



Volume 7, Issue 2, pp 130-144, December 2025

ACHIEVERS JOURNAL OF SCIENTIFIC RESEARCH

Open Access Publications of Achievers University, Owo

Available Online at www.achieversjournalofscience.org



Prevalence of Traumatic Childbirth Experiences among Midwives in Secondary Public Health Care Facilities of Niger State, Nigeria

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Submitted: Jun 1, 2025; **Revised:** Sept 12, 2025; **Accepted:** November 2, 2025; **Published:** Dec 31, 2025

Abstract

Midwives frequently encounter traumatic situations during childbirth, including emergencies, complications, and adverse outcomes. These experiences have significant implications for their psychological well-being, professional performance, and, in some cases, their decision to exit the profession. The objective of the study was to assess the prevalence of exposure to traumatic childbirth among midwives in Secondary care facilities of Niger State, Nigeria. A cross-sectional descriptive survey design was utilized, using the questionnaire as the tool for data collection among one hundred and seventy midwives whom were recruited via multistage sampling. Data were analyzed using descriptive and inferential statistics on SPSS version 27. Results revealed a high prevalence of exposure to traumatic childbirth (94.1%). The Chi-square analysis examining the relationship between socio-demographic variables (educational background, years of experience, and practice setting) and the prevalence of traumatic childbirth experiences revealed several significant associations ($p = 0.001$ each). Further inferential analysis showed a statistically significant association between number of exposures to traumatic childbirth by midwives and working hours at p -value 0.05 ($\chi^2 = 59.288$, $df = 4$, $p = 0.001$). The likelihood ratio (70.846, $p = 0.001$) and the linear-by-linear association (43.008, $p = 0.001$). The study recommends structured support systems, regular psychological debriefing, trauma-informed care training, and policy interventions to safeguard midwives' mental health and improve maternal and neonatal care outcomes.

Keywords: Traumatic Childbirth, Midwives, Prevalence, Psychological wellbeing, Nigeria.

1.0 Introduction

Maternal and neonatal mortality rates remain alarmingly high in low-resource settings, particularly in sub-Saharan Africa, where Nigeria accounts for a significant proportion of global maternal deaths (WHO, 2023). Midwives, as primary caregivers during childbirth, frequently encounter traumatic events that can lead to psychological distress, burnout, and compromised care quality (Leinweber *et al.*, 2017). Despite the emotional toll, limited research has explored midwives' experiences in regions like Niger State, where healthcare infrastructure is often under-resourced.

Sheen *et al.* (2015) defined traumatic childbirth as an incident where the mother or newborn face serious injury or a threat to life. Such experiences can leave lasting emotional imprints on midwives, particularly when involving stillbirth or maternal death. According to the DSM-V-A, trauma encompasses distressing events perceived as threatening or harmful, whether to oneself or others (Abdollahpour & Motaghi, 2019). These events can significantly impact midwives' psychological well-being, job performance and may even influence the decision to even leave the profession.

Similarly, Leinweber *et al.* (2022) describes traumatic childbirth as interactions or events during birth that cause intense emotional distress and may have lasting negative effects on a woman's health. This may be connected to the close, empathetic relationship between midwives and birthing women which leave the midwives vulnerable to emotional trauma when witnessing adverse outcomes (Cankaya *et al.*, 2020). Fahy *et al.* (2008, as cited in Rice & Warland, 2013) also highlight that "with the-women" role of the midwives, may place them at risk of emotional distress during painful or traumatic births. Cankaya *et al.* (2020) study in Turkey, found that all the midwives reported experiencing traumatic birth.

Reported rates of traumatic childbirth vary: 12% in Turkey and 29% in Iran (Cankaya *et al.*, 2020; Ayers *et al.*, 2023), with over 50% in low-resource settings (Modarres *et al.*, 2022). Women in LMICs face compounded risks due to limited access, poverty, and health disparities. Fontein-Kuipers *et al.* (2018) conducted a mixed-methods study in the Netherlands and Flanders, findings revealed that midwives reported traumatic incidents such as birth complications (34%), perinatal mortality (28.3%), and healthcare errors (19.8%). Similarly, Schröder (2016) surveyed Danish obstetricians and midwives on traumatic childbirth from the perspective of the healthcare professionals' experiences with traumatic childbirth, results showed that 85% of the 1237 respondents had participated in a traumatic childbirth event. Respondents commonly expressed blame, guilt, and existential distress, though generalization of the findings should be treated with caution due to the cultural context.

