



ANALYSIS OF P4K FILLING IN THE MCH BOOK WITH FACTORS OF MATERNAL DEATH BASED ON THREE DELAYS (3T)

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Abstract

The Birth Preparedness and Complication Readiness Program (P4K) is an effort to overcome maternal mortality by reducing three delays (3T), late decision-making, late reaching health facilities, and late getting treatment. The purpose of this study was to analyze P4K filling in maternal and child health (MCH) books with the causes of maternal death based on three delays (3T). The method used in this study is quantitative and descriptive using data on 58 cases of maternal death found at the Jember District Health Office. The results of this study were that there were 15 (25.8%) cases of maternal death with P4K in the MCH handbook which were incompletely filled in and identified as experiencing three delays and 12 (20.6%) cases of maternal death with P4K in the MCH handbook which were not filled out. This research can be used as material for evaluating the Birth Preparedness and Complication Readiness Program (P4K).

Keywords: *maternal mortality ; P4K; 3T*

1. Introduction

The Maternal Mortality Rate (MMR) is an indicator of the development of a region. One of the areas with the highest MMR in Indonesia is Jember Regency. Jember Regency 2021 will be the district with the highest number of maternal deaths in East Java, reaching 115 cases of maternal death (Dinas Kesehatan Kabupaten Jember, 2022). MMR in Jember Regency in 2021 is 334/per 100,000 live births. Jember Regency still has challenges in reducing the high maternal mortality rate.

The high maternal mortality rate is caused by several things, both direct and

indirect causes. Three delays are one of the indirect causal factors of maternal death. Three delays are still the main problem for maternal health services, namely late making decisions, late arrival at the referral site, and late getting needed services at health facilities (Peraturan Menteri Kesehatan Republik Indonesia Nomor 13 Tahun 2022 Tentang Perubahan Atas Peraturan Menteri Kesehatan Nomor 21 Tahun 2020 Tentang Rencana Strategis Kementerian Kesehatan Tahun 2020-2024, 2022). Knowledge of the danger signs of pregnancy, childbirth, and postpartum, decision-making, referral transportation, and treatment at referral sites influence maternal mortality (Masturoh et al., 2018). These three delays can be overcome through efforts to provide maternal health

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services. One of the maternal health service efforts is the Birth Planning and Complication Readiness Program (P4K).

The Birth Planning and Complication Readiness Program (P4K) is one of the efforts to accelerate the reduction of Maternal and Newborn Mortality Rates through increasing access to and quality of antenatal care, delivery assistance, prevention of complications, and family planning by midwives (Direktorat Promosi Kesehatan dan Pemberdayaan Masyarakat, 2019). The results of the research that has been carried out state that the implementation of the P4K program in the working area of the Somba Opu Health Center, Gowa Regency has been carried out but not optimally (Mukharrim et al., 2019). P4K implementation that has not been carried out optimally can be influenced by several things, one of which is the lack of knowledge of pregnant women about this program. Research conducted at Puskesmas X stated that 55.4% of pregnant women had insufficient knowledge related to P4K (Ariani et al., 2022).

The Birth Planning and Complication Readiness Program (P4K) is contained in the MCH handbook, namely on the "Amanat Persalinan" page. The results showed that the P4K filling in the MCH handbook was low, only 26.0% of respondents had filled out the P4K in the MCH handbook completely (Darmayanti et al., 2021). Efforts need to be made to increase the knowledge, filling out, and practice of P4K in the community. This is one of the efforts to reduce maternal mortality in the Jember Regency. Good birth planning and prevention of complications are expected to reduce the occurrence of three delays (3T) if there are signs of danger so that it does not lead to complications and death.

Therefore, to increase the knowledge, filling out, and practice of P4K in the community, it is necessary to analyze

the practice of birth preparedness and complication readiness (P4K) with factors of maternal death.

2. Method

This study uses a quantitative-descriptive method. This study used secondary data on maternal mortality reports for 2022 available at the Jember District Health Office, with a total number of deaths of 58 deaths. Secondary data were analyzed using descriptive statistic univariate and bivariate techniques. In the bivariate using cross-tabulation between Filling in P4K in the MCH book with three delay factors.

3. Result and Discussion

Completion of P4K in the MCH Handbook for Maternal Death Cases in Jember Regency in 2022

In 2022 the number of cases of maternal death in Jember Regency is 58 cases. The data on death cases are then analyzed based on filling out the P4K documents in the Maternal and Child Health (MCH) book which is found on the 'Mandate of Childbirth' page. The following is an analysis of P4K filling at MCH which is divided into three criteria, namely filled, incompletely filled, and not filled.

Table 1. Filling in P4K in the MCH Handbook

| P4K in the MCH Handbook | n | % |
|-------------------------|----|------|
| Completely Filled | 9 | 15.5 |
| Incomplete Filled | 21 | 36.2 |
| Not filled | 28 | 48.3 |
| Total | 58 | 100 |

Analysis of maternal mortality based on filling out P4K in the MCH handbook, that most criteria were not filled in (48.3%). These results indicate that there are still many mothers who do not implement P4K properly. This is in line with other studies which state that 83.33% of pregnant women do not carry out P4K (Boimau & Yulianti, 2022). P4K which is not carried out properly shows the mother's unpreparedness in facing childbirth and the possible complications

that will occur. Research conducted by (Jannah et al., 2021) shows that 60% of pregnant women who have unfavorable behavior related to P4K 79.17% are not ready to face complications.

