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Assessment of Knowledge of Shaken Baby Syndrome Among Women of Reproductive Age In Ilorin: A Cross-Sectional Study

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ABSTRACT

Shaken Baby Syndrome (SBS), also referred to as abusive head trauma, is a severe form of non-accidental injury that predominantly affects infants and young children, often resulting in significant morbidity and mortality. This study aimed to assess the knowledge and awareness of SBS among women of reproductive age in the University of Ilorin Teaching Hospital, Nigeria. A cross-sectional analytical design was employed, with data collected from 388 consenting participants using a validated questionnaire. Descriptive statistics, chi-square tests, and logistic regression analyses were conducted to examine associations between socio-demographic variables and knowledge of SBS.

Findings revealed that 70.36% of participants had no prior awareness of SBS, and 43.81% were unaware of its consequences. Although occupation was significantly associated with general awareness, factors such as age, marital status, education level, and number of children were significantly associated with knowledge of SBS consequences. Younger women and those without children demonstrated higher awareness, possibly due to greater access to digital information sources. Notably, education level did not consistently predict awareness, highlighting the complexity of knowledge acquisition.

The study underscores a substantial gap in awareness of SBS among women of reproductive age, emphasizing the need for targeted educational interventions. Social media and healthcare-based education, particularly during antenatal and postnatal visits, were identified as effective channels for information dissemination. Improving awareness is critical for preventing SBS and reducing its devastating outcomes.

Introduction

Shaken baby syndrome (SBS) is a type of abuse that primarily affects neurological functioning and is characterized by brain damage [1]. It is a non-accidental traumatic injury that happens when a baby or young child is violently shaken [1,2]. Shaken baby syndrome is the most often used and accepted word for this disorder; other terms include abusive head trauma, shaken impact syndrome, whiplash shake syndrome, and non-accidental or purposeful head damage [2].

According to the World Health Organisation, there are various forms of physical abuse against children, including beating, shaking, kicking, biting, suffocating, and poisoning [3]. Physical abuse involves the intentional use of any physical force against a child that is highly likely to result in harm or injury to the child's health and development. Vigorous shaking is one particular dangerous form of physical abuse. The extreme vibration associated with the back-and-forth movements of the infant's head during shaking can lead to significant or even fatal brain damage [4]. Shaking is a major factor in the etiology of abusive head trauma and has been linked to increased mortality rates in shaken baby syndrome (SBS) [5]. The most common trigger for shaking a baby has been reported to be inconsolable or excessive crying, mostly coupled with external stressors such as work, social, or financial challenges. A result of this form of physical child abuse is SBS [5].

SBS is a severe form of non-accidental head injury commonly observed in infancy or early childhood. It results from violent head trauma, which usually occurs when a young child is vigorously shaken and subjected to rapid acceleration, deceleration, and rotational forces with or without impact [6,7]. SBS, also known as abusive head trauma (AHT), can be caused by direct blows to the head, dropping, throwing, or shaking a child. It manifests clinically as a triad of subdural hematoma, retinal hemorrhages, and encephalopathy, which can lead to death within a few days after the injury. A considerable proportion of survivors develop functional disorders such as learning difficulties, behavioral problems,

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mental retardation, stroke, and blindness due to retinal damage [8]. The majority of children affected are under the age of two, but SBS can also be seen in children up to 5 years old due to their relatively large head compared to their weak neck muscles [9,10].

Shaken Baby Syndrome (SBS) predominantly affects children under the age of two, although it may occur in children up to five years old [11]. The highest incidence is observed in infants aged between six and eight weeks, a period commonly associated with increased crying. Infants are particularly susceptible to injury from shaking due to their proportionally large head size and underdeveloped neck muscles [12]. In addition, their cranial sutures are not fully fused, and they have relatively larger volumes of cerebrospinal fluid, which permit greater movement of the brain within the skull [13].

