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## **The Implementation of Maternal Health Education Policy in Low and High Maternal Mortality Areas**

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### **Abstract**

Some policies about maternal health education (MHE) to increase the safe childbirth behaviors have been implemented in Indonesia. However, in some areas there are many unsafe childbirth behaviors and maternal mortality case is still high. Research-informed policy was done to analyze the implementation of maternal health education policy in low and high maternal mortality area. The data collected through self report, focus group discussion, and observation the implementation of MHE in Community Health Center. The data is analyzed and presented descriptively. The research finding show that in low maternal mortality area the communication policy is done fairly accompanied by horizontal communication and feedback, availability of adequate resources, positive disposition of institution leader and policy executor is available and bureaucracy structure is quite flexible. In high maternal mortality area, the policy communication, positive disposition, resources availability, bureaucracy structure flexibility is less. The research conclusion that implementation of MHE policy in low maternal mortality area is more available than in high area. Leader institution disposition and availability of policy executor are the main triggers of the communication, resources availability, and bureaucracy structure flexibility that are more available.

**Keywords:** implementation of policy; maternal health education; maternal mortality number.

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## **1. Introduction**

In 2013 the number maternal mortality is 8800 cases, it means each time there is a mother who died. Indonesia being the country with maternal mortality numbers the fifth largest in the world, the second largest in Asia, and the largest in South-East Asia [1]. In Indonesia, the maternal mortality number is high, even increase from 2228 per 100.000 live childbirth in 2007 to 359 per 100.000 live childbirth in 2012 [2]. More than 80 % the maternal mortality cases in Indonesia happen in health facilities and reference cases [3]. That condition indicates how high the maternal mortality number caused by the factor-three late.

One of main causes of maternal mortality due to a factor-three late is low family knowledge and awareness of pregnant woman against the risk of obstetric complication and high unsafe childbirth. The fact tells that in village area the giving childbirth is at home and helped by traditional birth attendant is still high. The gap of unsafe childbirth between district area, and between rural and urban is high [2]. The efforts policy to prevent the maternal mortality due to factor three phases of delay is including: quality integrated antenatal care; childbirth in health facilities; guarantee of delivery cost; and maternal health education [4].

The policy implementation is a process of policy translation into the real acts. Simply, the policy implementation is policy plan execution [5]. Analysis approach of policy implementation might be done by gap analysis between the plan and the policy result and also interpretative policy analysis to explain how the policy is interpreted by the policy executors. Interpretative policy analysis approach is a meaningful implementation of policy based on executor's point of view [6]. The policy implementation simultantly affected by factors of communication, resources, attitude, and bureaucracy structure [7].

One of the key success of MHE as the preventive effort of maternal death is focusing on vital behavior that is giving childbirth in health facilities which available [8]. The gap condition of unsafe childbirth behavior in region and between rural and urban that is high being one of the implementation indications of MHE policy has not significantly affected the safe childbirth and decreasing the mother death numbers. That condition allegedly due to the different factors which affect the policy implementation in each area. The current research is aimed to do the interpretative analysis to the implementation of MHE policy including the factors of communication, resources, behavior, and bureaucracy structure in an area with low and high number of maternal mortality.

## **2. Research Method**

A case study focuses on interpretative analysis of the implementation of MHE policy in low and high maternal mortality area, in Java Island. The research is done in Bantul District, Daerah Istimewa Yogyakarta, Province, and Pandeglang District, Banten Province. Both of the districts are choosen because has high gap of maternal mortality number and proportion of childbirth in health facilities. Bantul District represents the low maternal mortality and high childbirth in health facilities area. In the other hand, the Pandeglang District represents the high maternal mortality and low childbirth in health facilities area. In each district there are 8 choosen Community Health Center (CHC) as the research area.

Research informers are the manager and executor staff of the mother health program and health promotion

program of District Health Service and CHC. The collecting data from the informers use *self report* with questioner, in-depth interview, focus group discussion, and observation. The documents related to MHE policy and still valid up to last 5 years were collected by observing method. The data analysis and presentation of the research result were done descriptively including the factors of communication, resources, behavior, and bureaucracy structure.

### 3. Results

#### 3.1. Communication of the policy

The policy of MHE is arranged by the manager of Mother Health Program and Health Promotion Program, Ministry of Health to be applied in CHC. The information transmission of the maternal health education policy to the executors is done through guidance distribution, socialization and training in stages from Ministry of Health, Provinces Health Service, District Health Service and to CHC. The policy implementation is observed and evaluated in stages through reporting from CHC, District, Province, and to the Ministry of Health. The communication intensity of the implementation of MHE policy according to the research area is displayed on the Table 1.

