Case Study of Record of Program of Birth Planning and Complication Prevention (P4K) by Village Midwife, Kemawi Village, Semarang Regency

Atik Mawarni*, *Yudhy* Dharmawan, *Farid* Agushybana

Department of Biostatistics and Population, Public Health Faculty, Diponegoro University

Abstract. Kemawi Village is one of the active Alert Village in the Semarang District. Based on information from the Public Health Center (PHC), the reporting of the Birth Planning and Complication Prevention Program (P4K) has not been done scheduled by the village midwife. The purpose of this research is to know how is the knowledge of midwife about the importance of registration reporting of P4K and then to analyze how the reporting of P4K is done by the village midwife. Research conducted in 2014. The type of research is a case study, with a qualitative approach. The main informant was a Kemawi village midwife, with several triangulation informant persons. The research gives the results of the recording have been done according to the procedure but the filling of the P4K sticker has not been suitable, for example, blood donor candidate is not filled with a clear identity due to there is no data processing training and supervision. Further reporting of P4K programs is made by the midwife only when there is a request at any time, no scheduled reporting. Therefore, it is recommended to PHC and District PHC (DHO) to make training and supervision for the village midwife in order to improve the ability of P4K program data management in particular, including data reporting and Maternal Child Health (MCH) in general.

Keywords. Recording of P4K Reporting, Village Midwife, Maternal and Child Health (MCH)

1 Introduction

Maternity Prevention and Complication Prevention (P4K) Program is one of the activities facilitated by midwives in the village in order to increase the active role of husbands, families and communities in planning safe childbirth and preparing for complications for pregnant women, including planning for the use of family planning after childbirth using stickers as target notification media in order to improve coverage and quality of health

* Corresponding author: atikm246@gmail.com

services for mothers and newborns. [1].Specifically the P4K Program has the objective of maternal status and the attachment of P4K stickers in each pregnant mother's house containing information on the location of the pregnant woman's residence, the identity of the pregnant mother, the estimated delivery, the birth attendant, the delivery companion, the delivery facility, the blood type, the candidate blood donations, transportation to be used as well as financing [1].If the data is well managed it can produce information that can be used as the basis of decision-making related problems of pregnancy and childbirth.

In Central Java, in 2012, Maternal Mortality Rate (AKI) is approximately 116.34 per 100,000 live births. Approximately 57.93% of maternal deaths occurred at the time of childbirth, approximately 24.74% at the time of pregnancy and about 17.33% at the time of delivery. By age group, most maternal deaths occurred in productive age group (20 - 34 years) about 66.96%, then in age group> 35 years about 26.67% and in age group <20 years about 6.37%[2].

PHC Sumowono is one of public health center in Sumowono Subdistrict, Semarang Regency which has 16 assisted villages in its working area. During 2012, there are 16 infant deaths, or an IMR of 30 per 100,000 live births in addition to the number of 17 children under five [3]. These results indicate that there are still deaths caused by complications of pregnancy and childbirth. To suppress the incidence of maternal deaths during pregnancy and then launch the Birth Planning Program and Prevention Complications (P4K).

Kemawi Village is one of the active Alert Village in Sumowono Public PHC, Semarang District which has one village midwife and 28 active cadres. Based on information from PHC Officers, P4K reporting has not been done on a scheduled basis, from each village only reporting when there is a request from the District Health Office (DHC) in the context of village alert assessment. Based on these conditions, a case study which aims to analyze how P4K reporting in Kemawi Village is recorded.

2 Method

The type of research is case study with qualitative approach that intends to understand the phenomenon of how the village midwife in carrying out P4K reporting activities covering the activities of recording, data processing and reporting. Research conducted in 2014, the number of subjects as many as seven people consisted of one main informant and seven triangulation informants. The main informant was a Kemawi village midwife, as a triangulation informant were two cadres, two pregnant women who lived in Kemawi village, one head of Sumowono PHC, one head of mother program District Health Office and one coordinating midwife. Interview guides were used for in-depth interviews of seven research informants. The observation guidelines are used for non-participatory observation of village midwife activities and documents relating to P4K data management. This study implemented the content analysis technique to analyze the collected information. Content analysis is a method to draw conclusions by identifying certain message characteristics objectively and systematically.

