



E-ISSN: 2664-1666

P-ISSN: 2664-1658

www.communitynursing.net

IJARCHN 2025; 7(2): 19-24

Received: 09-06-2025

Accepted: 12-05-2025

Sulaiman Umar

MSc, RN, CT, Department of Nursing Science, College of Health Sciences, Federal University Birnin Kebbi, Kebbi, Nigeria

Kanchan Devi

MSc, RN, RM, Department of Medical Surgical Nursing, Satish Chandra Pandey Memorial (SCPM) College of Nursing and Paramedical Sciences, Gonda, Uttar Pradesh, India

Abdulkadir Mohammed

MSc, RN, RM, RPHN, Department of Community Health Services, National Primary Health Care Development Agency (NPHCDA) Abuja, Nigeria

Ijaida Joseph Ijabula

MSc, RN, RNE, RPHN, Department of Medical Surgical Nursing, College of Nursing and Midwifery, Yola, Adamawa, Nigeria

Ahmad Dahuwa Abdulkadir

BNSc, RN, RM, Adamu Adamu College of Nursing Sciences, Federal University of Health Sciences, Azare, Bauchi, Nigeria

Salihu Ismail

MSc, RN, Department of Nursing Services, Federal University of Health Sciences, Azare, Bauchi, Nigeria

Corresponding Author:

Sulaiman Umar

MSc, RN, CT, Department of Nursing Science, College of Health Sciences, Federal University Birnin Kebbi, Kebbi, Nigeria

Mother's knowledge and practice of first aid in Kalgo community Nigeria

Sulaiman Umar, Kanchan Devi, Abdulkadir Mohammed, Ijaida Joseph Ijabula, Ahmad Dahuwa Abdulkadir and Salihu Ismail

DOI: <https://www.doi.org/10.33545/26641658.2025.v7.i2a.241>

Abstract

Introduction: First aid is the initial care provided to someone who suddenly falls ill or injured, it helps to prevent suffering and promote recovery until arrival of healthcare providers.

Aim: The aim was to assess the knowledge of first aid, and practice regarding first aid among mothers. And to find out statistically significant association between their level of practice regarding first aid with their selected socio-demographic variables.

Materials and Methods: The research design used for this study was purposive sampling technique was used to select 60 mothers in Kalgo Community, Nigeria.

Results: The results showed that, majority 32 (53.3%) of the respondent had adequate knowledge regarding first aid, while 55 (91.7%) had negative level of practice. And there was statistically significant association between their levels of practice with their selected socio-demographic variables such as level of education (tertiary) shows a significant association with a Chi-square value of 12.97 and a *p-value* of 0.01.

Conclusion: In conclusion, recommendation was given to conduct a similar study in different setting.

Keywords: Mothers, knowledge, practice, first aid, Kalgo community

Introduction

First aid is the initial care provided to someone who suddenly falls ill or injured, injuries to children range from 0.7 - 5.1 per 1000 children in the United States. Injuries account for more than half of all deaths in children below the ages of 6 years in the United States ^[1]. Domestic accidents are the most common cause of death among children under the age of five, therefore, mothers' knowledge of first aid is paramount ^[2]. Rapid and right interventions of parents can limit disability and increase the chances of survival of the injured child and make a big difference in the outcome ^[3]. First aid largely consists of a succession of uncomplicated and in some cases lifesaving procedures that an individual can be thought to perform with simple day to day practical equipment. First aid is best given by individuals who are trained in first aid and closest to the scene of injury. Most injuries in school children can easily be managed with first aid without requiring additional medical attention ^[4].