A study conducted in Saudi Arabia in 2022 evaluating parental awareness, knowledge, and attitudes toward Shaken Baby Syndrome (SBS) reported that only 32.1% of participants had prior awareness of the condition [14]. This finding indicates a considerable gap in knowledge among caregivers. Similarly, a study examining SBS cases in North Carolina found that approximately three to four children in the United States experience severe or fatal head injuries due to child abuse each day [15], highlighting the significant public health burden of abusive head trauma (AHT). These statistics underscore the critical need for effective prevention strategies and public health education programs. In addition, research carried out in Tabuk in 2018 revealed that 67.39% of parents had no prior knowledge of the risks associated with SBS [7]. Taken together, these findings demonstrate consistently low levels of awareness across different populations, reinforcing the importance of implementing targeted educational interventions to improve caregiver knowledge and reduce the incidence of SBS [7].

Shaken Baby Syndrome (SBS), which results in traumatic head injury, is a major cause of mortality as well as the most common cause of long-term disability and permanent neurological damage among physically abused infants and young children [16]. Evidence indicates that approximately one-third of severely affected infants die as a consequence of shaking. This mortality rate is notably higher by about 6% to 12% than that associated with accidental head injuries in children of a similar age group [17]. Furthermore, SBS is associated with a high level of morbidity, as nearly 60% of surviving children experience moderate to severe disabilities, highlighting the significant and lasting impact of this form of abuse [18].

There has been limited studies on the knowledge of shaking baby syndrome among mothers in Nigeria. This gap in literature and grossly unaware population of infant caregivers raises concerns about the prospects of eradicating SBS. It is therefore crucial to understand the attitude and knowledge of women of reproductive age about SBS, as they are more likely to be primary caregivers or involved in child-rearing. Gaining this understanding will help develop effective interventions to raise awareness, establish education programs, and, most importantly, call the attention of health authorities to the urgent need to prevent the devastating sequelae from SBS in newborns and infants. This study evaluates the knowledge and awareness of SBS among reproductive-age women in University of Ilorin Teaching Hospital, Ilorin, Kwara State (UITH). The findings will help in preventing infant injuries and reducing mortality, promoting safe parental practices, empowering mothers as caregivers, identifying effective media channels for the dissemination of data-driven health education, designing targeted interventions, and raising more awareness on this neglected issue.

Methods and Materials

Study Design

An observational, analytic, cross-sectional study was employed to collect data at one point in time.

Study Area

This study was conducted in the University of Ilorin Teaching Hospital, located in Ilorin, Kwara State, Nigeria, from January 21 to February 10, 2025.

Study Population

The study population comprised women of reproductive age (18–49 years) within the University of Ilorin Teaching Hospital at the time of the study.

Inclusion Criteria

All women of reproductive age (18–49 years) within the University of Ilorin Teaching Hospital who consented to participate were enrolled in the study.

Exclusion Criteria

Women of reproductive age at the University of Ilorin Teaching Hospital who were unable to respond to the questionnaire on account of severe illness, inability to write, or not sufficiently IT proficient.

Sample Size

The minimum sample size (n) was calculated as follows:

$$n = \frac{Z^2\, P\, (1 - P)}{D^2}$$

$$n = \frac{1.96^2 \times 0.5 \times (1-0.5)}{0.05^2} = 385$$

where,

n = required sample size,

Z = z-score corresponding to a 95% confidence level (1.96),

P = estimated proportion of participants with knowledge of shaken baby syndrome (SBS), assumed to be 50% (0.5),

D = desired margin of error (0.05)

The minimum calculated sample size to achieve a precision of 5% with a 95% confidence level is 385 participants. To account for potential non-response and to ensure sufficient data, the study aimed to recruit 400 participants.