3 Result

3.1 Characteristics of Informants

The main informant of a village midwife (IU) was educated in D4 midwifery, 40 years old. The training obtained by the village midwife has only been related to midwifery substances as well as normal birth attendant training, early detection of child development, no training related to reporting recording. Six triangulated informants consisted of two health cadres

(IT1 and IT2), all of whom had elementary education with age 40 and 45 years old, two pregnant women (IT3 and IT4) with elementary and junior high school age 20 and 22 years old, one midwife coordinator (IT5) aged 50 years, midwifery D4 education, one head of puskesmas (IT6) with doctor 40 years old and one head of mother program District Health Office (IT7) aged 50 years midwifery D4 education.

Knowledge of the importance of P4K recording and reporting.
Interviews provide results that the village midwife considers it important to record P4K reporting because it can increase the coverage of ANC services and support the establishment of alert villages in a region, as the answer is as follows:

"Recording of P4K reporting is important since it enhances the scope of the ANC and also accelerates the functioning of alert villages in a region" (IU).

3.2 P4K Data Collection Process

In the data collection activities obtained three themes are (1) HR data collection, (2) data collection system and (3) data accuracy. Table 1 is a coding process and table 2 is the result of obsevation on a village midwife when performing data collection. Human resources in P4K program data collection involve a village midwife and health cadres. Interviews with a village midwife supported by informants' answers to triangulation of health cadres indicated that P4K data collection was only performed by the village midwife, the health cadres only requested pregnant women to check with the village midwife, then reported laconic to the midwife of the pregnant woman without recording. The main informant statement of the village midwife and one of the cadre triangulation informants are:

"*Data collection, only I do, not assisted by cadres*" *(IU)*

"*If there is a pregnant woman I report to the midwife and also tell the pregnant women to check, I do not do the recording. (IT1)* "

Regarding the data collection system, the way in which the village midwife is after the examination, the P4K program data collection begins by recording the condition of pregnant women using P4K sticker means, KIA book and pregnant mother's cohort form. What is done is to fill out the P4K stickers and KIA books, after which the village midwife copies the notes into the pregnant women's cohort form belonging to the KIA program, no special form for P4K program registration. For P4K stickers and further KIA books are given to pregnant women to take home. It is also found in Dharmawan's research that in Sumowono Sub-district there is no special format of KIA recording for activities of alert village [4]. The village midwife's statement is as follows:

"*The data I collected after checking pregnant women by taking notes on P4K stickers and KIA books, I then copied in the cohort of pregnant women, stickers and KIA books taken home by pregnant women, no P4K registration form*" *(IU)*

The results of the observations on the village midwife in the filling of two P4K stickers (table 2) supported by the informant's answer to triangulation of pregnant women, indicated that the mother's name, estimated delivery, maternity delivery, delivery, delivery and transportation were all filled correctly, for blood donor candidates only filled the family without complete identity, so the resulting data is not accurate. The results are also supported by research that gives results that data collection and recording has been done by health workers directly related to the KIA program, which is midwife, both auxiliary PHC Midwife, Village Midwife or Midwife of PHC and Midwife Coordinator [5].

The statement of one of the maternal triangulation informants is as follows:

"When I check the mother of the midwife, I am given a sticker, which fills the midwife sticker, all the data on the sticker has been filled, for the prospective donor containing the family, has not been written because it has not know the family blood type ..." (IT3)

In relation to the KIA book, observation of two pregnant women's KIA books (table 3), the results show that in both books the first day of the menstruation and the estimated date of delivery were filled by the village midwife, but the data received a delivery consisting of a rescue plan labor, delivery funding, village ambulance, family planning methods and blood donors are still empty. These results indicate that the listing on the KIA book is incomplete.

