RELATIONSHIP BETWEEN CADRES KNOWLEDGE ABOUT P4K (MATERNITY COMPLICATION PLANNING AND PREVENTION PROGRAM) WITH PREPAREDNESS BEHAVIOR IN FACING COMPLICATIONS IN PUBLIC HEALTH CENTER PASIRKALIKI BANDUNG CITY

Seni Rahayu[1], Wiwin Widayani[2], Saur Sariaty[3]
[1,3] Department of Midwifery, Health Polytechnic Bandung, Indonesia
[2] Public Health Center Pasirkaliki Bandung City Indonesia

Email: senirahayusunarya@yahoo.co.id

ABSTRACT

Abstract. **Background:** Birth Planning and Prevention of Complications (P4K) in the context of accelerating the reduction of MMR and Infant Mortality Rate (IMR) through activities to improve access and quality of services, which are activities to build community potential, especially for preparation and action to save mothers and newborns. The role of cadres in implementing P4K activities is very important. However, currently there are still many Public Health Center that have not fully implemented P4K activities. One of the contributing factors is the lack of knowledge of cadres in the implementation of Birth Planning and Prevention of Complications.
Method: This research uses analytic research with cross sectional study design. The aim is to identify the relationship between cadres knowledge about P4K and cadres' behavior in dealing with complications in the Pasirkaliki Public Health Center work area, Bandung.
Results: The results of statistical tests using the chi square test at a 95% confidence level showed that there was a statistically significant relationship between cadres knowledge about P4K and cadre preparedness behavior in dealing with complications in the Pasirkaliki Public Health Center work area, Bandung with p value = 0.013 (p≤0.05).
Conclusion: With good knowledge of cadres about P4K, it will improve cadre preparedness behavior towards emergencies in mothers and infants in the region.

Keywords: knowledge of cadres, cadre preparedness, P4K.

BACKGROUND

The maternal mortality rate (MMR) is still high. Based on data from the Ministry of Health (Kemenkes), in 2015 there were 305 mothers died per 100 thousand people. According to the Director General of Family Health at the Ministry of Health, Eni Gustina, the high maternal mortality rate is influenced by low health and nutritional status.[1]

AKI is correlated with the infant mortality rate (IMR). In an effort to minimize both risk factors, the cadres are advised to carry out regular checkups every four months during pregnancy as well as scanning for risk factors for abnormalities or diseases that can increase the risk of death during childbirth.[1]

According to the 2016 National Health Indicators Survey (Sirkesnas), the coverage of cadres who check their pregnancy and give birth at health facilities is only around 74.7%.

"This means that there are still 25% of mothers whose fetuses grow and develop not monitored by health workers.[2]

Various efforts to improve the quality of services and the management of the MCH program management together with related programs and international institutions have been implemented, but there is still a need for increased community involvement in the attention and maintenance of maternal and newborn health. It is well known that at the community level the problem of delay, mainly late in recognizing danger signs and decision making is still influenced by low knowledge and conditions of injustice and gender inequality. In our society, women often do not have access to health services and the authority to decide their own health problems. In this regard and in accordance with the MPS strategy, efforts to accelerate the maternal mortality rate require cross-sectoral support in empowering women, families and communities in planning childbirth and being prepared for obstetric and neonatal complications.

In 2007, the Minister of Health of the Republic of Indonesia launched the Childbirth Planning and Complications Prevention Program (P4K) in the context of accelerating the decline in the MMR and Infant Mortality Rate (IMR) through activities to increase access and quality of services, which are activities to build community potential, especially for preparation and action in save mothers and newborns.[3] Each cadre is given a P4K sticker to stick at home and a KIA (mother and child health) book as a guide. With the Childbirth Planning and Complications Prevention Program (P4K), every cadre will be recorded, recorded, and monitored. The sticker contains data on pregnant women, estimated deliveries, birth attendants, places of delivery, birth attendants, transportation used, and potential blood donors. Cadres get a complete service.