However, there is poor knowledge of first aid among school teachers in African region, to prevent the consequences of poor knowledge on first aid, other researchers in India proved that proper first aid training for school teachers led to a significant improvement in the teachers' knowledge of first aid. The education and training may limit injury and save human life ^[5]. Both children and infants are at a higher risk of experiencing injury due to their age characteristics, children are the wealth of tomorrow's nation. Every child is at risk of experiencing injuries and every caregiver to maximally safeguard children from injuries. ^[6] First aid training is important for every person of every age since both severe and trivial accidents happen in life. Researchers are considering expanding first aid knowledge through targeting first aid education for young school children. The goal is to increase the number of bystanders by cultivating a positive attitude toward helping people in need ^[7]. Moreover, anyone with basic first aid knowledge can assess the situation and intervene to provide proper care. First aid information especially from social media is often unreliable, gender, socioeconomic status and education influenced first aid knowledge and attitude ^[8].

Another study was conducted on Unintentional Deaths in Children and Youths the results showed that, from 2010-2011 and 2018-2019, unintentional death rates decreased by 11% (1,100). However, the rates increased in some groups. Suffocation among infants (20%), motor vehicle accidents among black children (9%), poisoning deaths among black (37%), an (50%) in Hispanic children. In 2018-2019, rates were higher in males than female children 11.3 vs. 6.6 per 100,000 populations [9]. Hence the investigator felt that the needs and desire to carry out a study to assess the mothers' knowledge and practice of first aid in Kalgo Community Nigeria.

Aim

The aim of the study was to assess mother's knowledge and practice of first aid, and to find out their statistically significant association between their levels of knowledge of first aid with their selected socio-demographic variables.

Research Hypotheses

- **H₁:** There was significance knowledge regarding first aid.
- **H₀:** There was no positive practice regarding first aid.
- **H₁:** There was statistically significant association between their levels of practice regarding first aid with their selected socio-demographic variables.

Materials and Methods

- **Research Approach:** Quantitative approach was adopted for this study.
- **Research Design:** Descriptive survey design was used for the study.
- **Setting of the Study:** The research setting for this study was Kalgo, Kebbi State, Nigeria. It is a local government area in Kebbi State Nigeria. It was created out of Bunza local government Area in 1996. It has an area of 1,173km² and a population of 85,403 as at 2006 population census.
- **Target Population:** Mothers in Kalgo Community, Nigeria.

Sample Size and Sampling Technique

The sample size of this study was 60 respondents who are selected from the target population which are mothers; and purposive sampling technique was used to select the study participants.

Sampling Criteria

- **Inclusion Criteria:** Mothers that are residing in Kalgo Community Nigeria; those that are willing to participate, and were available during data collection were included in the study.
- **Exclusion Criteria:** Mothers that are not residing in Kalgo Community Nigeria; those that are not willing to participate in the study, and those that were not available during data collection were excluded from this study.

Study-Variables ‘ Demographic variables (age, marital status, number of pregnancies, religion, occupational status, and level of education).

Research variables (knowledge of first aid).

Development and Description of Tool

A self-prepared questionnaire was developed by the researcher to obtain answer from mothers. The tool used for

the research study was self-structured questionnaire which was prepared to assess the knowledge of first aid among mothers. The tool was formulated based on the investigators' clinical experience, extensive Library search, consultation of experts, and review of literature. The instrument for data collection was a self-structured closed-ended questionnaire to suit the objectives of the study. The questionnaire consisted of two sections, section A, and C.

Section A: It consisted of demographic variables of the participants included six items such as age, marital status, number of pregnancies, religion, occupational status, and level of education.

Section B: It consisted of self-prepared questionnaire on knowledge of first aid. There were 20 questions, each question had multiple choice with four responses (a, b, c, and d). Each correct answer was given a score of one mark, while wrong answer and unanswered score zero. The maximum score was 20. The levels of knowledge score were interpreted as adequate, moderate, and inadequate.

Table 1: Level of Knowledge Score

Level of knowledge	Score	Percentage
Adequate	15 - 20	≥75%
Moderate	10 - 14	≥50<75%
Inadequate	0 - 9	<45%

Section C: It consisted of self-prepared questionnaire on practice of first aid. There were 20 questions, each question had multiple choice with two responses (yes/no). Each correct answer was given a score of one mark, while wrong answer and unanswered score zero. The maximum score was 20. The levels of practice score were interpreted as positive and negative.