Table 1. The process of coding data collection

Key statement	Coding	Category	Theme
Who collects the data only, not assisted by cadres(IU)	Data collection only by village midwives	midwive	Human resource for data collention
If there is a pregnant woman, I report to the midwife and also ask the pregnant woman to check, I do not record. (IT1, IT2)	The cadre only reports when there are pregnant women, not taking notes.	cadre	
I collected data by taking notes on P4K stickers and KIA books, then I copied in pregnant women cohorts, stickers taken home by pregnant women, no special P4K registration form. (IU)	How to collect data. Recording media consist of P4K stickers, KIA books, and pregnant women cohorts. There is no special P4K registration form.	Data collection. Infrastructure	Data collection system
When I checked into the midwife, I was given a sticker and a KIA book, which filled the midwife's sticker, all the data on the sticker was filled, the blood donor candidate containing the family had not been written yet. (IT3, IT4).	All data on the sticker is already filled. Blood donor data is only filled with family.	Data	data. accuracy

Tabel 2. Observation result of data charging two stickers of P4K by village midwife.

Identitiy	Name	Expected delivery	birth attendant	Birth place	Maternity Companion	Tran sportati on	Candidate Blood Donor
IT3	+	+	+	+	+	+	+ (family)
IT4	+	+	+	+	+	+	+ family

Note: IT = triangulation informant; **+ = data input by midwives.**

The result of observation on two MCH books belonging to triangulation informant of pregnant mother is as follows:

Tabel 3. Observation result of two KIA Books owned by pregnant mother

Identity	Childbirth is assisted by midwives / doctors	Childbirth Fund	Village ambulance	Contraceptive method	Candidate Blood Donor
IT3	-	-	-	-	-
IT4	-	-	-	-	-

Note: IT = triangulation informant; - = not filled

Data Processing Capabilities

In the data processing, four themes are obtained: (1) knowledge of data editing (2) data editing (3) data processing training (4) data processing supervision, table 2 shows coding process. Interviews with the village midwife's main informants, supported by observations in table 5, gave the result that knowledge of data editing in order to verify the P4K data was not yet owned by the village midwife. Currently, data editing is done only based on logic, ie matching the number of getting pregnant services for the first time on the K1 column and the number of K1 that gets the sticker. The village midwife's statement as follow:

"To check the truth of the data, I just match the number of K1 and the number of K1 that gets the sticker, the other way do not know, (IU).

This condition is caused by the village midwife has never received training given by PHC or District Health Office. Associated with data processing supervision, the village midwife explained that supervision by PHC for evaluation of data processing never existed, so the village midwife never got input if there was mistake. The expression of the village midwife is as follows:

"There is no supervision from the PHC, so there is no correction if there are errors in data processing (IU)".

This is supported by the triangulation informant of head of PHC that supervision of data processing by PHC has never been done due to workload of many PHC, focused on patient service, it is appropriate statement:

"The workload at PHC is maintly focused on patient care, I did not have time to supervise data processing supervision" (IT6).

Tabel 4. Process coding data processing

Key Statement	Coding	Category	Theme
How to check the truth of P4K data, I do not know, (IU).	Do not know how to verify the data.	Knowledge .	Knowledge of P4K data editing
To check the truth of the data, what I do is match the number of K1 and the number of K1 that gets the sticker (IU).	Match K1 with K1 sticker.	How to check data correctness	How to edit data
Never been trained in data mining, let alone edit data. (IU) There is no data processing training from DKK (IT5).	Do not trained.	Training	Data processing training
Supervision of reporting recording is never performed by puskesmas (IU). Supervision at the village midwife for reporting recording has never been done because of many workloads, focusing on patient care at puskesmas. (IT6).	Supervision of data processing is never done.	Supervisi	Supervision of data processing

The result of observation on KIA Books for editing activities is shown in table 5.

Table 5. Observation results in maternity cohort document for editing activities in August and September 2014.

	K1	Stikered - K1
August	1	1
September	2	2

3.3 Reporting

In the P4K reporting activities, two themes were obtained, they were report schedule and report format (see at table 6). In-depth interviews to the village midwife's main informant obtained the results that the P4K program began to be socialized in 2010, from 2010 to 2011 the reporting schedule to PHC was done at the beginning of each month, but after 2011 there was no report request, so the village midwife did not make it. According to the village midwife's main informant statement as follows:

"In the past, when the P4K program was implemented in 2010, there was a reporting schedule, every month we were asked to send a report to the PHC *, only until 2011, after which it was never asked again, we did not finally make a report" (IU).*

The result was reinforced by the answer of the triangulation informant of Head of PHC and Coordinating Midwife who stated that there is no request from DKK for monthly report of P4K program so the PHC never asks for it, PHC asks for the report only if there is a

need for the determination of standby village strata by the end of the year. Statement of triangulation informant (head of PHC) is as follows*:*

"The P4K Program monthly report is never requested because there is no request from DHO, sometimes only the annual report we ask for when there is activity of determining the strata of the village" (IT6).