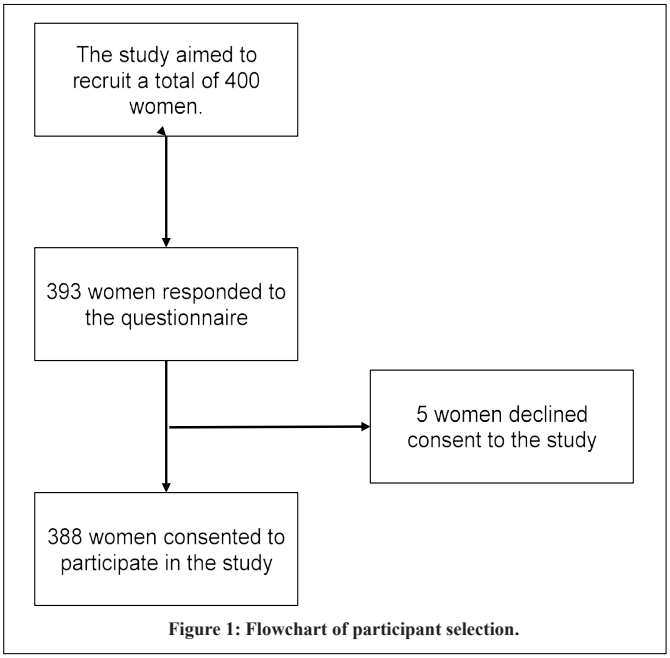

Figure 1: Flowchart of participant selection.

Study Period

The study was conducted from January 21 to February 10, 2025.

Sampling Technique

A convenient non-probability sampling technique was employed to collect data from the participants.

Data Collection

Data were collected using an online-based validated questionnaire administered in English and translated for non–English (Yoruba and Hausa) speakers. The questionnaire was distributed via Google Forms, targeting women of reproductive age (18–49 years) within the University of Ilorin Teaching Hospital.

The questionnaire included a brief description of the aim of the study and approval of participation in the first section. This was followed by demographic information and questions designed to assess the knowledge

and attitudes of participants regarding SBS. The questionnaire was adapted from the study of AlOmran et al. [14]

The purpose of the study was explained to the respondents, and consent was obtained.

Some of the questionnaires were interviewer-administered while others were self-administered for participants who could read and comprehend. Six student volunteers assisted with the data collection after adequate training, and with their support, responses were gathered from various departments in the hospital.

Statistical Analysis

Data was collected and imported into Python for analysis. Statistical computation was performed using the scipy.stats module. Categorical variables were expressed in frequencies, and percentages were calculated to summarise the data. Pearson's chi-squared test of independence was employed to assess the association between the response variables. Additionally, a binary logistic regression model was fitted to determine the odds ratios of the independent variables on the outcome. A p-value < 0.05 was considered statistically significant.

Ethical Consideration

Ethical approval for the study was obtained from the Institutional Review Board of the University of Ilorin Teaching Hospital (UITH) on January 17, 2025, with reference number UITH/CAT/189/VOL.21/852. Participation was voluntary, and all data were kept confidential and used solely for this research purpose.

Results

A total of 388 (98.7%) women consented to participate in the study, while 5 declined (Fig. 1). Among them, 217 (55.9%) women were between the ages of 20 and 29, with 202 (52.1%) being married. Nearly all participants were Nigerian, with only two identifying as non-Nigerian. Approximately one-third of the women had attained a high school education or less. A substantial portion of the participants (45.10%) had between one and four children. Additional details on the sociodemographic characteristics are presented in Table 1.

The association between sociodemographic characteristics and prior knowledge of SBS (Yes/No) was evaluated using a Chi-squared test of independence (Table 5). Occupation was the only factor significantly associated with general awareness (p = 0.0135). In contrast, age, marital status, education level, and number of children showed no statistically significant association with simple awareness (p > 0.05).

Table 4 demonstrates the association between participants' knowledge of the consequences of SBS and their sociodemographic characteristics. Sociodemographic characteristics like age, education level, marital status, number of children and occupation showed a statistically significant association (p < 0.05), while others like occupation and nationality were not significantly associated with knowledge of SBS.

Approximately 70.36% of the women had no prior knowledge of SBS (Fig. 2). Additionally, 43.81% were not aware of the consequence of SBS (Fig. 4). Women with 1–4 children had significantly higher odds of knowing about SBS compared to those with no children (OR = 0.612, 95% CI: 0.389–0.962, p = 0.033). However, having 5–7 children was not significantly associated with SBS knowledge (OR = 0.322, 95% CI: 0.091–1.137, p = 0.078).