In the UK, Uddin *et al.* (2022) conducted a systematic review across 18 studies, reporting that 45–96% of maternity health professionals (MHPs) experienced traumatic childbirths. Negative impacts included guilt, professional identity struggles, and compromised clinical practice, while collegial support emerged as a critical coping mechanism. Furthermore, Leinweber *et al.* (2017) reported that 67.2% of Australian midwives had witnessed care-related birth trauma, with 74.8% experiencing horror and 65.3% guilt. Despite sampling limitations, this online survey highlighted the emotional toll of frequent trauma exposure.

Meaney *et al.* (2017), using a mixed-methods approach in Ireland, found that 79.8% of healthcare professionals had experienced at least one intra-partum death, with 62% witnessing unexpected and potentially preventable deaths. The study's comprehensive methodology strengthened its findings, though broader generalizability should be considered. In Sweden, Wahlberg *et al.* (2016) found that 84% of obstetricians and 71% of midwives had experienced severe obstetric events. Although impactful, the retrospective cross-sectional design may be limited by recall bias and data inconsistencies. Amir and Reid (2020), in an Irish tertiary maternity hospital, found that over 90% of healthcare workers experienced a traumatic perinatal event within the previous year, with 58% exposed monthly or more. The study highlighted high levels of burnout but lacked depth regarding the nature of trauma and associated stressors.

These studies collectively underscore the widespread prevalence and psychological impact of traumatic childbirth on midwives and other maternity professionals across diverse global settings. This study forms part of a wider study aimed to explore the prevalence of traumatic childbirth and perceived effect on the provision of intrapartum care. This paper presents findings related to the prevalence of exposure to traumatic childbirth clinical event.

2.0 Material and Methods

2.1 Study Setting

Niger State, one of Nigeria's 36 states, was established from the former North-western state on February 3rd, 1976. Located in the North central geopolitical zone, it shares borders with the Republic of Benin (West), Zamfara State (North), Kebbi (North-West), Kogi (South), Kwara (South-West), Kaduna (North-East), and the Federal Capital Territory (South-East). The state is divided into three administrative zones: A, B, and C, each comprising 8, 9, and 8 Local Government Areas (LGAs) respectively. The research work was conducted in three hospitals namely: - hospital 1 in zone A, hospital 2 located in zone B and hospital 3 located in zone C. The reasons for choice of these hospitals are due to their location within the major towns of the state, having highest volume of deliveries, high number of midwives and also serve as a referral center to most of the secondary public health care facilities within the zones (Niger State Hospital Service Management Board, 2024).

2.2 Study Design

A quantitative cross-sectional study design was employed. A quantitative cross-sectional study design is a research approach that involves examining data gathered from a population or a representative sample at a single moment in time (Creswell & Creswell, 2018). It is commonly used to evaluate the prevalence of specific conditions, behaviors, or traits within a particular group. This design was utilized to gather information on the prevalence of midwives experiencing traumatic childbirth in Niger State.

2.3 Study Population, Eligibility Criteria, Sample Size, and Sampling Method

2.3.1 Study Population

The study was conducted among one hundred and seventy midwives working in the maternity units of selected hospitals, covering antenatal, labour, postnatal, and gynaecological wards.

2.3.2 Inclusion Criteria

The study involved healthcare providers, whose population, irrespective of demographic factors, comprised;

- i. Actively qualified practicing midwives (midwives, nurse/midwife) with at least one year of experience in maternity units of secondary public healthcare facilities in Niger State.
- ii. Working in maternity settings such as antenatal, labour, postnatal, and gynaecological wards.
- iii. Midwives who have attended childbirth categorized as traumatic in the past 12 months.

2.3.3 Exclusion Criteria

- i. Midwives who are not present on the day of data collection, those on sick leave, annual leave, or study leave.
- ii. Those midwives even though, have witnessed traumatic childbirth are not willing due to their significant emotional or psychological inability to self-report or discuss traumatic childbirth experiences.

2.3.4 Sample Size

Given the relatively small population of midwives for this study (170 midwives), all midwives from maternity units of the three selected hospitals were included in the study. Official staff registers of all practicing midwives in the maternity units of the selected hospitals was used as the sampling frame. These records contained the names and relevant information of all midwives qualified to take part in the study. According to Creswell, (2014), using the entire population in a study is practical when the population size is small enough to be managed within the available resources and timeframe. This approach enhances the reliability and validity of the findings by minimizing sampling error and bias (Patton, 2015). It ensures that all perspectives within the population are captured, leading to a more comprehensive understanding of the research problem (Robson & McCartan 2016). Fowler, (2014) conclude that studying the entire population leads to findings that are completely representative of that group, thereby enhancing the generalizability of the results. Additionally, it avoids the complexities and potential biases associated with sampling procedures (Fowler, 2014).