This is validated by a statement from the head of the DHC maternity health section (informant triangulation), saying that specifically DHC does not request a P4K report, as some items in the P4K report are K1 and K1 stamped have been reported through the KIA program form each month, others such as FKD, PKD and the number of cadres are required to report only when needed, such as the setting of standby villages and also when there is demand from the province. One example of the statement is as follows:

"In particular we do not ask for monthly reports of P4K program because there are K1 and K1 stamped which have also been reported on KIA program. For other data such as FKD, PKD, the number of cadres we ask if there is a determination of the standby villages or request from the province.." (IT7)

In relation to village status, as in Table 7, it shows that from 16 villages, 15 villages have the lowest status of pratama and only one village has an independent status. For independent status will be able to provide P4K with complete as well as the number of cadres, FKD, K1 and K1 berstiker, but for villages with pratama status will not be able to provide it unless K1 and K1 berstiker. This condition is one of the reasons that there is no monthly reporting of P4K to PHC or DHC.

With regard to the P4K reporting format, there is no specific format, reporting is made together with the MCH report. Reports submitted are only K1 and K1 recapitulations that get stickers, inserted in the KIA report. As per the village midwife's statement

"I reported the P4K program so one with the KIA program report, no special format, the report content only K1 and K1 got the sticker" (IU)

and also the informant's statement of midwife triangulation coordinator:

"There is no format from DKK for P4K reports" (IT5)

The same condition is also found in Nurohmat's research on information system in UKS, found no specific report form for school health behavior [6]. The village midwife's statement can be summarized as follows:

Table 6. the coding process of report elaboration

Key statement	Coding	Category	Theme
Currently unsolicited monthly reports, there is only a year-end report for the determination of the standby village strata (IU).	Monthly reports are never elaborated.	Monthly report	Report schedule
The P4K Program monthly report is not requested, just ask for an annual report when determining the Desa Siaga stratum (IT5).	Only the year-end report for the determination of the standby village strata.	End-Year report	

I report P4K program so one with KIA program report, no special format, report content only K1 and K1 got sticker (IU).	There is no special P4K format. Report So one with KIA repor	Report format Report content	Report format
There is no format from the health service for P4K reports, we use the MCH report only.(IT5)	The content of the report only K1 and K1 gets stickers.		

Table 7. Distribution of standby village based on sratum in 2014

Stratum	Frequency
Pratama (Basic)	15
Madya (Intermediate)	1
Purnama (Advance)	0

3.4 Discussion

In the P4K reporting activities, two themes were obtained, they were report schedule and report format (see at table 6). In-depth interviews to the village midwife's main informant obtained the results that the P4K program began to be socialized in 2010, from 2010 to 2011 the reporting schedule to PHC was done at the beginning of each month, but after 2011 there was no report request, so the village midwife did not make it. According to the village midwife's main informant statement as follows:

Results showed that data collection of P4Kprogram was in accordance with service standards. Data was collected by village midwife using a form that was set by Ministry of Health which wasP4K sticker and MCH book. The data in the P4Kstickerwas completely filled, but blood donor candidate was not correctly filled, it supposed to be filled with the clear identity but it only was written as “family”.The similar result found in Sokhiyatun research which showed that not every column in the sticker were correctly filled, the most unfilled column was the blood donor candidate [7]. The results indicated that identity of the blood donor candidate is not considered important yet it is needed for the immediate decision-making when there is any pregnancy or childbirthcomplication that will reduce the maternal mortality rate.