Multiple regression showed that occupation emerged as the only statistically significant predictor. Specifically, self-employed women had significantly lower odds of possessing knowledge about SBS compared to the reference group (aOR = 0.43, 95% CI: 0.23–0.80, p = 0.008). Age approached statistical significance, with women aged 30–39 years showing higher odds of knowledge compared to the 18–19 years baseline, though this did not strictly cross the significance threshold (aOR = 3.38, 95% CI: 0.98–11.67, p = 0.054). Number of children, marital status, and education level were not significant predictors in the adjusted model.

Discussion

Several studies have assessed awareness and attitudes toward SBS and factors that could be associated with it, particularly in Saudi Arabia [19]. However, awareness level, cultural perception, and healthcare practices vary across regions. This study focused on evaluating the knowledge of SBS among women of reproductive age in Ilorin, Kwara State, Nigeria. We observed a statistically significant association between knowledge of the consequences of SBS and factors such as age, marital status, educational level, and number of children.

Our findings indicate that young adults have greater knowledge of the consequences of SBS than the older age groups, while adolescents have the lowest knowledge of the consequences of SBS. This may be due to greater exposure of young adults to digital media and educational resources compared to fewer learning opportunities and traditional parenting beliefs in older adults. It was also observed that older adults initially had strong negative perceptions of social media, primarily due to privacy concerns [20]. A higher percentage of young adults own smartphones compared to older people, highlighting the digital divide that can influence access to information [21].

Table 1: Demographic characteristics.

Variable	Category	Frequency	Percentage
Age Category	18 - 19 years old	15	3.87%
	20 - 29 years old	217	55.93%
	30 - 39 years old	94	24.23%
	40 - 49 years old	62	15.98%
Marital Status	Married	202	52.06%
	Single	180	46.39%
	Widowed	4	1.03%
	Divorced	2	0.52%
Education Level	Bachelor	229	59.02%
	High school or lower	132	34.02%
	Postgraduate	27	6.96%
Occupation	Unemployed	161	41.49%
	Self Employed	147	37.89%
	Employee	80	20.62%
Number of children	None	192	49.48%
	1 - 4	175	45.10%
	5 - 7	20	5.15%
	More than 7	1	0.26%

Table 2: Knowledge Regarding SBS.

Variables	Category	Frequency	Percentage
Have you ever heard of Shaken Baby Syndrome?	Yes	115	29.64%
	No	273	70.36%
If yes, what do you know about it?	It involves violent shaking of a baby	83	21.39%
	It causes mental retardation	50	12.89%
	It causes learning disabilities	37	9.54%
	It involves direct blows to the head of a baby	18	4.64%
	It causes blindness	12	3.09%
	Others	4	1.03%
Have you ever seen any educational campaign, fliers or materials on Shaken Baby Syndrome in your community?	Yes	29	7.47%
	No	359	92.53%
Do you think shaking a baby is	Harmful	176	45.36%
	Maybe harmful	98	25.26%
	I don't know	61	15.72%
	Non-harmful	53	13.66%
What do you think the consequences of Shaken Baby Syndrome are?	I don't know	170	43.81%
	Cerebral hemorrhage	147	37.89%
	Behavior changes	89	22.94%
	Learning difficulties	84	21.65%
	Coma	74	19.07%
	No consequences	22	5.67%
Do you think shaking an infant can lead to death?	Yes	183	47.16%
	No	158	40.72%
	Others	47	12.11%
Do you think Shaken Baby Syndrome can be prevented?	Yes	266	68.56%
	No	13	3.35%
	I don't know	109	28.09%

Table 3: Attitude towards knowledge of SBS.