2.3.5 Sampling Technique

A multistage sampling procedure was employed for this study. In the first stage, all secondary public healthcare facilities in Niger State were clustered based on the state's three existing senatorial zones; Niger South, Niger East, and Niger North (Fig 1). In the second stage, one hospital was randomly selected from each zone based on highest number of midwives as verified from official staff registers, has the largest monthly delivery rate, and its designation as a referral centre for surrounding secondary facilities. In the third stage, the maternity units were purposively selected based on their relevance to the focus area of the study. After applying eligibility criteria such as being on active duty and having at least one year of experience in maternity care, a total enumerative (census) approach was used to include all eligible midwives. In total, 170 midwives from the three selected hospitals participated in the study. The distribution of midwives across the three senatorial zones, which guided hospital selection, is presented in fig 1.

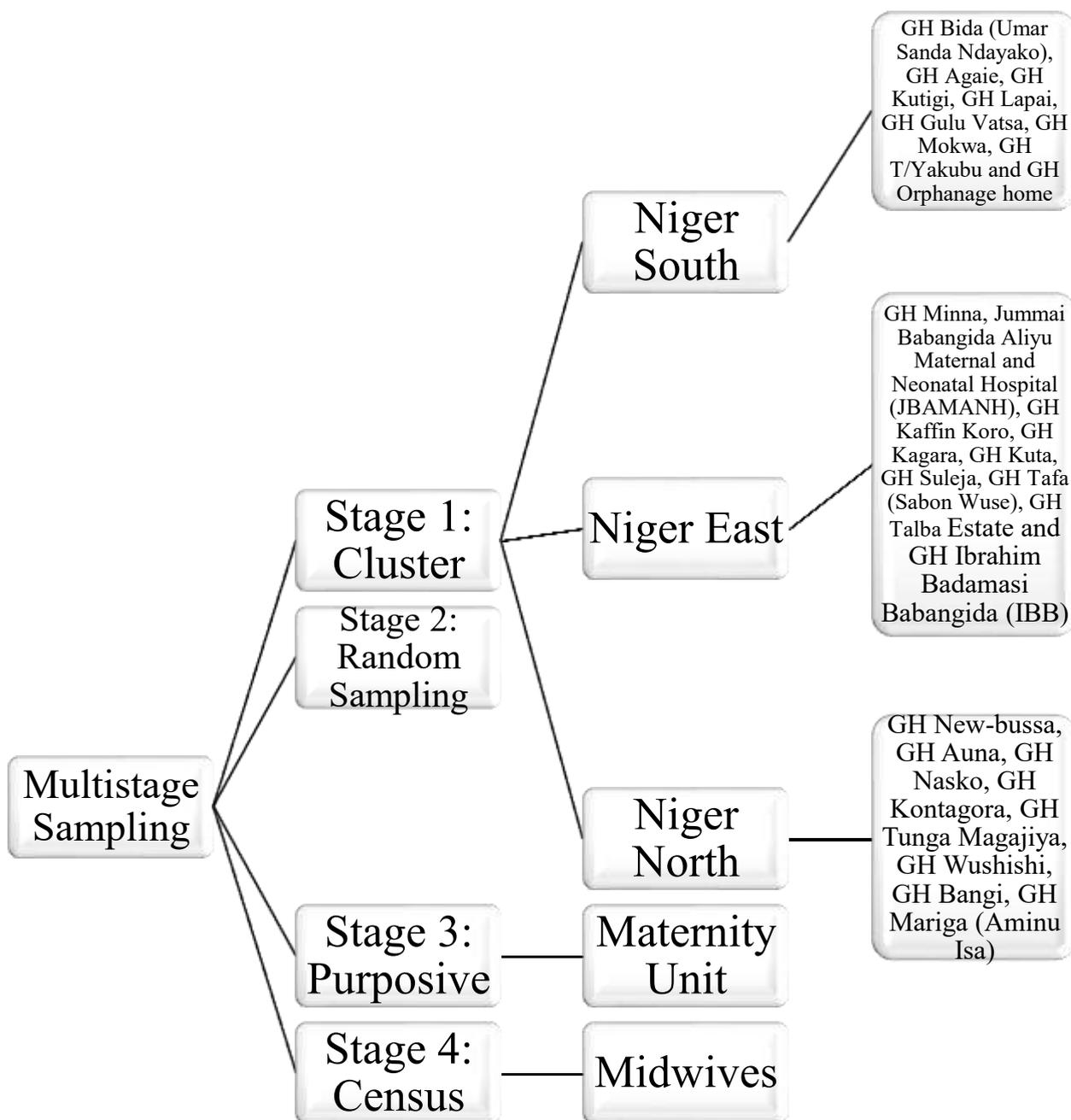


Figure 1: Sampling Technique

2.3.6 Instrument for Data Collection

A structured questionnaire, developed from the literature reviewed by the researchers was used as a tool to address the prevalence of traumatic childbirth. The instrument consisted of two sections: Section A elicited sociodemographic information from respondents; Section B included six closed-ended questions about the prevalence of traumatic. A detail of the questionnaire is attached in the appendix.