**Table1:** Proportion and average intensity of communication mode the implementation of MHE policy to the executor according to the research area

Communication policy mode	Low maternal mortality area		High maternal mortality area	
	Proportion (%)	Intensity	Proportion (%)	Intensity
1. Socialization	100,0	3,0 ± 2,0	80,9	1,7 ± 1,1
2. Training	83,3	2,3 ± 2,3	66,7	1,1 ± 1,1
3. Reading Guidance	37,5	0,3 ± 0,3	14,3	0,1 ± 0,3

The implementation communication of the MHE policy in low and high maternal mortality has included most of the executors. The proportion and intensity of communication process of the policy implementation in low maternal mortality area are higher and more evenly than in high maternal mortality area. The result of focus group discussion shows that the communication process of MHE policy in low maternal mortality area is done together by the Mother Health Program and Health Promotion Program of District Health Service while in high maternal mortality area is done in each program.

#### 3.2. Policy Resources

The resources needed in the implementation policy are including the human, facility/tools, finance, and

information should be available in quantity and quality. The implementation resources availability of the MHE policy according to the research area is displayed on Table 2.

**Table 2:** The resources availability of the implementation of MHE policy according to research area

Policy Resources		Low maternal	High maternal
		mortality area	mortality area
<b>Employment Status (%)</b>			
1.	Government employees (PNS)	83,3	38,1
2.	Contract employees (PTT)	16,7	33,3
3.	Volunteer health worker	0	28,6
<b>Information resources (%)</b>			
1.	The content of policy	79,2	66,7
2.	The purposes of the policy	75,0	57,1
3.	The policy targets	41,7	38,1
4.	The task that should be done	70,8	52,4
<b>Finance/tools resources</b>			
1.	Guidance book/flipcharts	available	available
2.	Board of information	available	available
3.	Amplifier/wireless microphone	available	available
4.	Tape recorder/CD player	available	Less availability
5.	Photo camera/handycam	available	unavailable
6.	Finance	available	Less available

The human resources quality and quantity of the executors in low maternal mortality area is adequate. Otherwise, the human resources quality and quantity of the executors in high maternal mortality area is inadequate. The equipment's and finance resources for implementation of the MHE policy should be available.

In low maternal mortality area, the equipment's resources are adequate and can work properly. The implementation of MHE being the priority program so that it get adequate financial support and substantial tobacco revenue share, and they are possible to create the education media. Meanwhile, the equipment availability in high maternal mortality area is in adequate and not works properly. The finance resources are also inadequate comparing with the wide scope area and difficult to reach, while the tobacco revenue shares is relatively small.

The information resources are reflected by meaning execution toward MHE policy elements. The proportion of policy executor who have adequate understanding to the content, purposes, targets, and jobs which should be done in the implementation of MHE policy in low mortality area is higher than in high mortality area. Target understanding of is low because more than 50% the executors think that the targets are only for pregnant women, not including a husband. The observation result shows that the executors of pregnant women does not included their husband to accompany them in checkup room but they are waiting in the waiting room and outside health facilities.

### 3.3. Attitude toward the Policy

The policy executors' attitude toward the implementation of MHE policy in low and high maternal mortality area is mostly positives as displayed on Table 3. The proportion of executors who behave positively to the implementation of MHE policy in low maternal mortality area is higher than in high area. The positive attitude of the executors due to the institution leader's support who put the health education as one of the priority programs and put the program executors according to their interests and competencies.

**Table 3:** The proportion of the executors acts who give best attitude according to research area.

Acts statement of the executor	Low maternal mortality area	High maternal mortality area (%)
	(%)	
1. The policy execution of health education is the responsible of all the health workers	87,5	71,4
2. The maternal health education service is as important as the medical care.	83,3	66,7
3. Health education to change the childbirth behavior to the health facilities is more difficult to apply.	20,8	66,7

Positive attitude, support, and commitment of the institution leader and institution leader indicated by the preventive and promotive regional health policy that is the Village Free From 4 Health Problems (*Dusun Bebas*

*Empat Masalah Kesehatan (DB4KM)*, which include: free of maternal death, free infant death, free under five years child malnutrition, and free of dengue hemorrhagic fever. Positive attitude is shown by budget provision, infrastructure, and health facilities availability. The form of regional government support and attention is giving cash reward Rp 2.500.000,- to the each village leader who managed to be free of four health problems. DB4MK program get positive support from many parties and society. Otherwise, in high maternal mortality area, the positive attitude, support, and commitment of the institution leader and region leader to the health maternal education policy is still limited.

### 3.4. Bureaucratic Structure of Policy

The bureaucracy structure which has real impact toward the policy implementation is Standard Operating Procedures (SOP). All executors say that they have explained about the checkup result; fetus condition and position; regular checkup pregnancy; health maintain; and balanced nutritional intake. The proportion of executors who apply SOP of MHE especially about the safe childbirth behavior according to research area is displayed on Table 4.