Variables	Category	Frequency	Percentage
Do you want to know about Shaken Baby Syndrome?	Yes	364	93.81%
	No	24	6.19%
If not, explain why.	I am not interested	12	50.00%
	I already know enough	7	29.17%
	Personal reasons	2	8.33%
	It makes me sad and anxious	2	8.33%
	I never came across it	1	4.17%
If yes, through which sources?	Doctor or medical staff during the vaccination period	234	32.59%
	Internet and social media	206	28.69%
	Awareness campaigns	162	22.56%
	Medical books and bulletins	109	15.18%
	Others	7	0.97%
What is the preferred time to receive information about Shaken Baby Syndrome?	Before pregnancy	228	58.76%
	During pregnancy	109	28.09%
	One week after delivery	29	7.47%
	During vaccination visits for the baby	22	5.67%
Do you think healthcare providers (e.g., Midwives, nurses, doctors, e.t.c.) should teach about Shaken Baby Syndrome during prenatal and postnatal visits?	Yes	382	98.45%
	No	6	1.55%

Table 4: Association between knowledge of the consequences of SBS and the demographic characteristics.

Variables	Categories	Harmful	I don't know	Maybe harmful	Non-harmful	Chi-Squared Statistic	P-value
Age Category	18 - 19 years old	6 (1.55%)	4 (1.03%)	4 (1.03%)	1 (0.26%)	17.2059	0.0456
	20 - 29 years old	101 (26.03%)	32 (8.25%)	60 (15.46%)	24 (6.19%)		
	30 - 39 years old	49 (12.63%)	13 (3.35%)	21 (5.41%)	11 (2.84%)		
	40 - 49 years old	20 (5.15%)	12 (3.09%)	13 (3.35%)	17 (4.38%)		
Education Level	Bachelor	2 (0.52%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	15.8521	0.0146
	High school or lower	83 (21.39%)	35 (9.02%)	48 (12.37%)	36 (9.28%)		
	Postgraduate	90 (23.2%)	26 (6.7%)	50 (12.89%)	14 (3.61%)		
Marital Status	Divorced	1 (0.26%)	0 (0.0%)	0 (0.0%)	3 (0.77%)	25.3684	0.0026
	Married	95 (24.48%)	29 (7.47%)	73 (18.81%)	32 (8.25%)		
	Single	66 (17.01%)	28 (7.22%)	20 (5.15%)	18 (4.64%)		
	Widowed	15 (3.87%)	4 (1.03%)	5 (1.29%)	3 (0.77%)		
Number of Children	1 - 4	33 (8.51%)	10 (2.58%)	25 (6.44%)	12 (3.09%)	25.9492	0.0021
	5 - 7	58 (14.95%)	26 (6.7%)	34 (8.76%)	29 (7.47%)		
	More than 7	85 (21.91%)	25 (6.44%)	39 (10.05%)	12 (3.09%)		
	None	78 (20.1%)	28 (7.22%)	39 (10.05%)	30 (7.73%)		
Occupation	Employee	6 (1.55%)	5 (1.29%)	1 (0.26%)	8 (2.06%)	14.3598	0.0259
	Self Employed	1 (0.26%)	0 (0.0%)	0 (0.0%)	0 (0.0%)		
	Unemployed	91 (23.45%)	28 (7.22%)	58 (14.95%)	15 (3.87%)		

Table 5: Association between the knowledge of SBS and the demographic characteristics.

Variables	Categories	Yes	No	Chi-Squared Statistic	P-value
Age Category	18 - 19 years old	4 (1.03%)	11 (2.84%)	1.9107	0.5911
	20 - 29 years old	68 (17.53%)	149 (38.4%)		
	30 - 39 years old	29 (7.47%)	65 (16.75%)		
	40 - 49 years old	14 (3.61%)	48 (12.37%)		
Marital Status	Divorced	0 (0.0%)	2 (0.52%)	5.2324	0.1555
	Married	51 (13.14%)	151 (38.92%)		
	Single	63 (16.24%)	117 (30.15%)		
	Widowed	1 (0.26%)	3 (0.77%)		
Education Level	Bachelor	71 (18.3%)	158 (40.72%)	0.9991	0.6068
	High school or lower	35 (9.02%)	97 (25.0%)		
	Postgraduate	9 (2.32%)	18 (4.64%)		
Occupation	Employee	26 (6.7%)	54 (13.92%)	8.6158	0.0135
	Self Employed	31 (7.99%)	116 (29.9%)		
	Unemployed	58 (14.95%)	103 (26.55%)		
Number of Children	1 - 4	44 (11.34%)	131 (33.76%)	7.2462	0.0645
	5 - 7	3 (0.77%)	17 (4.38%)		
	More than 7	0 (0.0%)	1 (0.26%)		
	None	68 (17.53%)	124 (31.96%)		

Table 6: Association between Socio-demographic Characteristics and Knowledge of SBS.

