

The Relationship between Attitudes, Workload, and Work Environment and Midwives' Performance in Early Detection of High-Risk Pregnancy

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Abstract

Introduction: The high rates of maternal and neonatal mortality remain a major global health challenge, with non-obstetric complications and hypertensive disorders being the dominant causes of death. Although the Maternal and Child Health (MCH) Handbook is used as a monitoring instrument, incomplete data recording by healthcare providers continues to hinder the early detection of high-risk conditions.

Objective: The purpose of this study is to determine the relationship between attitudes, workloads, and work environment to the performance of midwives in filling out the KIA book in the early detection of high-risk pregnant women in the Tarogong Kidul sub-district area in 2024.

Method: The research method is quantitative research, with a descriptive analytical method with a *Cross Sectional* design. The sample of this research is a midwife in the working area of Tarogong Kidul Garut District with a sampling technique using total sampling. The data analysis used the Chi square statistical test.

Results: The study showed that workload and work environment can affect the work performance of midwives with a sig value ($p < 0.05$) in filling out the KIA book in the early detection of high-risk pregnant women.

Conclusion: this study shows that workload and work environment are significantly related to midwife's performance in filling out the KIA book.

Keywords: attitude, midwives, performance, work environment, workload

Introduction

Pregnancy is a physiological process that is refined by fertilization and ends with the process of childbirth. High risk pregnancy is a pregnancy that can cause complications in the cervix of pregnancy, childbirth, postpartum and babies. Globally, the maternal mortality rate (MMR) is still very high and is still very worrying. According to WHO (2023), every day more than 700 women or around 287,000 women die from durnia due to complications during pregnancy, childbirth or postpartum (World Health Organization, 2025). Most maternal deaths are preventable, as healthcare solutions to prevent or treat complications are widely known. Based in fiscal year 2024 will be caused by 1,351 non-obstetric complications, hypertension in pregnancy, childbirth and postpartum as many as 988 beds, obstetric bleeding as many as 955, other obstetric complications 506, and others (Kementrian Kesehatan Republik Indonesia, 2025).

West Java Province in 2024 recorded a total of 749 beds or 98.60 per 100,000 births, down 43 cases compared to 2023 which was 792 beds. The causes of maternal mortality are still dominated by Non-Obstetric Complications 29.11%, Hypertension in pregnancy, childbirth and postpartum 28.17%, Obstetric bleeding 25.37%, Other Obstetric Complications 10.15%, and others 0.53% (Dinas Kesehatan Jawa Barat, 2025). Kabupaten Garut it self contributed as many as 50 matte beds, which were dominated by 15 cases of non-obstetric complications, hypertension in pregnancy, childbirth and postpartum as many as 13 cases, obstetric bleeding as many as 10 cases, abortion complications from pregnancy 2 cases, infections and other obstetric complications as many as 10 cases (Dinas Kesehatan Kabupaten Garut, 2024).

The same complications in mothers often have a direct impact on the fetus and baby, causing an increase in infant mortality rate (BCA) to date that is still quite high. WHO in 2022 recorded that there were 2.3 million newborns who died around 6500 newborn deaths every day (World Health Organization, 2024). Based on data reported by the family directorate of Health Profiling in 2024, of the 33,131 deaths under five, 80.46% (26,657 of them) occurred in the 0-7 day period and 6,560 deaths (19.80%) occurred in 8-28 days. The majority of 38.38% of neonatal and cardiovascular toddlers are underage. Neonatal toddler mortality due to BBLR and prematurity was 26.37%, Inference 12.66%, Congenital malformations, deformations and chromosomal abnormalities 9.07%, intrapartum complications 6.07%, disorders related to the length of pregnancy, and fetal growth 1.14%, and others 4.54% (Kementrian Kesehatan Republik Indonesia, 2025).

West Java Province recorded that in 2024 there were 4,858 cases of infant deaths. Of the 7.28 percent of infant mortality per 1,000 births, 87.80% occurred during the neronatal period (0-28 days), and 12.20% were post neonatal (29 days - 11 month). The causes of neonatal death are still dominated by 40.76% Respiratory and cardiovascular disorders, Low Birth Weight (BBLR) 23.26%, infections 13.28% and complications 6.22%. The causes of post-neonatal death were dominated by 39.11%, and diseases of the gastrointestinal system and infections and parasites were 15.26% (Dinas Kesehatan Jawa Barat, 2025). Garut Regency itself recorded 330 cases of infant death in 2024. The cause of death was dominated by respiratory and cardiovascular disorders as many as 175 cases, infections 88 cases, BBLR 28 cases and other cases (Dinas Kesehatan Kabupaten Garut, 2024).

