34	89.5
No	1	5.3	4	10.5
Total	19	100.0	38	100.0

Descriptive Analysis for Process Components from the My Village My Home: Data sources for filling in MVMH at the beginning were cohort books, auxiliary books, Health Towards Cards and Baby & Mom’s books as well as reports from the community and house-to-house visits.

Table 5: Distribution of Data Source for MVMH in Surabaya, 2018

Data Source	Exposure Group		Non Exposure Group	
	n	%	n	%
Door to door	8	42.1	18	47.4
Community	4	21.1	12	31.6
Cohort book	3	15.8	5	13.2
Help book	6	31.6	11	28.9
Health Towards Cards	15	78.9	34	89.5
Baby & Mom’s books	7	36.8	26	68.4

The results showed that most Posyandu cadres in both groups said that filling in the MVMH for infants and children who did immunization at the Posyandu was at the end of every Posyandu activity. Filling the MVMH should be every time a newborn is born and every baby or child is immunized.

In the group of cadres who had received training, most said that monitoring of immunization schedules for immunized infants and children in Posyandu and Puskesmas was close to the Posyandu schedule (68.4%). While in the cadre group who did not receive training,

most said that monitoring of immunization schedules for infants and children immunized in Posyandu and puskesmas was during the implementation of Posyandu (57.9%). More information is presented in table 6.

In the group of cadres who had received training, most said that monitoring of immunization schedules for infants and children immunized not at Posyandu was close to the immunization schedule (68.4%). Whereas in the group of cadres who did not receive training, (52.6%) cadres said that monitoring of immunization schedules for immunized infants and children was not in Posyandu, namely during the implementation of Posyandu.

Table 6: The Frequency Distribution Monitoring of Infant and Child Immunization Schedules Immunization at Posyandu and at the Puskesmas in Surabaya, 2018

Frequency	Exposure Group		Non Exposure Group	
	(n)	(%)	(n)	(%)
Each approaching the Posyandu schedule	2	10.5	12	31.6
During the implementation of the Posyandu	14	73.7	21	55.3
Never	1	5.0	5	13.2
Total	19	100.0	19	100.0

Table 7: The Frequency Distribution of of Cadre’s Activity to Record Immunization Data from Cohort Book to MVMH in Surabaya, 2018

Frequency	Exposure Group		Non Exposure Group	
	(n)	(%)	(n)	(%)
Every time a newborn is born and each baby is immunized	9	47.4	12	31.6
At the end of Posyandu activities	9	47.4	23	71.9
End of month	0	0	3	7.9
Never	1	5.3	0	0
Total	19	100.0	38	100.0

Discussion

Immunization are important to reduce vaccine-preventable diseases in children, and consistent control of vaccine-preventable diseases depends on fairly high immunization coverage ¹⁰.

A person’s behavior is influenced by 3 factors, they are predisposing factors, reinforcing factors, enabling factors. One of the predisposing factors that influence health behavior is knowledge. It is the basic foundation of attitudes and positive action of a person ¹¹. It means that a person good knowledge would showed that attitude good. A person’s knowledge is very influential on the actions they take. Knowledge is the result of knowing something and knowledge occurs after someone senses a

particular object. The sensation can be through the senses of sight, hearing, smell, taste, and touch. Most human knowledge is obtained through the ears and eyes¹².

Knowledge of cadres and mothers of toddlers about MVMH was measured by 8 questions about the description of the contents of the MVMH, those who played an active role in the MVMH, as well as the goals and benefits of the MVMH. Cadre in health volunteers, selected by the community, most of active cadres entirely female, although it may be a cadre of men ¹³. Mostly, training cadres or without training have MVMH good training.

Most of the baduta mothers accompanied with cadres with training have known about the MVMH while for mothers with cadres without training, 50% of mothers

do not know the MVMH. Most of the respondents who knew about the MVMH had sufficient knowledge about MVMH both for mothers with cadre with and without trainings. The 8 questions that were asked to the mother of baduta mostly answered incorrectly, this questions related to the purpose and benefits of the MVMH. One of question, namely “The home of immunization can be used as a means of communication between midwives, cadres, and the community regarding immunization” and “The MVMH provides an illustration of infant immunization status at the posyandu only”. There is a significant difference between mothers and cadres who have received training and mothers with cadres who do not receive training are related to whether or not the MVMH is available.

They inform and motivate about immunization to mothers and fathers during their regular visits as well as in meetings and other community activities. Although rarely needed, they also do home visits to motivate the parents of a child who has fallen behind in his/her immunizations.

The results showed that both cadres and mothers had good knowledge about MVMH because they had to be in every Posyandu while maintaining the existence and sustainability of the MVMH method therefore 3 all under-aged children were immunized in order to improve the Complete Basic Immunization Program in Surabaya. The level of vaccination coverage in a given community depends on both service factors and the degree to which the public understands and trusts the immunization process ⁶⁾.

Conclusion

Most of the cadres and mothers who are either in the group of cadres who have received training or who have not received training have good knowledge. Most cadres and mothers both in the group of cadres who have received training or who have not received training have a good attitude towards the MVMH.

Recommendation

The results showed that both cadres and baduta mothers had good knowledge about MVMH because they had to be in every Posyandu while maintaining the existence and sustainability of the MVMH method therefore 3 all under-aged children were immunized

in order to improve the Complete Basic Immunization Program in Surabaya.

Conflict of Interest: The authors have no conflicts of interest associated with the material presented in this paper.

Source of Funding: This research was supported by Faculty of Public Health Universitas Airlangga and District of Health, Surabaya, Indonesia.

Ethical Clearance: Received from Health Research Ethics Committee, Faculty of Public Health, Universitas Airlangga.

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