2.3.7 Validity of the Instrument

The content and face validity of the research instruments was assessed by five expert or senior midwifery colleagues in Ahmadu Bello University Zaria. To ensure face validity, the data collection instrument was compared with the objective to confirm that the objective was addressed. For content validity, the jurors received information about the objective and were asked to rate each question's relevance using a four-point Likert scale. They evaluated each question for relevance, clarity, simplicity and ambiguity, scoring them as follows: B for not relevant and A for very relevant. This scoring system was also applied to clarity, simplicity, and ambiguity. The proportion of items that scored A were calculated, with a content validity index of 0.75. Items with low scores were rephrased to enhance simplicity, clarity, and reduce ambiguity. Irrelevant items were removed and replaced with relevant suggestions from the jurors. Their feedback was incorporated into the final draft of the questionnaire.

2.3.8 Reliability of the Instrument

Since the questionnaire mainly comprised single categorical (Yes/No) items designed to assess the prevalence and reporting of traumatic childbirth experiences, internal consistency testing using Cronbach's alpha was deemed inappropriate. Instead, the reliability of the instrument was ensured through pretesting, expert evaluation, and strict adherence to criteria for item clarity, relevance, and simplicity. A test-retest, involving 10% of the target population was conducted to determine the clarity, relevance, and consistency of the items. Feedback from this exercise showed uniformity in responses across repeated administrations, demonstrating acceptable test-retest reliability and overall instrument stability.

2.3.9 Method of Data Collection

Following the approval of ethical clearance with approval number NMHREPC2024/08/08, the Niger State Ministry for Tertiary Institutions issued an introductory letter to the Hospital Service Management Board on behalf of the researchers. The board provided permission letters for the selected hospitals, which were subsequently presented to the heads of hospital services at the three facilities for further approval. Finally, the hospital secretaries introduced the researchers to the heads of the maternity units. After explaining the purpose of the visits to these unit heads, permission was granted to engage with the respondents.

The researchers distributed questionnaires allowing them 24 hours to complete them. A total of 170 filled questionnaires were retrieved. The data were then cleaned, coded, and entered into SPSS version 27 for Windows for analysis. Respondents were asked to identify a specific traumatic childbirth incident they had witnessed while caring for a woman, referred to as the 'index' trauma. This event served as the basis for examining the characteristics of the traumatic occurrence.

2.3.10 Method Data Analysis

Data analysis on prevalence of traumatic childbirth was performed using Statistical Package for Social Sciences (SPSS) version 27 for descriptive statistics. Continuous data was presented as means, while categorical data was presented as percentages. Chi-square test of comparison between experiences of traumatic childbirth and hours of duty was calculated at p-value 0.05.

2.3.11 Ethical Consideration

Ethical approval for the study was granted by the Niger State Ministry of Health Research Ethics Committee (Approval No. NMHREPC2024/08/08). Additional authorization was obtained from the Hospital Service Management Board and the administrations of the selected hospitals. Before data collection, participants were fully informed about the study's objectives, procedures, and their rights, including the freedom to decline participation or withdraw at any point without penalty.

Because the study explored potentially distressing experiences related to traumatic childbirth, specific steps were taken to ensure participants' psychological safety and confidentiality.

Questionnaires were administered in a private and supportive setting, allowing respondents to share their experiences freely. Research assistants, who were qualified nurses trained in ethical and trauma-sensitive engagement, conducted the sessions with care to minimize emotional discomfort. Participants who appeared emotionally affected were provided with immediate reassurance and offered referral options for counselling through the hospitals' staff welfare or mental health units. Contact details for these services were made available to all participants. To maintain confidentiality, no names or personal identifiers were recorded on the questionnaires. Instead, coded numbers were used for tracking, and completed forms were kept in locked cabinets. Electronic data were password-protected and accessible only to the research team. All results were presented in summary form, ensuring anonymity of both individuals and institutions.