Community participation in the health sector is very important. Cadre as one of the government's targets in implementing this program has a very large contribution. However, not every cadre shows their activeness in this activity, because it is influenced by several factors.[4]

Indonesia in 2011 had 268,439 active posyandu with 131,383 cadres. The percentage of active cadres nationally is 74.7% and the drop-out rate of cadres is around 25.3% and the coverage of active posyandu cadres nationally until 2010 has only reached 78% of the 80% target and in 2011 the program coverage or community participation is very high. varied, ranging from as low as 10% to as high as 80%.[5]

The results of Teti Rahmawati's research in 2012 concluded that the overall role of health cadres in P4K activities at Posyandu related to counseling and targets had been going well. Nevertheless, there are several aspects of the role of health cadres that need to be increased in intensity.[6]

The results of other studies also show knowledge, attitudes, behavior of pregnant women and their husbands who do not support the implementation of P4K, lack of supporting facilities such as forms, MCH books and transportation costs to the target. The knowledge and attitudes of cadres are also considered good, but their behavior is still lacking in supporting the implementation of P4K. one of the contributing factors is the lack of motivation from cadres.[7]

The P4K program is expected to be better prepared for cadres in dealing with childbirth and complications so that the impact will reduce maternal and infant morbidity and mortality. Based on this, researchers are interested in examining the relationship between cadres knowledge about P4K and cadres' preparedness behavior in dealing with complications in the Pasirkaliki Public Health Center work area, Bandung.

METHOD

This research uses analytic research with cross sectional study design. The aim is to identify the relationship between cadres knowledge about P4K and cadres' behavior in dealing with complications in the Pasirkaliki Public Health Center work area, Bandung. This research will be carried out from February s.d. October 2018, in the Pasirkaliki Health Center area of Bandung City.

The data used are primary and secondary data. The instrument in this study was a questionnaire in the form of a list of questions about P4K. And the format of preparation for pregnant women in the face of childbirth and complications.

Analysis of the data used is by using software, with the following steps.

If eligible, Chi-Square analysis is used to test the equality of respondent characteristics which are confounding variables and to examine the relationship between cadres' knowledge about P4K and cadres' alertness behavior for emergency pregnant women. However, if it does not meet the requirements, the data will be analyzed using the Fisher Exact

test. The analysis test is used because the type of characteristic data is categorical data.

RESULT

This research was conducted in the work area of the Pasirkaliki Public Health Center in Bandung, starting from February to October 2018 with the research subjects being cadres in the Pasirkaliki Community Health Center area of Bandung City who had met the inclusion and exclusion criteria. mothers are on alert to face complications in the work area of the Pasirkaliki Health Center.

Table 4.1. Characteristics of Cadres in the Pasirkaliki Community Health Center, Bandung City

Variable	n	%
Age		
Mean (SD) : 51,53 (6,06)		
Median (Minimum-Maximum) : 50,50 (40-64)		
<=20 years old	0	0,0
20-35 years old	0	0,0
>35 years old	30	100,0
Education		
Primary School	5	16,7
Junior High School	25	83,3
Senior High School	0	0,0
Diploma	0	0,0
Bachelor	0	0,0
Profession		
Housewife	30	100,0
Long time be a cadre		
Under 10 years	11	36,7
Over 10 years	19	63,3
Total	30	100,0

Table 4.1 shows that the average age of cadres in Pasirkaliki Health Center, Bandung City is 51.53 years. The age of the youngest cadre is 40 years and the age of the oldest cadre is 64 years. Most of the cadres in the age group >35 years were 30 people (100.0%).

Table 4.1 shows that most of the education for cadres in Pasirkaliki Community Health Center, Bandung City is junior high school as many as 25 people (83.3%) and all pregnant women work is housewives as many as 30 people (100.0%).

Table 4.1 shows that the average length of time being a cadre in Pasirkaliki Community Health Center, Bandung City is 12.83 years. as many as 19 people have become cadres over 10 years (63.3%).

Based on Table 4.2. it can be seen that in question no 9, namely "Pregnant women do not need to know about potential blood donors, because if they need blood at the time of delivery, it is already available at the blood bank" answered incorrectly by 17 people (56.7%).

Question no 10, namely "heartburn that is getting more frequent and mucus mixed with blood is a sign of labor" was answered correctly by 30 people (100.0%). Question no 11, namely "The baby's movement is less, the mother is often dizzy, high/low blood pressure is a normal symptom in pregnant women" answered incorrectly by 18 people (60.0%), Question no 12 is "pregnant women need to plan contraception that will be used after delivery" answered correctly by 23 people (76.7%).

Based on Table 4.2. it can be seen that in question no 14, namely "Healthy pregnant women do not need to take blood-added tablets" answered incorrectly by 22 people (73.3%). Question no 15, "Blood bleeding for 42 days is normal" answered incorrectly by 17 people (56.7%).