Considering the still high cases of maternal and infant mortality , it is necessary for Efforts to improve maternal and child health services in an excellent manner, one of which is through comunication, information and documentation (KIE) and good records. The government through the The Ministry of Health established the Maternal and Child Health

Book to become a saturation the equipment for recording services for mothers and children from pregnancy, childbirth, and postpartum period until the baby born with 5 tahun termasurk services for impurization, nutrition, Growing Up and Developing Children and family planning. Previous research conducted by Sukowati showed that only 9% had their KIA books fully filled out at Non-Poned Health Centers in Surabaya (Sukowati et al., 2013). Many pregnant women only bring the KIA Book but it is not filled out completely, which results in various problems arising and being too late to be detected. Based on the results of the sturdi litterraturr rervierw, the performance of midwives in the service of Anternatal Carer surdah is good (>50%). The factors that affect performance are Age, infrastructure, training, work period, knowledge, motivation, leadership, and work commitment. Kinerja compiles a record of the results of the project in the structural function of the position or whole of the work activities in the teryar perioder. Performance is defined by ability, skills, perserp, attitude, personality, motivation, learning, strerss, rewards, work deeds, leadership, organizational environment and structure (Violinansa BO, Surryawati C, 2021).

The results of the 2020 study of Andriani and Nurraghmi year which were conducted at Purskesmas in Bukittinggi City suggest that there is a gap between the attitude of the midwife's performance in the preparation of KIA burkur in the early stages of high-risk pregnancy, with a Valurer of 0.021. A positive attitude will lead to a positive impact on performance (Andriani & Nugrahmi, 2021). Another research conducted by Atiqah 2025 is that although health workers understand the content and importance of the KIA book, compliance in proper filling practices is greatly influenced by situational factors such as work pressure and supervision (Atiqah Nabila Q, 2025). Therefore, interventions to improve compliance should not only focus on improving knowledge, but also pay attention to work systems and work environments that support the optimal implementation of administrative tasks.

Early diagnosis in women with high risk pregnancy can be measured by midwives and measured by good blood records in KIA book. The number of patients who come to Puskesmas Tarogong Kidul with the statures of KIA book filling that are not visible or not toured by the midwives and early diagnosis in pregnancy, this is the basis and considered important for future improvements. This requires efforts to improve the quality of recording so that it can detect high-risk pregnancies early faster in pregnant women.

Objective

The purpose of this study is to determine the relationship between attitudes, workload, and work environment on the performance of midwives in filling out the KIA book in the early detection of high risk pregnant women in the Tarogong Kidul Garut District in 2024.

Method

This study employed a cross-sectional quantitative correlational design to analyze the relationship between attitude, workload, and work environment with the performance of midwives in completing the Maternal and Child Health (KIA) Book for early detection of high-risk pregnant women. This design was selected because all study variables could be measured simultaneously, allowing for efficient data collection in terms of time and cost, while facilitating timely, practical, and effective research implementation.

The study population comprised all practicing midwives working in the service area of Puskesmas Tarogong Kidul who provided antenatal care (ANC) services and were responsible for completing KIA books. Inclusion criteria included civil servant and contract midwives who

were willing to participate in the study and completed the questionnaire in full, while exclusion criteria were midwives who were unable to perform their duties due to illness or leave during the study period. A total sampling technique was applied, resulting in 29 respondents, which was considered appropriate given the relatively small population size and its ability to minimize sampling bias. Prior to data collection, research permits were obtained from the relevant authorities, and informed consent was secured from all participants.

Data were collected using a structured questionnaire designed to measure attitudes, workload, work environment, and midwives' performance. Attitude and work environment variables were measured using a four-point Likert scale, with total scores categorized accordingly, while workload was measured using a Guttman scale with nominal data classification. Statistical analysis was conducted using a 5% significance level corresponding to a 95% confidence interval. Data analysis involved univariate analysis to describe the frequency distribution of each variable, followed by bivariate analysis using the Chi-square test to assess relationships between independent and dependent variables on a nominal scale. Additionally, multiple linear regression analysis was performed to identify the most dominant factors influencing midwives' performance. All data analyses were conducted using SPSS software.