3.0 Results

Table 1 revealed that most midwives (46.5%) are aged 30-39, while younger midwives (20-29) make up 20.0%. Marital status reveals that 71.2% are married, 23.5% are single, and 5.3% are separated. In respect to religion, 58.8% identified as Muslim and 41.1% as Christian. Regarding their level of education, 72.3% trained at a College of Nursing/Midwifery and few 7.7% in a Nursing Department. Most midwives (54.1%) hold a Nursing Certificate, and only 1.2% have a PhD. Regarding the years of experience, 45.9% of the midwives have spent more than 20+ years and above while 41.2% have 10-19 years in service. Regarding the unit or current practicing ward from which the midwives were drawn, the results revealed that 45.9% work in labour wards. In terms of workload, 39.4% of the midwives attend to a high number of births monthly.

Table 2 revealed that midwives' educational qualifications, years of experience, and practice settings had a significant influence on their exposure to traumatic childbirths at ($p = 0.001$ respectively). The perceived frequency of traumatic births was also significantly linked to years of experience ($p = 0.002$) and practice setting ($p = 0.006$). Reporting of traumatic events was mainly affected by the practice setting ($p = 0.001$), while the relationship between working hours and trauma exposure was significantly influenced by educational background ($p = 0.007$) and practice setting ($p = 0.001$). Furthermore, reporting symptoms was significantly associated with years of experience ($p = 0.001$). Documentation of traumatic childbirths showed a marginal association with experience ($p = 0.050$), and the overall prevalence of trauma among midwives compared to other professionals was significantly related to years of experience ($p = 0.001$) and practice setting ($p = 0.001$).

Table 3 highlighted that majority of the respondents have experienced traumatic childbirth more than three times with only few (11.2%) experiencing it once. 94.1% have heard of traumatic childbirth experience, whereas 5.9% have not. The prevalence rate of traumatic childbirth, frequency of documentation and percentage of midwives' reporting experiencing symptoms of secondary traumatic stress or burnout due to traumatic childbirth experience are 94.1%, 88.8%, 88.1% respectively.

Table 1: Distribution of the Midwives Sociodemographic Characteristics (n= 170)

Variable	Frequency	Percentage
Age		
20-29	34	20.0
30-39	79	46.5
40-above	57	33.5
Religion		
Islam	100	58.8
Christianity	70	41.7
Educational Background		
School of Nursing	34	20.0
College of Nursing/Midwifery	123	72.3
Department of Nursing	13	7.7
Qualification Obtained		
Nursing Certificate	92	54.1
National Diploma in Nursing	11	6.5
BNSc	47	27.6
MSc Nursing	18	10.6
PhD Nursing	2	1.2
Years of Experience		
0-9	22	12.9
10-19	70	41.2
20 and Above	78	45.9
Practice Setting		
Antenatal ward	48	28.2
Labour ward	78	45.9
Postnatal ward	34	20.0
Gynae ward	10	5.9
Monthly number of births		
0-10	31	18.2
11-20	39	22.9
21-30	33	19.4
31 and above	67	39.4

Table 2: Associations between Prevalence and Selected Socio-Demographic Factors among Midwives (n=170)

Prevalence Variable	p-value		
	Educational Background	Years of Experience	Practice Setting
Witnessed traumatic childbirth	0.001	0.001	0.001
Frequency of traumatic child birth	0.270	0.002	0.006
Reported to hospital	0.357	0.097	0.001
Number of hours reduced	0.007	0.411	0.001
Report symptoms	0.175	0.001	0.078
Document traumatic childbirth experiences	0.345	0.050	0.053
Prevalence among midwives higher than other professionals	0.126	0.001	0.001

Table 3: Prevalence of Traumatic Childbirth exposures by the Midwives (n= 170)

Variable	Frequency			
	Yes	%	No	%
Witnessed traumatic child birth	160	94.1	10	5.9
Frequency of traumatic child birth Witnessed				
Once	19	11.2	00	00
Twice	40	23.5	00	00
Three times	30	17.6	00	00
More than three times	71	41.8	00	00
Action taken				
Reported to hospital	132	82.5	28	17.5
Document experience	142	88.8	18	11.2
Number of hours Reduced	141	88.1	19	11.9
Reported symptoms	141	88.1	19	11.9
Report is high among midwives	112	70.0	48	30.0

Table 4: Cross Tabulation of Worked Hours and the Frequency of Witnessed Traumatic Childbirth

Witnessed Traumatic Childbirth		Worked hours and the Frequency of traumatic childbirth					Total
		None	Once	Twice	Three times	More than three times	
Witnessed Traumatic Childbirth	Yes	10	10	31	20	33	104
	No	38	9	9	10	00	66
Total		33	19	40	30	48	170

Table 3 shows the relationship between the number of hours worked per week by midwives and the prevalence of traumatic childbirth experiences. Among those who reported working long hours (Yes), 31 midwives (29.8%) experienced traumatic childbirth twice, while 20 (19.2%) experienced it three times, and 33 midwives (31.7%) reported more than three times. Conversely, 10 (9.6%) in this group reported experiencing no traumatic childbirth. Among those who reported not working extended hours (No), the prevalence of traumatic childbirth experiences decreases with frequency 38 midwives (57.6%) reported none experience, while 10 (15.2%) experienced it three times.