Characteristics	Categories	Fair	Poor	Chi-Squared Statistic	P-value
Age Category	18 - 19 years old	0 (0.0%)	15 (3.87%)	1.0358	0.7926
	20 - 29 years old	7 (1.8%)	210 (54.12%)		
	30 - 39 years old	4 (1.03%)	90 (23.2%)		
	40 - 49 years old	3 (0.77%)	59 (15.21%)		
Marital Status	Divorced	0 (0.0%)	2 (0.52%)	5.3886	0.1455
	Married	7 (1.8%)	195 (50.26%)		
	Single	6 (1.55%)	174 (44.85%)		
	Widowed	1 (0.26%)	3 (0.77%)		
Education Level	Bachelor	8 (2.06%)	221 (56.96%)	1.2559	0.5337
	High school or lower	4 (1.03%)	128 (32.99%)		
	Postgraduate	2 (0.52%)	25 (6.44%)		
Occupation	Employee	5 (1.29%)	75 (19.33%)	2.2079	0.3316
	Self Employed	5 (1.29%)	142 (36.6%)		
	Unemployed	4 (1.03%)	157 (40.46%)		
Number of Children	1 - 4	7 (1.8%)	168 (43.3%)	0.8641	0.8341
	5 - 7	0 (0.0%)	20 (5.15%)		
	More than 7	0 (0.0%)	1 (0.26%)		
	None	7 (1.8%)	185 (47.68%)		

Table 7: A regression analysis.

Variable	aOR	P-value	Lower 95% CI	Upper 95% CI
Constant	0.9060	0.854	0.3176	2.5849
Age 20 - 29 years old	1.9760	0.213	0.6770	5.7661
Age 30 - 39 years old	3.3780	0.054	0.9782	11.6670
Age 40 - 49 years old	1.4630	0.571	0.3925	5.4514
Education Bachelor	0.9410	0.801	0.5868	1.5090
Education Postgraduate	1.4060	0.46	0.5690	3.4734
Number of Kids 1 - 4	1.4870	0.304	0.6973	3.1728
Number of Kids 5 or more	0.7050	0.575	0.2072	2.3957
Occupation Employee	0.6180	0.185	0.3036	1.2589
Occupation Self Employed	0.4290	0.008	0.2299	0.7996
Marital Status Married	0.6440	0.239	0.3099	1.3389

Dep. Variable:	knowledge category
Model:	Logit
Method:	MLE
No. Observations:	388
Df Residuals:	377
Df Model:	10
Pseudo R-squ.:	0.04189
Log-Likelihood:	-256.84
LL-Null:	-268.07
LLR p-value:	0.01293

In contrast, a study conducted in Saudi Arabia showed no statistically significant association between knowledge of awareness of SBS and age [19]. Another study showed no statistically significant association between nursing students' awareness of SBS and age [4]. In Riyadh, Saudi Arabia, a study showed no statistically significant association between awareness of SBS and age [19]. This may be due to differences in cultural attitudes and child-rearing practices. Studies have shown that parenting behaviors differ across cultures due to environmental factors, societal norms, and cultural values [22].

Furthermore, we found that single women had a slightly higher awareness than married women. Marriage, especially in Nigeria, comes with a great deal of parenting responsibilities, which may leave married women with reduced leisure time to explore new health-related research, workshops, and child safety topics. Research supports this, indicating that married mothers have less leisure time than their single counterparts, potentially affecting their capacity to engage in child safety education and awareness activities [23].