Based on Table 4.2. It can be seen that in question no 18, namely "The delivery mandate is an agreement on the ability of pregnant women along with their husbands and/or families on the P4K components with stickers" answered correctly 18 people (60.0%). Question no 19, namely "The making and signing of the delivery mandate is carried out after the mother gives birth" answered incorrectly by 27 people (90.0%). Question no 20, namely "Cadres are one of the targets of P4K" Answered correctly by 29 people (96.7%).

Table 4.3. Shows that most of the behavior of cadres in the face of complications in the work area of the Pasirkaliki Public Health Center in Bandung. Question number 5, namely "Knowing the plan to use postpartum contraception for every pregnant and postpartum woman in your area" was answered rarely by 17 people (56.7%) and 3 people (10%) answered never.

Question no 8, namely "Making contact/home visits to postpartum mothers" was answered rarely by 18 people (60.0%). Question no 9, namely "There is a Tabulin program (Savings for maternity mothers)" was answered never by 20 people (66.7%) and 9 people (30%) answered rarely. Question no 10, namely "knowing about the delivery mandate" was answered never by 14 people (46.7%) and 12 people (40%) answered never.

Question no 13, namely "Every pregnant woman already has a potential donor

when there is an emergency during delivery" was answered rarely by 10 people (33.3%) and 7 people (23.3%) answered never.

Table 4.2. Description of Cadres' Knowledge about P4K on The Readiness of Mothers to be Prepared to Face Complications in the Working area of the Pasirkaliki Health Center

No	Question	Correct		Incorrect	
		n	%	n	%
1	The Birth Planning and Complication Prevention Program is an extension of P4K	30	100,0	0	0,0
2	The purpose of P4K is to record the status of pregnant women and install P4K stickers in every home of pregnant women that contains information about childbirth.	30	100,0	0	0,0
3	Another goal of P4K is for all pregnant women to give birth in the hospital	7	23,3	23	76,7
4	Midwives, Cadres, MCH Care Forums/Pokja Posyandu and their families are the staff who play a role in P4K activities	30	100,0	0	0,0
5	Data collection on pregnant women with stickers is an activity to collect data on the recording and reporting of the condition of pregnant women and giving birth through pasting stickers in every house of pregnant women.	30	100,0	0	0,0
6	One of the purposes of installing the P4K sticker is to get agreement and readiness in planning childbirth	30	100,0	0	0,0
7	The following is the information contained in the P4K sticker including the name of the pregnant mother, the name of the husband and the name of the child	5	16,7	25	83,3
8	Health workers who will assist with childbirth, donor plans, delivery costs and transportation plans are the information contained in the P4K sticker	22	73,3	8	26,7
9	Pregnant women don't need to know about potential blood donors, because if they need blood at the time of delivery, it's already available at the blood bank	13	43,3	17	56,7
10	Heartburn that is getting more frequent and mucus mixed with blood is a sign of labor	30	100,0	0	0,0
11	The baby's movement is less, the mother is often dizzy, high/low blood pressure is a normal symptom that occurs in pregnant women	12	40,0	18	60,0
12	Do pregnant women need to plan contraception to be used after giving birth?	23	76,7	7	23,3
13	Jaundice is a normal condition in newborns	13	43,3	17	56,7
14	Healthy pregnant women don't need to take blood-boosting tablets	8	26,7	22	73,3
15	Bleeding for 42 days is normal	17	56,7	13	43,3
16	Tabulin is goods or funds that the family saves in stages according to their ability in accordance with the agreement and their use to finance pregnancy and childbirth	30	100,0	0	0,0
17	Tabulin is a maternity mother's savings	30	100,0	0	0,0
18	The delivery mandate is an agreement on the ability of the pregnant mother along with her husband and/or family for the P4K components with stickers	18	60,0	12	40,0
19	Making and signing the birth order after the mother gives birth	3	10,0	27	90,0
20	Cadres are one of the targets of P4K	29	96,7	1	3,3

Table 4.3 Description of Cadre Preparedness Behavior in Dealing with Complications in the Work Area of Pasirkaliki Public Health Center, Bandung city