Chi-Square Tests	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	59.288 ^a	4	.001
Likelihood Ratio	70.846	4	.001
Linear-by-Linear Association	43.008	1	.001
N of Valid Cases	170		

* Long hours: more than 48 hours per week or working more than 12 hours per shift.

The Chi-Square test was conducted to examine the relationship between the number of hours worked per week by midwives and the prevalence of traumatic childbirth experiences at p-value of 0.001. The results revealed a statistically significant association between these variables ($\chi^2 = 59.288$, $df = 4$, $p = 0.001$). The likelihood ratio (70.846, $p = 0.001$) and the linear-by-linear association (43.008, $p = 0.001$) further confirm the significance of this relationship.

4.0 Discussion

The sociodemographic data indicates that the majority of midwives are in the 30-39 age groups, placing them in mid-career, while significant portion (≥ 40) years have extensive experience. Younger midwives (<30 years) are fewer, reflecting a workforce that blends both early-career and seasoned professionals. Most participants are married and Muslim, factors that could shape their support networks. The religious demographics align with the cultural context of midwifery in Niger State. The majority received training from specialized nursing or midwifery institutions, with over half having at least a decade of experience, and many surpassing 20 years, demonstrating a high level of professional expertise.

Educational backgrounds vary, with most holding a Nursing Certificate, while a smaller proportion have attained MSc or PhD qualifications, indicating advanced education that may influence their response to traumatic childbirth. In terms of experience, most midwives have worked for over 20 years, reinforcing their in-depth understanding of intra-partum care. A large proportion work in labour wards and manage high birth caseloads (over 31 per month), exposing them to frequent traumatic childbirth situations. Nearly all respondents are aware of traumatic childbirth, suggesting its prevalence and the potential psychological strain it places on midwives.

The results of Chi-square analysis showed that educational background, years of experience, and practice setting were all significantly related to the frequency of experiencing traumatic childbirths respectively. This indicates that midwives' exposure to traumatic births varies across different educational levels, work experience, and areas of practice. Similarly, the perceived prevalence of traumatic childbirth experiences during intrapartum care was significantly associated with years of experience and practice setting, suggesting that more experienced midwives and those working in specific wards (such as the labour ward) are more likely to encounter such experiences.

Furthermore, reporting of traumatic childbirth incidents was significantly influenced by practice setting, while the correlation between hours worked per week and traumatic childbirth experiences showed significant relationships with educational background and practice setting. This implies that both work environment and academic preparation play roles in how midwives perceive workload-

related trauma exposure. The prevalence of reporting symptoms was significantly associated with years of experience, indicating that longer-serving midwives are more prone to emotional exhaustion resulting from repeated exposure to traumatic events. Documentation of traumatic childbirth experiences showed a borderline association with years of experience, while the prevalence of traumatic experiences among midwives compared to other professionals was significantly related to years of experience and practice setting.

Overall, these findings suggest that years of professional experience and the clinical environment have strong and consistent effects on midwives' exposure to and reporting of traumatic childbirth events, highlighting the importance of targeted support and trauma-informed care interventions within high-risk practice settings. Recent studies reinforce these findings. For instance, Ranieri *et al.* (2024), in a cross-sectional study among Italian midwives, found that frequent exposure to traumatic events significantly correlated with burnout and secondary traumatic stress, while fewer years since graduation were linked with higher post-traumatic stress symptoms and lower compassion satisfaction. This supports the present finding that experience influences trauma exposure, although its effects may vary across contexts. Likewise, a qualitative investigation by Xu *et al.* (2025) in China reported that midwives with varying years of experience described intrusive memories, helplessness during obstetric crises, and vicarious trauma highlighting the emotional toll of high-risk practice settings. Collectively, these studies corroborate the current research by emphasizing that both clinical environment and professional experience shape midwives' exposure to and response to traumatic childbirths. Therefore, targeted interventions should address the specific needs of midwives across different experience levels and practice areas, focusing on workload regulation, resilience-building, and trauma-informed institutional support.