Related to incompleteness fulfillment of the MCH book showed that report writing only done on the data that become the priority of midwifery examination which are estimated childbirth date, yet other data needs to be filled completely to support reducing maternal mortality program. Data incompleteness was also found in Igan Tarigan research which showed that quality of immunization recording in Yosomulyo PCH was only 33% from the determined standard, because the recording in baby immunization register book and pregnant women did not include the last two years data [8].

Lack of training on the report writing for the village midwife is the reason that makes village midwife was doubt to do the recheck and data editing. As well as the lack of data validation or supervision by the PHC to the village midwife in data processing, it shows that there is no warranty of data accuracy which is reported by the village midwife then in the end will affect the quality of the P4K program service.

Village midwives who consider that P4K reporting is important because they feel that the report is useful for improving antenatal care coverage (ANC), which K1 is one of the indicators of the success of ANC. In addition, the absence of special P4K report request by PHC is not a problem for the village midwive.

Hari Basuki research found that the least officer knowledge was in data processing.[9] Coaching is indispensable for a midwife. According to Afnar Husna's research, found that coaching and motivation relate to the performance of a midwife [10]. Yokhbeth research found that behavior and midwife coordinator work achievements between the less report writing and good report writing were affected by the participation of the midwife coordinator in specific training about MCH recording [5]. Supervision and training related to MCH services are also lacking, found also by Putra in his research on midwife services at PHC Alahan Panjang, Solok District, West Sumatra Province [11]. Therefore it is needed to hold the training for the village midwife particularly for the health data management. The absence of the supervision from head of the PHC was found in Tengkue Nih Farisni research which showed that 71,9% midwives coordinator were not doing supervision in cadre coaching according to the schedule,so it can be concluded that supervision from the PHC (in this context is the head of the PHC) could encourage to improve the quality of report writing[12]. Supervision becomes an important factor in Midwife compliance in implementing the ANC standard[13]. It is possible to improve the pride of the institution and the involvement of midwives in the management of MCH data. This is in line with Sri Purnama Rejeki's research, which states that employee involvement and institutional pride are positively correlated with midwife performance[14]. When supervision is done is also expected to encourage work motivation. Midwives' work motivation related to need achievement contributes to Midwife's performance[15]. Key sources of encouragement included community appreciation, perceived government and development partner support for MNH, and on-the-job learning[16]. If a midwife is satisfied with his job it will correlate with job performance[17].

The existence of the results indicates that only one standby village has an intermediate stratum (as shown in table 7), the condition will affect the availability of P4K data, for the intermediate stratum village will be able to provide complete P4K data as well as the number of cadres, FKD, K1 and K1 are sticker, but for standby villages with basic strata will not be able to provide everything unless K1 and K1 are sticker. This condition is one of the reasons why there is no special reporting of P4K program to PHC or to DHO in every month.

Reports that can be generated from P4K stickers include the percentage of village performing the P4K sticker-placement, the percentage of pregnant women getting stickers and the percentage of expectant mothers with sticker who get the antenatal care standard [1]. The amount of K1 and stickered K1 reports that were made by village midwife will later be used for monitoring the PHC to assess P4K service quality. Report of the two indicators gives the idea that pregnant women already received enough care from the family and community if there any pregnancy or childbirth complications. To increase community participation in participating in the success of the P4K sticker program, it can also be done with mentoring by public health students who are proven to effectively increase community participation in filling and sticking stickers P4K[18].

3.5 Conclusion

From the results of research and discussion it can be concluded that the collection of data P4K program is in accordance with the guidelines. Data collection was done by the village midwife, using the form set by Ministry of Health that is in the form of P4K sticker and KIA book. However, there are still some weaknesses: the incomplete filling of KIA Books, especially on the delivery page and inaccurate data on the P4K Stickers that are blood donors that should be filled with the name of the donor, only filled with family writing. In data processing activities, the village midwife is not sure that the data entered is correct, this is because there is no training and supervision from PHC or District PHC. For P4K

reports there are still problems: the P4K report form the village midwife to the PHC is still incorporated with the KIA program report with an uncertain schedule. Reporting is submitted when there is village standby assessment activity.

3.6 Suggestion

To improve the quality of recording and reporting it is suggested to the PHC or District PHC to create training and supervision of data management to the village midwife in order to improve the quality of recording and reporting, in particular the P4K program.

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