

**THE RELATIONSHIP OF DELIVERY ASSISTANCE POSITIONS ON ARM PAIN**

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**ABSTRACT**

Increase in childbirth assistance by health workers in Indonesia from 95.16% to 95.79%, in West Java from 93% to 93.42% in 2020 to 2022. [1] Childbirth assistance by West Bandung Regency health workers in 2021 was as much as 64.537 %. [2] It is estimated that more and more births will be carried out by health workers. This increasing workload will of course increase the risks of the job, such as physical complaints and fatigue due to increased work demands. [3] The birthing process in Indonesia is generally carried out by midwives.

**Method:** This type of research uses quantitative research methods with an observational design using a cross sectional approach. The aim of this research design was to determine the relationship between the position of birth attendants and arm pain at the Batujajar District Health Center. West Bandung. This research will be carried out at the Batujajar Community Health Center.

**Result:** The results showed that more than half of the respondents experienced complaints of arm pain. Many things affect the arm including the duration of work, especially static and repetitive, and working posture. The body can only tolerate staying standing in one position for only 20 minutes. If it is more than this limit, slowly the elasticity of the tissue will decrease and eventually muscle pressure increases and arm pain arises. Therefore, the control is to make a change of position in a certain duration or by sitting while performing labor actions.

There is a relationship between the position of labor assistance and arm pain. To prevent complaints of arm pain, midwives should be able to regulate the duration of work and still maintain good posture and reduce static with relaxation.

For future researchers, further research needs to be done on other factors that cancause arm pain in midwives using other tests and methods and it is necessary to conduct research on arm pain in midwives appropriately so that the result are more accurate and better. Futher research is neededto determine the factors that most influence arm pain in midwives.

**Keywords :** Position, delivery helper, Arm Pain

**INTRODUCTION**

Increase in childbirth assistance by health workers in Indonesia from 95.16% to 95.79%, in West Java from 93% to 93.42% in 2020 to 2022. [1] Childbirth assistance by West Bandung Regency health workers in 2021 was as much as 64.537 %. [2]

Arm pain is one of the pains that is often a complaint, this pain is caused by incorrect positioning at work. Research in Indonesia regarding the relationship between the characteristics of midwives' work positions and arm pain is caused by several factors. This complaint occurs due to disorders of the skeletal muscles, psychological disorders and incorrect mobilization, where the main symptom of arm pain is characterized by pain or discomfort in the arm area. Physical complaints experienced by midwives can occur due to a lack of awareness of working ergonomically or work equipment that is less supportive, forcing users to adapt by making uncomfortable body positions and maneuvers.

Improper working positions cause musculoskeletal discomfort, so the application of ergonomics in the midwife's work environment is an effort to reduce problems in midwives'

work attitudes. One of the areas of risk in the work of midwives is the position when providing birth assistance which is related to the facilities in the birth process such as the birthing bed. The high risk of discomfort due to inappropriate positions of midwives in assisting with childbirth is the basis for conducting research on the relationship between the position of assisting in childbirth and reducing midwives' discomfort during work.

Batujajar Community Health Center is one of the Community Health Centers under the auspices of the Regional Technical Services Unit in the Cililin Region Health sector where Batujajar Community Health Center is an extension of the West Bandung Regency Health Service in an effort to implement health development policies in the Batujajar District working area. Batujajar Community Health Center is one of 32 Community Health Centers in West Bandung Regency, with a population of 93,642 people, and a population density of around 444 people.

Based on the Decree of the Regent of West Bandung, the Batujajar Community Health Center was appointed as one of the Basic Emergency Neonatal Obstetric Services (PONED) Community Health Centers in the West Bandung Regency area. The PONED Health Center has inpatient services and has PONED facilities ready 24 hours to provide services to pregnant, maternity, postpartum and newborn mothers with complications. Batujajar Community Health Center has implemented a service quality system according to standards. Batujajar Community Health Center is one of the community health centers that provides outpatient and inpatient maternity services in West Bandung Regency.

Based on the background explanation above, the research problem can be formulated, namely "is there a relationship between the position of the birth attendant and arm pain?" This study aims to determine the relationship between the position of the birth attendant by the midwife and the arm pain experienced.

## **METHOD**

This type of research uses quantitative research methods with observational designs using a cross sectional approach. The population is independent practice midwives in the working area of Puskesmas B. Data was collected in September 2023 using questionnaires.

## RESULT

Based on the results of research that has been carried out, the number of respondents taken was 21 respondents. The following research results were obtained:

a. Position

1. Positions for Assisting Childbirth Cause Arm Pain

**Table 2.1 Position of birth attendant**

Standing Position > 2 hours	Amount	Percentage (%)
Always	15	71,4%
Sometimes	3	14,3%
Never	3	14,3%
Total	21	100%

Based on table 2.1 above, it is known that of the 21 respondents who help in childbirth positions, 15 (71.4%) respondents always use uncomfortable positions, 3 (14.3%) indicate that respondents sometimes and never help in uncomfortable positions.

b. Arm Pain

**Table 2.2 Analysis of Arm Pain Data at the Batujajar Community Health Center**

Arm Pain	Amount	Percentage (%)
No Pain	1	5%
Mild Pain	12	52%
Moderate Pain	9	43%
Severe Pain	0	0%
Very Severe Pain	0	0%
Total	21	100%

Based on table 2.2 above, it is known that of the 21 respondents who experienced mild arm pain, 12 (52%), 9 (43%) of respondents with moderate arm pain, and 1 (5%) of respondents who did not have arm pain and there were no respondents who had severe pain and very severe pain.

## DISCUSSION

Based on research conducted regarding the relationship between the position of birth attendants and arm pain, the results showed that of the 21 respondents who assisted in the birth position, 15 (71.4%) respondents always used uncomfortable positions, 3 (14.3%) indicated that respondents sometimes and never Have you ever been in an uncomfortable position such as standing for more than 2 hours? Results Of the 21 respondents who experienced mild arm pain, 12 (52%), 9 (43%) midwives who experienced moderate arm pain, and 1 (5%) midwives who did not experience arm pain. Based on these results, it shows that more than half of the respondents experienced complaints of mild arm pain. Many things can affect arm pain, including improper working position. The results of the Pearson product moment test show that the significance value of  $p$  is  $< .001 < 0.05$ , so  $H_0$  is not accepted, this means that  $H_a$  is accepted. It can be concluded that the position of assisting with childbirth is related to complaints of arm pain. In this study, it was found that there was a significant relationship between the midwife's position when assisting with childbirth and arm pain. Especially when standing for more than 2 hours with conditions that cause the arm muscles to contract due to holding the weight of the body and spine. What was found in this research was that there was a relationship between working position and complaints of arm pain, this was because many

midwives worked in a tilted position when assisting with childbirth, resulting in pain in the arm muscles. Apart from that, there are other activities such as moving patients from the delivery bed to the treatment room bed, carrying out sutures, giving injections in inappropriate positions.

## CONCLUSIONS AND SUGGESTION

There is a relationship between the position of labor assistance and arm pain. To prevent complaints of arm pain, midwives should be able to regulate the duration of work and still maintain good posture and reduce static with relaxation.

For future researchers, further research needs to be done on other factors that cancause arm pain in midwives using other tests and methods and it is necessary to conduct research on arm pain in midwives appropriately so that the result are more accurate and better. Futher research is neededto determine the factors that most influence arm pain in midwives.

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