Table 2: Level of Practice Score

Level of Practice	Score	Percentage
Positive	10 - 20	50 - 100%
Negative	0 - 9	0 - 45%

Ethical Consideration

The study was conducted after the approval of Ethical Committee of the Kalgo Local Government Area, Kebbi State, Nigeria; and consent were also obtained from the Heads of the Kalgo Community, and the study participants. The mothers were assured for confidentiality of their responses.

Method of Data Collection

The data was collected from the respondents was analyzed using descriptive and inferential statistics with the aid of IBM SPSS version 23.0. Sample criteria were analyzed by frequency, and percentage distribution tables. Chi-square test was used to find out the statistically significant association between their levels of knowledge of first aid and their selected socio-demographic variable.

Organization of the Study Findings

- **Section I:** Respondents socio-demographic variables.
- **Section II:** Respondents levels of knowledge of first aid.
- **Section III:** Association between the respondents' knowledge scores and their selected socio-demographic variables.

Results and Discussion

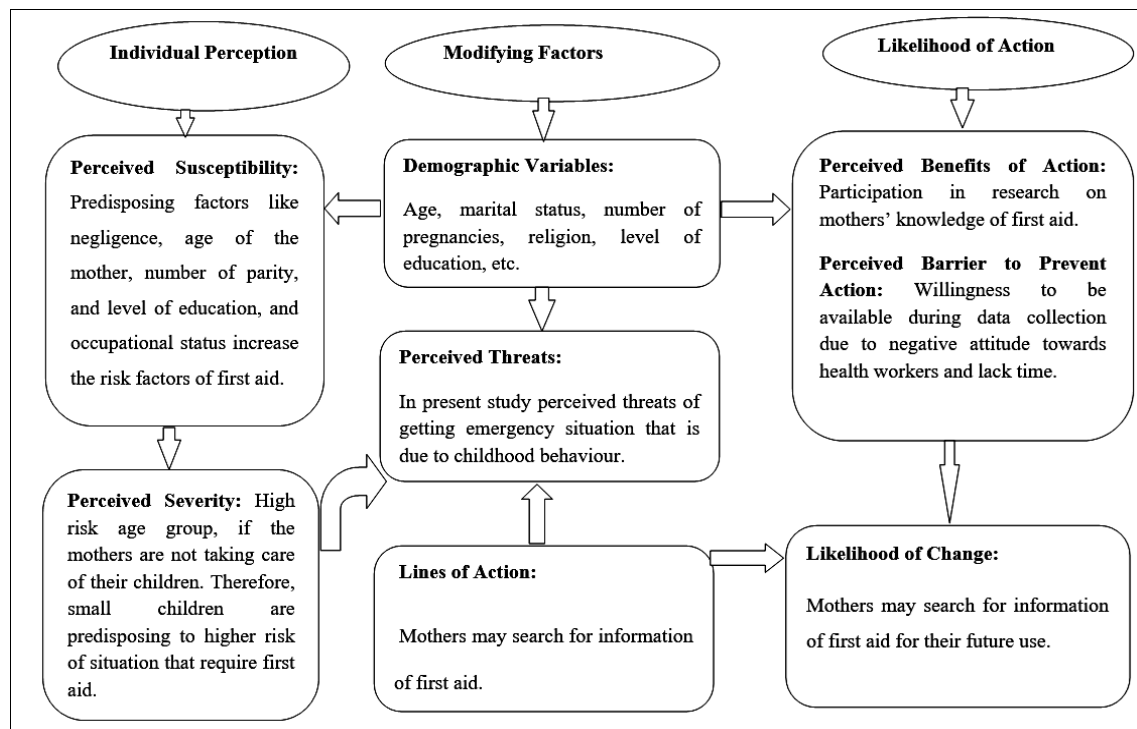


Fig 1: Conceptual Frame Work Based on Becker's Health Belief Model

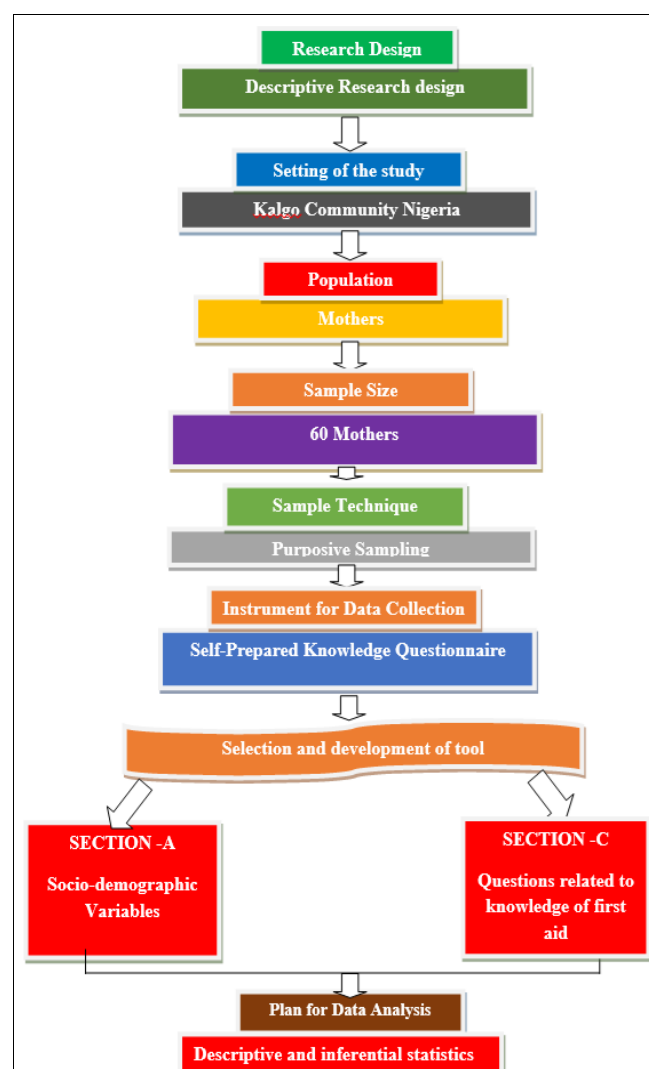


Fig 2: Representation of Research Methodology

Section I**Table 3:** Percentage Distribution of Respondents' Demographic Variables N=60