**Table 4:** The proportion of executors' policy applied SOP about MHE subject according to the research area.

Maternal health eeducation subject of safe childbirth according to <i>SOP</i>		Low maternal mortality area (%)	High maternal mortality area (%)
1.	Signs of dangerous pregnancy and childbirth	79,2	47,6
2.	Plan of Childbirth helper	95,8	76,2
3.	Plan of childbirth place	91,7	71,4
4.	Preparation of childbirth cost	95,8	76,2
5.	Vehicles preparation for transportation	54,2	42,8
6.	Plan of childbirth companion	45,8	38,1
7.	Preparation of blood donors	45,8	23,8
8.	Involving the husband in education	12,5	9,5
9.	Husband's role in childbirth preparation	12,5	9,5
10.	Fill the childbirth mandate form	8,3	0,0
11.	Stick the childbirth plan sticker	8,3	0,0

Standard Operating Procedures of MHE focusing on safe childbirth behavior do not apply optimally. The proportion of executors who does not give explanation about dangerous pregnancy and childbirth sign is quite high with the reason of there is no complaint about dangerous sign from pregnant women. Especially in high maternal mortality area, there are pregnant women who are afraid and do not want to listen the explanation about dangerous sign of pregnancy and childbirth. Some of the executors do not explain about safe childbirth

plan. In high area, the reason of that is because when they ask about childbirth plan, most of pregnant mother answer “*I still do not have plan yet*”, or “*how it will be later*”. The executors do not fill the childbirth mandate form because forget, not important to feel, and there is no monitoring, evaluation, and standard reporting system. The observation result and document analysis show that the SOP execution of maternal health education is not yet focused on the behavior due to do the childbirth in health facilities which available.

#### **4. Discussion**

The success of the policy implementation of MHE is determined by vertical and horizontal communication process flexibility and not focused on the hierarchy of information sources [9]. The communication process of MHE policy in low maternal mortality area is done by vertical and horizontal between the executors in CHC. Horizontal communication is done through the briefing forum, which is held on every work day and followed by all health workers. In high maternal mortality area the communication of policy sometime is stuck on the executors who attend the training because there is not always horizontal communication forum between the health workers. One of the obstacles of the policy communication is the lack of feedback communication and following up of the implementation policy report. In policy communication there must be feedback communication and following up of the implementation report [9], which is used as one of the effort to know the performance of the implementation policy [10].

The executors understanding on the element of MHE policy is less precise. Implementation of MHE policy is still understood as the effort of increasing knowledge about maternal health not as the way to help to decrease the mortality number. The aims of implementation policy has understood as the way to change behavior but still not focused on vital behavior which need to be changed. The executors tasks is as the facilitators of pregnant women’s family and involving the husband in MHE in order to do safe childbirth is not fully understood and done yet. Even though the maternal health care usage is affected and decided by the husband as the effect of value system of that wife should obey and respect her husband [11, 12, 13].

Bantul District is success being one of the areas where the maternal mortality number is low due to the politic commitment from institutional leaders and regional leaders. The effectiveness of implementation MHE policy is also determined by politic commitment of regional leaders [14]. Positive attitude of the executors can be meant as a form of ownership of the policy, indicates that implementation policy accepted by the social environment [15]. Most of the executors in high maternal mortality area state that the education in order to do childbirth in health facilities is difficult to be applied. That attitude is reflected the less optimistic in doing their tasks which affected the success of implementation policy [16]. Less optimistic attitude grows because they think that people are difficult to be made aware and not interested in the health education. Some of the executors say “*I have gotten a counseling but I still give birth at home and helped by traditional birth attendant*” and “*sometime I give up to do counseling because no one attended*”. Therefore, before doing the health education, each health worker should do self-reflection about their attitude, interest, and confidence on the health education [17].

One of defining factor of implementation policy successfulness is followed the SOP. Ideal SOP in implementation of MHE policy is managed and executed by Mother’s Health Program and supported by Health

Promotion Program. Meanwhile, the fact is not all area and CHC able to make cooperation and coordination in each program, because of inflexible bureaucracy structure [16]. Bureaucracy structure in low maternal mortality area is quite flexible and there is good cooperation in each program of Mother's Health and Health Promotion, while bureaucracy structure in high area is quite rigid and the implementation of MHE policy is dominated by Mother's Health Program.

## **5. Limitations**

Limitations the research is only performed on the two areas of difference in maternal mortality contrasts, so generalizations about it are limited. Information sources include only health institution of the informant has not involved the legislative institutions.

## **6. Conclusions**

The implementation of MHE policy in low maternal mortality area describe: communication of policy is quite evenly and do the horizontal and feedback communication; resources quality and quantity is quite available; health institution leader positively behave on the implementation policy; bureaucracy structure is flexible; but the implementation of SOP is not fully focused on safe childbirth counseling. Meanwhile, the implementation of that policy in high maternal mortality area describe: the communication policy is less evenly; horizontal and feedback communication are rarely done; resources quality and quantity is less available; positive attitude of health institution leader and executors on implementation policy is still limited; and the bureaucracy structure is rigid, less cooperative, and implementation of SOP is less focused on the safe childbirth counseling.

## **7. Recommendation**

Recommended policy which need to do: doing vertical and horizontal communication that continue and evenly to all program executors and followed by the feedback of execution reports; improving the competency and positioning the executors according to their interest and supported by equipment's, finance, and information which are available; increasing the support and positive attitude of regional leader and health institution leader and monitoring and evaluating with standard reporting system; apply the flexible bureaucracy structure and SOP which is focused on safe childbirth behavior by involving the husband as the main media of health maternal education.

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