Filling in the P4K Components in the MCH Handbook for Maternal Mortality Cases in Jember Regency in 2022

In the delivery mandate in the MCH handbook, there are several P4K components including the selection of birth attendants, delivery funds, transportation to the place of delivery, postpartum contraceptive methods, and potential blood donors.

Table 2. Filling in P4K Components in the MCH Handbook

| P4K components | Filled | | Not filled | |
|---------------------------------|--------|------|------------|------|
| | n | % | n | % |
| Maternity Assistant | 30 | 51.7 | 28 | 48.3 |
| Childbirth Fund | 26 | 44.8 | 32 | 55.2 |
| Transportation | 30 | 51.7 | 28 | 48.3 |
| Contraceptive Method Postpartum | 27 | 46.6 | 31 | 54.4 |
| Prospective Blood Donor | 9 | 15.5 | 49 | 84.5 |

The component of prospective blood donors was the P4K component which was mostly not filled in (84.5%). This shows that there are still many mothers who are not ready for an emergency. This research is in line with previous research which stated that 66% of pregnant women did not prepare potential blood donors (Rohmah & Febriani, 2021). The preparation of prospective blood donors is an important component to be prepared during pregnancy. The period from pregnancy to postpartum is an important period to pay attention to because emergencies can occur. The presence of potential blood donors can be used to prevent complications during childbirth in the event of an emergency (Jannah et al., 2021). Research conducted at Benin City Hospital, Nigeria states that the factor that contributes the most to maternal

mortality is the unpreparedness of blood donors (Aikpitanyi et al., 2019).

Analysis of Maternal Mortality Cases in Jember Regency in 2022 based on Indirect Causes of Three Delays (3T)

Three delays are one of the indirect causes of maternal death. Three delays are still a major problem for maternal health services. The three delays are based on the theory by Thaddeus and Maine which consist of late seeking care, late arriving at the referral site, and late getting the services needed at health facilities (Thaddeus & Maine, 1994). In this study the analysis of the causes of maternal death is divided into direct causes, late seeking care, late getting services at health facilities, late reaching health services, and not being identified. The unidentified category is due to the incompleteness of the maternal death report document so the cause of death cannot be identified.

Table 3. Analysis of Maternal Mortality based on Three Too Late (3T)

| Factors Causing Maternal Death | n | % |
|---|----|------|
| Immediate Cause | 18 | 31.0 |
| Late Seeking Care | 20 | 34.5 |
| Late to Get Services at Health Facilities | 8 | 13.8 |
| Late to Reach Health Services | 2 | 3.5 |
| Not identified | 10 | 17.2 |
| Total | 58 | 100 |

The results of the analysis show that the causes of maternal death based on three delays are mostly caused by delays in seeking care (34.5%). These results are in line with previous studies, 52.4% of cases of maternal death fall into the category of late-seeking care (Sakinah et al., 2023). Delay in seeking care consists of making the decision to seek care and recognizing red flags. This factor is a factor that comes from the individual level. Delay in seeking care is the most contributing individual factor in maternal death, namely 37.5% (Muriithi et al., 2022).

Analysis of Filling in P4K in the MCH Handbook with Causes of Maternal Death Based on Three Delays (3T)

Based on the analysis of maternal deaths based on factors of three delays in maternal death cases in Jember Regency in 2022, a total of 30 cases were identified with factors of three delays. The case was then analyzed based on filling in the P4K in the MCH handbook which is on the 'Delivery Order' page using cross tabulation with three categories of P4K filling in the MCH book, namely filled, incompletely filled, and not filled.

Table 4. Analysis of P4K Completion in the MCH Handbook with Three Factors of Delay (3T)

| Factor Three Delay | Filling in P4K in the MCH Handbook | | |
|---|------------------------------------|-------------------|------------|
| | Filled | Incomplete Filled | Not filled |
| | n | n | n |
| Late Seeking Care | 2 | 8 | 10 |
| Late to Get Services at Health Facilities | 1 | 5 | 2 |
| Late to Reach Health Facility | - | 2 | - |
| Total | 3 | 15 | 12 |

The results of the analysis showed that filling out the P4K in the MCH handbook as many as 15 cases of death (50%) who did not fill out the 'Amanat Persalinan' completely identified as experiencing three delays (3T). This shows unprepared behavior in dealing with childbirth and the complications that occur. According to (JHPIEGO, 2004), birth planning and prevention of complications is a strategy to promote the use of skilled care, especially during labor to reduce delays in obtaining care. Research conducted in West Bengal, India stated that out of 48.6% of cases of death identified in the category of late seeking care, 30.3% of these cases were caused by the absence of birth planning (Sk et al., 2019).

4. Conclusion and Suggestion

It concluded that 90% of cases of

maternal death identified as three delays had inadequate birth planning and prevention of complications. Lack of birth preparedness and complication readiness can cause three delays which can lead to complications up to maternal death. Based on the results of this study, it is hoped that the Jember District Health Office can improve the implementation of P4K in the Jember District. Not only through counseling but also through P4K assistance, especially for high-risk mothers. It is hoped that proper birth preparedness and complication readiness can prevent the occurrence of three delays and reduce maternal mortality.

5. Acknowledgments

We thank the Faculty of Public Health, the University of Jember, the Jember District Health Office, and all parties who contributed to this research.

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