The findings of this study revealed that respondents with bachelor's degrees demonstrated a higher level of awareness regarding the harmful consequences of Shaken Baby Syndrome (SBS) compared to those with postgraduate qualifications. This observation suggests that higher

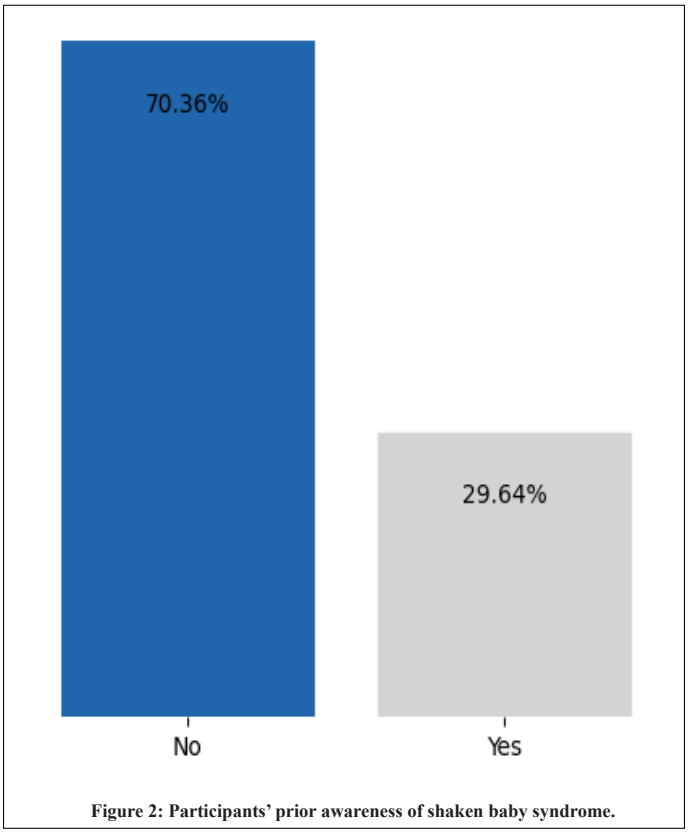

Figure 2: Participants' prior awareness of shaken baby syndrome.

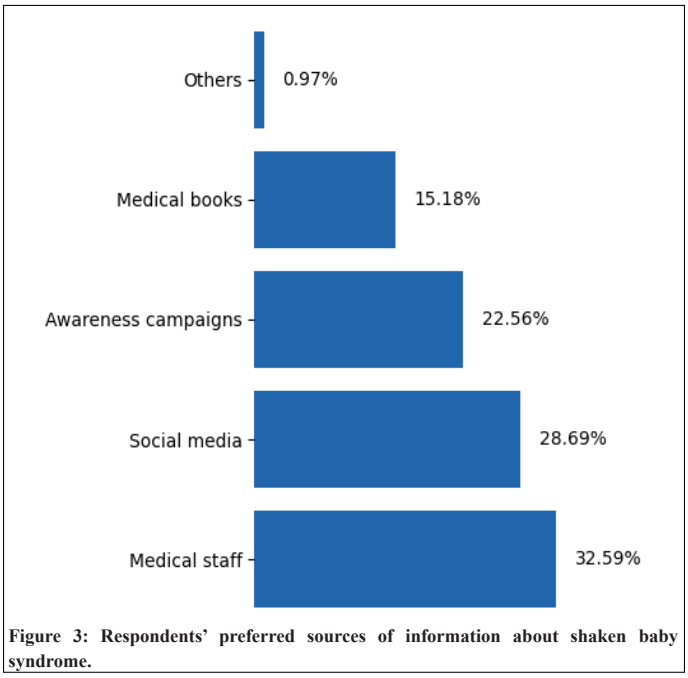

Figure 3: Respondents' preferred sources of information about shaken baby syndrome.