Result

Table 1. The Relationship between Attitudes, Work Environment and Midwife's Performance in Filling in KIA Books

	Performance	n	%	Sig
Attitude	Good	2	6.7%	0.582
	Fairly	11	36.7%	
	Poor	17	56.7%	
Workload	Good	8	26.7%	0.004
	Fairly	15	50.0%	
	Poor	7	23.3%	
Work Environment	Fairly	14	46.7%	0.001
	Poor	16	53.3%	

Based on the results of the study, the relationship between attitudes, workloads, and work environment and the performance of midwives in filling out the KIA book can be explained as follows. The analysis showed that most respondents were underperforming, with 56.7% being in the low-performing category. However, the relationship between attitude and performance was not shown to be significant ($p = 0.582$), so the midwife's attitude did not directly affect their performance in this study.

The workload aspect was shown to have a significant relationship with performance ($p = 0.004$). The distribution of data showed that respondents with moderate workloads had the highest percentage (50%), while good performance was recorded in 26.7% of respondents. This indicates that balanced workload management is essential to improve midwifery performance, and high or poorly distributed workloads can reduce work effectiveness. In addition, the work environment also had a significant effect on the performance of midwives ($p = 0.001$). Most respondents rated their work environment as moderate (46.7%) or poor (53.3%), indicating that unfavorable work environment conditions can negatively impact performance. Therefore, improving work facilities, relationships between personnel, and

building a mutually supportive work culture are important steps to improve the performance of midwives.

Overall, the results of this study show that workload and work environment are key factors that affect the performance of midwives, while attitudes do not have a significant influence. The focus of improvement should be directed towards workload management and improving the working environment conditions to support optimal performance.

Discussion

Based on the study "Analysis of Factors Related to Midwife's Performance in Filling in the KIA Book for Early Detection of High-Risk Pregnancy at the Bukittinggi City Health Center in 2021, it was found that attitude has a significant relationship with the performance of midwives in filling out the KIA book for early detection of high-risk pregnancy (Andriani & Nugrahmi, 2021). The results of the attitude factor statistical test showed a p value of 0.025, this is in line with Hidayah's research that the attitude variable ($p = 0.000$) affects the compliance of midwives in filling out the KIA Book (Hidayah, 2022). Attitude is one of the natural factors that exist in humans and this is related to work. This condition indicates significant dissatisfaction or demoralization, which can trigger a sustained decline in motivation and productivity. Attitude can influence behavior and can determine what a person will do. The work behavior shown by a person is a reflection of the person's own attitude. If a person has a positive attitude, then the resulting work behavior will also be good, and vice versa. In this case, a positive attitude from the midwife can be a strong foundation for village midwives in filling out the KIA book, so that the KIA book is filled out completely and correctly.

However, theoretically, attitude remains important because it can affect work behavior in the long run. Work stress theory and job satisfaction theory assert that work environment conditions affect job satisfaction and emotional attitudes. Bad or negative attitudes can trigger less productive behavior, which then worsens environmental conditions through cooperation, conflict and others. Although attitudes and the environment were considered poor, the performance of most respondents was still at a moderate level. It can be explained theoretically that although environmental factors and attitudes are not ideal, there are other factors such as internal motivation, work routine, experience and discipline (Arifin & Rahmadani, 2022).

The results of the work environment variable data show that more than half of the respondents (53.3%) consider the work environment to be bad. The results of the analysis showed a P value of 0.001, meaning that the work environment This condition that can be caused by poor relationships or inadequate facilities is likely to trigger negative attitudes. This forms a vicious circle where a bad environment triggers bad attitudes, which ultimately worsens the conditions of the environment itself. The performance of most respondents (60%) was in the medium category. This shows that even though the attitude and work environment are considered not good, the respondents' performance is still at a fairly stable level, which is not bad but also not optimal.

The results of this study show that most of the respondents choose a bad attitude and work environment, while the perceived workload is moderate and work performance is still at a moderate level. To determine the degree of influence of the above variables such as attitude, workload, work environment on performance. The results of the multiple linear regression test showed that Attitude had a regression coefficient of 0.090 with a significance value of $p=0.582$ (>0.05), this showed that Attitude had no effect on work performance.

Attitude has no significant effect on performance. This is likely due to the relatively homogeneous distribution of respondents' attitudes (the majority in the middle poor category), so the influence of this variable is not seen in statistical models.