S/No	Variables	Frequency	Percentage
1.	Age:		
	18 to 23years	25	41.7
	24 to 29years	19	31.7
	30 to 35years	8	13.3
	36 years and above	8	13.3
2.	Marital Status:		
	Married	22	36.7
	Divorce	9	15.0
	Widow	7	11.7
	Unmarried	22	36.7
3.	Number of Pregnancies:		
	1 to 3	35	58.3
	4 to 6	22	36.7
	≥7	3	5.0
3.	Religion:		
	Christianity	18	30
	Islam	42	70
	Others	-	-
4.	Occupational Status:		
	Full time house wife	23	38.3
	Employee	20	33.3
	Business	15	25.0
	Farmer	2	3.3
6.	Level of Education:		
	No formal education	9	15.0
	Formal education	12	20.0
	Primary education	6	10.0
	Secondary education	7	11.7
	Tertiary education	26	43.3

Table 1 shows the following: The age distribution: 41.7% are 18 to 23 years old, 31.7% are 24 to 29, and 13.3% fall in each of the other two categories (30 to 35 and 36+ years); Marital Status: 36.7% are married, 15.0% are divorced, 11.7% are widowed, and 36.7% are unmarried; Number of Pregnancies: 58.3% have had 1 to 3 pregnancies, 36.7% have had 4 to 6 pregnancies, and 5.0% have had 7 or more pregnancies; Religion: 30.0% are Christians, 70.0% are Muslims, and none fall into the "Others" category;

Occupational Status: 38.3% are full-time housewives, 33.3% are employees, 25.0% are in business, and 3.3% are farmers; Level of Educational: 15.0% have no formal education, 20.0% have formal education, 10.0% have primary education, 11.7% have secondary education, and 43.3% have tertiary education.