This study highlights that nearly all the respondents reported experiencing at least one traumatic childbirth event, with more than half enduring such events more than three times. This indicates that traumatic births are not rare anomalies but routine occupational hazards in this setting. This signifies that, midwives in this setting work in an environment where trauma is normalized, heightening risks of chronic stress, burnout, and attrition. This finding agreed with Ayers *et al.* (2023) report on traumatic childbirth experiences that revealed elevated prevalence rates of 12% in Turkey and 29% in Iran and the study of Modarres *et al.* (2022) findings in low resource countries, the prevalence rates of traumatic birth have been estimated at over 50% due to limited access to maternity care, heightened socio-economic disadvantage, and health disparities. Equally, the finding agreed with Schröder (2016) findings which established that out of the 59% of respondents (1237/2098), 85% reported their participation in a childbirth experience that was deemed traumatic and that of an online survey study by Leinweber *et al.* (2017) which further confirm that observing birth trauma related to care was a frequent occurrence with over 67.2% of Australian midwives witnessing a traumatic childbirth incident involving interpersonal care-related trauma features. These midwives experienced intense emotions, with 74.8% feeling horror and 65.3% grappling with guilt during or shortly after witnessing the distressing birth event.

Majority of the midwives faced recurring exposure which is a sign of cumulative burden. This aligns with studies from low-resource settings like Nigeria (Musa *et al.* 2023) and Ghana (Fafa *et al.* 2017), where high maternal mortality rates and obstetric emergencies disproportionately burden midwives. Additionally, a substantial number of midwives report symptoms of secondary traumatic stress or burnout, with nearly all respondents acknowledging such effects. This is in line with Fontein-kuipers *et al.* (2018) findings that confirmed thirteen per cent (13%) of active midwives in the Netherlands indicated their participation in a work-related event that proved traumatic, leading to post-traumatic stress for a subset of them (2.2% of practicing midwives). Documentation of traumatic childbirth appears to be a common practice, with midwives reporting these incidents more frequently than other healthcare professionals. This is in congruent with the study of Amir and Reid's (2020) survey on the impact of traumatic perinatal events on burnout rates among Irish health care professionals. The results revealed that over 90% of participants had encountered a traumatic perinatal event at

work in the past year, with midwives (58%) out of the 90% accounting for such exposure monthly or more frequently.

The inferential analysis demonstrated a statistically significant association between midwives' working hours and their exposure to traumatic childbirths ($\chi^2 = 59.288$, $df = 4$, $p = 0.001$). Extended working hours are generally linked to fatigue, reduced concentration, and emotional exhaustion which could increase psychological vulnerability. In the study setting, longer duty hours may not merely reflect tiredness but rather greater clinical exposure, as midwives who work beyond 48 hours per week are more likely to be present during emergencies or complicated deliveries. Therefore, the relationship between working hours and trauma exposure appears to stem from situational rather than purely psychological factors, rooted in the structural realities of maternity care. The finding highlights an institutional paradox: longer shifts designed to maintain continuity of care may inadvertently intensify midwives' exposure to traumatic events, emphasizing the urgent need for balanced work schedules, adequate staffing, and institutional support mechanisms to safeguard their psychological well-being. The finding corresponds with recent global research on the effects of extended work schedules in healthcare. Studies have increasingly shown that prolonged shifts contribute to emotional fatigue, burnout, and diminished job performance. For example, Li *et al.* (2024), in a cross-sectional investigation of nurse staffing and overtime in acute care hospitals, reported that nurses working beyond nine hours per shift or engaging in mandatory overtime experienced substantially higher burnout levels, reduced job satisfaction, and a stronger intention to leave the profession. Likewise, Huang *et al.* (2025), in a four-year longitudinal study, demonstrated that persistent overtime hours predicted a gradual increase in burnout and psychological distress among healthcare workers. These findings are consistent with the present study, suggesting that longer working hours not only elevate midwives' chances of encountering obstetric emergencies but also erode their emotional resilience, heightening their susceptibility to trauma. Therefore, enforcing reasonable shift limits, ensuring adequate staffing, and integrating psychological support systems are essential to protecting midwives' well-being and sustaining quality maternal care.

The near-universal exposure to traumatic childbirth in the study setting underscores the chronic emotional labour demands placed on midwives. According to Hochschild's theory, professions requiring frequent emotional regulation (e.g., healthcare) risk emotional dissonance i.e. the clash between genuine emotions (e.g., fear, grief) and mandated professional composure. Midwives witnessing maternal haemorrhage must suppress panic to maintain calm, exemplifying surface acting forced by systemic understaffing. Over time, this dissonance contributes to burnout and PTSD symptoms (e.g., flashbacks, avoidance) and may influence their decision to leave.