Based on the results of the regression coefficient analysis on the workload variable on the performance of filling out the KIA Book in the detection of high-risk pregnant women, 0.410 was obtained with a significance value of 0.004 (<0.05), which means that the workload has a positive and significant influence on the performance of midwives in filling out the KIA book in the early detection of high-risk pregnant women. This is supported by research (Ustriyaningsih, 2023) in a systematic literature review that states that the completeness of the data in the KIA Book is greatly influenced by the ability of midwives. The five internal factors of midwives, namely knowledge, attitude, skills, work experience, and motivation, determine how well midwives can master the KIA book material and encourage mothers to make full use of it. Similarly, another study found that workload has a significant relationship with midwives' performance in filling out the KIA Book. (Sari & Rini, 2023)

Workloads according to capacity also have a real effect (Noverrina AD, Surtaip, 2021). If the workload is balanced, then respondents can complete tasks more effectively thereby improving performance. A balanced workload will make it easier for respondents to complete their work optimally. If the workload is too heavy, it will hinder the effectiveness of the work; On the other hand, if it is too light, the potential of the respondent is not channeled properly. (Mahawati E, Ika Yuniwati, 2021)

In the work environment variable, the results showed a regression coefficient of 0.748 with a significance value of P value of 0.001 (<0.05) which means that the work environment variable has a positive and significant influence on performance. A conducive work environment has been proven to be a major factor in improving respondents' performance. The physical and non-physical conditions of the supportive work environment will make the respondents more productive. The work environment is the most dominant factor that affects performance. Comfortable, safe, and psychologically supportive work environment conditions have been shown to increase respondents' motivation and productivity. This means that the better the work environment is felt, the higher the performance will be produced.

The researcher assumes that attitudes, environments and workloads in each workplace are very different, especially midwives who as a group have a high risk of work and often cause prolonged burnout, in addition to several other factors, both internal and work, are very influential. Most of the filling out of the KIA book is incomplete so most village midwives do not take advantage of the data in the KIA book. (Syafuruddin et al., 2020). Good management of KIA books is necessary so that health data can be used optimally for evidence-based planning, evaluation, and decision-making (Suryantara et al., 2025). The researchers argue that midwives should have a good attitude because this supports success in their work. The better the attitude of midwives in the use of the KIA book, the better it will be in detecting at-risk pregnant women early, and conversely, the less good the midwife's attitude in the use of the KIA book, the less good it will be in detecting at-risk pregnant women early (Bonita, 2020). This requires fair workload management and support from various parties to support better.

Key Findings

The findings in this study are the factors that affect the performance of midwives in filling out the KIA book for early detection of high-risk pregnancies. The results of the study

showed that the significant relationship between the attitude of midwives and the work environment on the performance of midwives and vice versa with the hypothesis on the aspect of workload did not show a statistically significant relationship with performance.

Limitations

The limitations in this study are presented in a transparent manner, including in terms of methodological and sample aspects. Such as the limitations of cross sectional design. Due to the limitations of measurement instruments that are subjective perceptions that can cause bias, it is possible for midwives to be able to answer questions ideally. The use of nominal scales and limitations in the small number of sample sizes can be considered for future research to expand the research sample, add other variables and use a mix method to deepen research related to midwife performance.

Suggest Future Research

Efforts are needed to create a more conducive work environment, between work facilities, fostering harmonious relationships, and a culture of mutual support. Workload management should be managed in a balanced manner with fair and proportional distribution to prevent burnout, work stress, and increased performance effectiveness. The researcher suggested that further research be expanded to include research variables such as factors that have the potential to affect midwife's performance such as competence, job satisfaction and psychosocial factors. Increase the research sample to be more and more comprehensive and the application of mixed methods to deepen further research.

Conclusion

This study concludes that the analysis of the relationship between attitude, workload and work environment on the performance of midwives in filling out the KIA book in the early detection of high risk pregnant women has been achieved. That workload and work environment have a significant relationship with midwife's performance in filling out the KIA Book, on the other hand, the midwife's attitude does not have a significant relationship with the midwife's performance in this study.

Author Contribution

Each author makes the same contribution in conducting this research. All authors have reviewed and revised the final draft which is carried out responsibly for the content, writing structure including data collection until the writing of this manuscript is completed.

Conflict of Interest

The author declares that we do not have any financial or non-financial conflicts relevant to the research, authorship or publication of this scientific paper.

Ethical Clearance

This research study has met research ethics guidelines, such as obtaining informed consent from research participants, ensuring confidentiality and privacy and assistance with voluntary participation. Participants are informed of their right to withdraw or not to complete the research without any punishment.

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