No	Question	Always		Seldom		Never	
		N	%	n	%	n	%
1.	Collecting data on pregnant women, such as name, gestational age, estimated birth and delivery plans	30	100,0	0	0,0	0	0,0
2.	All pregnant women's houses have P4K stickers on them	27	90,0	3	10,0	0	0,0
3.	Conduct home visits/contact with pregnant women and their families in filling out stickers	26	86,7	4	13,3	0	0,0
4.	Make home visits to postpartum mothers (mothers after giving birth)	22	73,3	7	23,3	1	3,3
5.	Knowing the plan for using postpartum contraception for every pregnant and postpartum woman in your area	10	33,3	17	56,7	3	10,0
6.	Knowing birth attendants in the work area	22	73,3	7	23,3	1	3,3
7.	Registering pregnant women who have health problems (for example, high blood pressure, pregnant age > 35 years / pregnant too young and others)	17	56,7	6	20,0	7	23,3
8.	Make contact/home visits to postpartum mothers	12	40,0	18	60,0	0	0,0
9.	There is a Tabulin program (Savings for maternity mothers)	1	3,3	9	30,0	20	66,7
10.	Knowing about maternity orders	4	13,3	14	46,7	12	40,0
11.	Collecting data on the number of pregnant women in the work area	30	100,0	0	0,0	0	0,0
12.	Knowing the estimated delivery of pregnant women in the work area	20	66,7	7	23,3	3	10,0
13.	Every pregnant woman already has a potential donor when there is an emergency during delivery	13	43,3	10	33,3	7	23,3
14.	Report to the midwife if a pregnant/postpartum woman is found with danger signs	21	70,0	3	10,0	6	20,0
15.	Participate in MCH care forums/maternal and child health forums facilitated by midwives	20	66,7	7	23,3	3	10,0

Table 4.4. Description of Cadres' Knowledge about P4K on The Readiness of Mothers to be Prepared for Complications in the Work Area of the Pasirkaliki Public Health Center 2018

Variable		n	%
Knowledge (%)			
Mean (SD)	68,33 (11,84)		
Median	70,00		
Minimum	50,00		
Maximum	85,00		
Good Knowledge		20	66,7
Lack of Knowledge		10	33,3
Total		**30**	**100,0**

Table 4.4 shows that the average knowledge of cadres about P4K in the work area of the Pasirkaliki Health Center 2018 is 68.33% with a standard deviation of 11.84%, the median is 70.00%, with the lowest knowledge value 50.00% and the highest 85.00% . Most of them have good knowledge as many as 20 people (66.7%), but still found research subjects with lack of knowledge, namely 10 people (33.3%).

Table 4.5. Description of Research Subjects Based on The Behavior of Cadres in Dealing with Complications in Tthe Work Area of the Pasirkaliki Health Center, Bandung city

Variable	N	%
Behavior (%)		
Mean (SD) 73,55 (14,67)		
Median 76,66		
Minimum 46,67		
Maximum 96,67		
Good Behavior	16	53,3
Lack of Behavior	14	46,7
Total	**30**	**100,0**

Table 4.5 shows that the average score of cadre preparedness behavior in dealing with complications in the work area of the Pasirkaliki Public Health Center in Bandung is 73.55% with a standard deviation of 14.67%, median 76.66%, with the lowest behavioral score of 46.67%. and the highest is 96.67%. Most of them have good behavior as many as 16 people (53.3%) and research subjects who have bad behavior are 14 people (46.7%).

Table 4.6. The Relationship between Cadres Knowledge about P4K with Cadre Preparedness Behavior in Dealing with Complications in the Work Area of the Pasirkaliki Public Health Center, Bandung city

	Cadre Alert Behavior						p-Value
Variable	**Good Behavior**		**Lack of Behavior**		**Total**		
	n	**%**	**n**	**%**	**N**	**%**	
Cadre knowledge about P4K							<0,001
Good Knowledge	14	70,0	6	30,0	20	100,0	
Lack of Knowledge	2	20,0	8	80,0	10	100,0	

Based on table 4.6. information was obtained that the knowledge of cadres about good P4K and cadre preparedness behavior in dealing with complications in the work area of the Pasirkaliki Public Health Center in Bandung city were good as many as 14 people out of 20 people (70.0%) while the knowledge of cadres about P4K was lacking and cadre alert behavior in dealing with complications in the working area of the Pasirkaliki Health Center, Bandung, which is less as many as 8 people out of 10 people (80.0%) and the results of statistical tests using the chi square test at a 95% confidence level show that there is a statistically significant relationship between cadres knowledge about P4K and the behavior of cadres in dealing with complications in the work area of the Pasirkaliki Public Health Center in Bandung with a value of p=0.013 (p≤0.05).