educational attainment does not necessarily translate into increased awareness of specific health-related conditions such as SBS. A possible explanation for this trend is that postgraduate education is often highly specialized, with individuals focusing on a narrow field of study, thereby limiting exposure to broader public health topics. In contrast, undergraduate education typically provides a more comprehensive and multidisciplinary foundation, which may enhance general health awareness. This finding is consistent with Maddocks [24], who reported that master's level education tends to concentrate on specific subject areas, whereas bachelor's programmes offer a wider scope of knowledge. However, contrasting evidence exists, as a study by AlOmran et al. [14] found no statistically significant association between level of education and awareness of SBS. These variations highlight the complexity of factors influencing health awareness and suggest that education alone may not be a sufficient predictor of knowledge regarding SBS. Also the study done by Chukwuemeka et al., [25] in Awka stated awareness of Shaken Baby Syndrome (SBS) was highest among respondents with tertiary-level education. Interestingly, despite

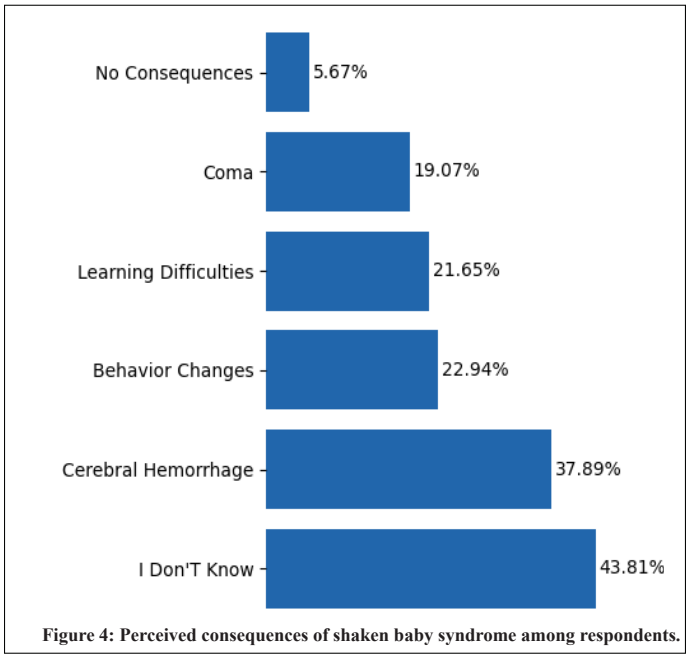

Figure 4: Perceived consequences of shaken baby syndrome among respondents.

having the highest proportion of awareness, participants with tertiary education also constituted the largest group of individuals who were unaware of SBS. This suggests variability in knowledge even within more educated groups.

Notably, our findings show that women without children are more aware of the harmful consequences of SBS than women with one or more children. This could be because women without children may have learned about SBS in academic settings, while parents may rely on cultural or personal experiences. One study found that individuals without children may pursue higher education and career advancements, which can increase their exposure to emerging topics [26].

A study conducted in selected polytechnics across Nigeria found that the majority of Nigerian polytechnic students prefer learning through social media over traditional reading [27]. This is in line with our finding that the highest percentage of respondents prefer to learn about SBS via social media, while only 14.35% prefer to learn about SBS via medical books.

Conclusion

This study highlights that awareness of Shaken Baby Syndrome (SBS) among women of reproductive age in Ilorin is influenced by multiple socio-demographic factors, including age, marital status, educational level, and parity. Younger women and those without children demonstrated higher awareness, likely due to greater exposure to digital information sources. However, inconsistencies across educational levels suggest that formal education alone does not guarantee adequate knowledge of SBS. Cultural practices and access to information also play significant roles in shaping awareness.

Limitation

The use of a convenient non-probability sampling technique in which participants were only recruited from the University of Ilorin Teaching Hospital may limit the generalizability of our findings. A sample size including participants from different parts of Nigeria will provide a more comprehensive view of this topic. However, our study includes a large number of participants, which helps to counteract this potential bias.

Recommendations for Future Research

We recommend organizing awareness campaigns and conducting research on the effect of health education on the knowledge of SBS among women of reproductive age in rural communities in Ilorin, Nigeria.

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Abdulfattah Sumayyah, Ajayi Eniola Odunayo, Bello Zainab, Samuel Oluwatobiloba, Ezenwa Blessing Chiamaka, Bello Hussein Adoto, Isiaka Shehu and Hassan A'isha Amira.

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