5.0 Recommendations

Based on the study findings, several context-specific interventions are recommended to mitigate the psychological effects of traumatic childbirth among midwives in Nigeria. First, there is a need to establish structured support systems within healthcare institutions. Hospitals and maternity units should implement regular debriefing sessions following traumatic delivery events and provide easily accessible mental health services for midwives. Such initiatives could be coordinated through hospital management boards and supported by the Nigerian Nursing and Midwifery Council (NMCN) in collaboration with mental health professionals. Establishing peer-support groups and confidential counselling units would also promote emotional recovery and resilience among midwives.

Secondly, training and capacity-building initiatives should be strengthened to enhance midwives' competence in managing trauma-related stress. Trauma-informed care and emotional resilience modules should be incorporated into the curricula of schools and colleges of nursing and midwifery accredited by the NMCN. Additionally, regular in-service training, workshops, and continuing professional development programs organized by the Federal and State Ministries of Health would ensure that practicing midwives are equipped with coping strategies and stress management skills relevant to their work environments.

Finally, policy and institutional interventions are essential to sustain these efforts. The Federal Ministry of Health, in partnership with the NMCN and professional associations such as the National Association of Nigerian Nurses and Midwives (NANNM), should develop and enforce national guidelines aimed at safeguarding the psychological well-being of midwives. These policies should include provisions for workload regulation, staff rotation in high-intensity wards, and mandatory post-incident counselling. Integrating such measures into Nigeria's existing Safe Motherhood Initiative and other maternal health policies will help strengthen institutional support, enhance midwives' mental health, and ultimately improve the quality of maternal and neonatal care delivery.

6.0 Limitations of the Study

Adopting a self-reported categorical format made it feasible to estimate prevalence across several facilities without requiring extensive psychological assessments. Nonetheless, because no validated trauma severity instrument was employed, the results represent perceived experiences of trauma rather than clinically measured psychological distress. Future research could improve measurement reliability by integrating standardized tools such as the *Impact of Event Scale-Revised (IES-R)* or the *Birth Trauma Scale* in combination with self-reported indicators.

7.0 Conclusion

In Niger State, traumatic childbirth poses a major occupational hazard for midwives, demanding systemic reforms to support their well-being and improve maternal care.

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Appendix I
Questionnaire on Prevalence

DEPARTMENT OF NURSING SCIENCES, FACULTY OF ALLIED HEALTH SCIENCES,
AHMADU BELLO UNIVERSITY, ZARIA
PREVALENCE OF TRAUMATIC CHILDBIRTH EXPERIENCES AMONG
MIDWIVES IN SECONDARY PUBLIC HEALTH CARE FACILITIES OF NIGER
STATE, NIGERIA

Dear Respondents,

My name is Amina Ahmad; I am a midwife in the Department of Nursing Sciences Ahmadu Bello University Zaria. I and my colleagues are conducting research on the above-mentioned topic. All information provided will strictly be used for academic purpose and would remain highly confidential and anonymous. Phone Number: 07063903228

Instruction: Please cooperate by answering what best represent your opinion.

Section A: Socio-Demographic Characteristics

1. Age in years:
2. Marital status: Married {} Single {} Divorce {} Separated {} others {} specify.....
3. Religion: Islam {} Christianity {} others (Specify).....
4. Educational Background: School of Nursing {} College of Nursing/Midwifery {} Department of Nursing {}
5. Qualification Obtained: Nursing Certificate {} National Diploma in Nursing {} BNSc {} MSc Nursing {} PhD Nursing {}
6. Years of Working Experience:.....
7. Practice Setting: Antenatal Ward {} Labour Ward {} Postnatal Ward {} Gynae Ward {}, Other (please specify): _____
8. Monthly average number of births attended.....

Section B: Prevalence of Traumatic Childbirth experience

How many times do experiences traumatic childbirth?

Variable	Yes	No
Traumatic childbirth experiences are commonly reported by midwives during intrapartum care?		
Have you reported any incidence of traumatic childbirth experiences in your work environment?		
Is there a correlation between the number of hours worked per week by midwives and the frequency with which they report experiencing traumatic childbirth events?		
Is there a high prevalence of midwives reporting symptoms of secondary traumatic stress or burnout due to exposure to traumatic childbirths?		
Is the prevalence of midwives documenting traumatic childbirth experiences high?		
Is the prevalence of traumatic childbirth experiences reported by midwives higher than that reported by other healthcare professionals involved in intrapartum care (e.g., obstetricians, nurses)?		