DISCUSSION

MMR in Indonesia is still high and one of the reasons is the lack of efforts to prevent pregnancy complications according to standards. The government's efforts to launch a delivery planning program and prevention of complications are considered very effective in reducing maternal mortality due to complications. The implementation of the P4K program is influenced by several factors including the knowledge of pregnant women, cadres or the community about pregnancy and prevention of complications. The assumption that pregnancy and childbirth is something natural that does not require examination and treatment. And without realizing that pregnant women are included in high risk. With the low awareness of pregnant women and the community (cadres) about the importance of preventing pregnancy complications, awareness of the importance of the benefits of P4K is also low.

1. Cadre knowledge about P4K

Based on the results of the study, 20% of respondents had good knowledge about P4K. With good knowledge of cadres about P4K, the cadres could explain to pregnant women about the danger signs, preparation for childbirth, etc. Based on Siswanto's research in 2002, it was stated that the participation of cadres could influence their participation in society. With good knowledge, cadres can increase their participation in the community, especially in implementing the P4K program.[8]

Cadres with good knowledge about P4K are expected to assist pregnant women in preparing for childbirth and in dealing with complications. In addition to mothers, cadres themselves with good knowledge will be able to recognize the danger signs of what is happening to pregnant women and if they find this condition in their environment, the cadres will inform the mother and family to immediately

check their condition. Meanwhile, cadres who have low knowledge will hinder their participation, especially in the implementation of data collection for pregnant women.[8]

Based on the results of research by Retnowati and Asih Dwi in 2010 concluded that there is a relationship between the application of P4K and efforts to prevent pregnancy complications. From the data above, it shows that the involvement of cadres in collecting data on pregnant women is good.[9] This is in accordance with the results of research by Kusumastuti, et al in 2015 which showed that the role of cadres in conducting data collection was generally quite good.[10]

This is in line with research conducted by Nurazizah in 2010 on the relationship between perceptions of cadres and motivation of health cadres with performance in Desa Siaga, delivery planning programs and prevention of complications. The results showed that there was a relationship between motivation and performance.[11] This states that the knowledge factor greatly affects performance in terms of data collection and its role in carrying out the role in P4K, in filling out P4K stickers.

2. Relationship of Cadre Knowledge about P4K with Cadre Alert Behavior for emergencies

Midwives in carrying out their duties cannot walk alone without the help of the community, especially cadres. Cadres are local people who are chosen voluntarily without any strings attached, the activity of cadres in the community is very much needed. For this reason, cadres must find out the whereabouts of pregnant women in their environment.[12]

Based on the results of the study, 66.7% of respondents had good knowledge of P4K. With good knowledge of cadres about P4K, cadres could explain to pregnant women about danger signs, preparation for childbirth, etc. Based on Siswanto's research in 2002 that the participation of cadres can affect their participation in society. With good knowledge, cadres can increase their participation in the community, especially in implementing the P4K program.[8]

Cadres with good knowledge about P4K are expected to assist pregnant women in preparing for childbirth and in dealing with complications. In addition to mothers, cadres themselves with good knowledge will be able to recognize the danger signs of what is happening to pregnant women and if they find this condition in their environment, the cadres will inform the mother and family to immediately check their condition. Meanwhile, cadres who have low knowledge will hinder their participation.[8]

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3. Hypothesis Test

H0 : There is no significant relationship between the knowledge of cadres about P4K with the behavior of cadres' preparedness in dealing with complications in the work area of the Pasirkaliki Public Health Center in Bandung.
H1 : There is a significant relationship between the knowledge of cadres about P4K with the behavior of cadres' preparedness in dealing with complications in the work area of the Pasirkaliki Public Health Center in Bandung.
Statistical test results: H0 is rejected

Supporting results:
The results of statistical tests using the chi square test at a 95% confidence level showed that there was a statistically significant relationship between cadres' knowledge of P4K and cadre's preparedness behavior in dealing with complications in the Pasirkaliki Public Health Center work area, Bandung with $p<0.001$ ($p\leq0.05$). with a value of $p<0.001$ ($p\leq0.05$).
Conclusion: The research hypothesis is accepted

CONCLUSION

There is a significant relationship between the knowledge of cadres about P4K with the behavior of cadres' preparedness in dealing with complications in the work area of the Pasirkaliki Public Health Center in Bandung with a value of $p<0.001$ ($p\leq0.05$).

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