Section II

Findings Related to Knowledge of First Aid

Table 4: Respondents Levels of Knowledge of First Aid

S.No	Level of knowledge	Score range	Frequency	Percentage
1.	Inadequate	≤ 40%	10	16.7
2.	Moderate	≥50<70%	18	30.0
3.	Adequate	70-100%	32	53.3

Table 2 showed that, majority 32 (53.3%) of the respondent had adequate knowledge regarding first aid, 18 (30.0%) had moderate, while minority 10 (16.7%) had inadequate knowledge.

Section III

Findings Related to Level of Practice of First Aid

Table 5: Respondents Level of Practice of First Aid

S.No	Level of Practice	Score Range	Frequency	Percentage
1.	Positive	50-100%	5	8.3
2.	Negative	0-45%	55	91.7

Table 3 above revealed that, minority of the participants 5 (8.3%) had positive practice, while majority 55 (91.7%) had negative level of practice.

Section IV

Findings Related to Association of Practice of First Aid and Selected Socio-Demographic Variables

Table 6: Association between their Levels of Practice of First Aid and their Selected Socio-Demographic Variables

Sociodemographic Variable		Level of Practice				Chi-Square	P-Value
		Negative		Positive			
Age:	18 to 23years	1	1.7	24	40	2.90	0.41
	24 to 29years	3	5	16	26.6		
	30 to 35years	1	1.7	7	11.7		
	36 years and above	0	0	5	8.3		
Marital Status:	Married	3	5	19	31.7	1.95	0.58
	Divorce	1	1.7	8	13.3		
	Widow	0	0	7	11.7		
	Unmarried	1	1.7	21	35		
Number of Pregnancies:	1 to 3	4	6.7	31	51.7	1.13	0.57
	4 to 6	1	1.7	21	35		
	≥7	0	0	3	5		
Religion:	Christianity	1	1.7	17	28.3	0.38	0.83
	Islam	4	6.7	37	61.7		
	Others	0	0	1	1.7		
Occupational Status:	Full time house wife	3	5	20	33.3	6.87	0.08
	Employee	1	1.7	19	31.7		
	Business	0	0	15	25		
	Farmer	1	1.7	1	1.7		
Level of Education:	No formal education	0	0	9	15	12.97	0.01
	Formal education	1	1.7	11	18.3		
	Primary education	0	0	6	10		
	Secondary education	3	5	4	6.7		
	Tertiary education	1	1.7	25	41.7		

Table 4 presents the results of a Chi-square analysis examining the relationship between socio-demographic variables and the level of practice (negative or positive). For age, there is no significant association with a Chi-square value of 2.90 and a *p-value* of 0.41. Marital status does not show a significant association with a Chi-square value of 1.95 and a *p-value* of 0.58. The number of pregnancies also lacks a significant association with a Chi-square value of 1.13 and a *p-value* of 0.57. Religion does not exhibit a significant association with a Chi-square value of 0.38 and a *p-value* of 0.83. Regarding occupational status, there appears to be a weak association with a Chi-square value of 6.87 and a *p-value* of 0.08. However, the level of education (tertiary) shows a significant association with a Chi-square value of 12.97 and a *p-value* of 0.01.

Summary

The age ranges of the majority of the respondents are between 18 to 23 years (41.7%). The study results showed that, majority 32 (53.3%) of the respondent had adequate knowledge of first aid, 18 (30.0%) had moderate, while minority 10 (16.7%) had inadequate knowledge. Minority of the participants 5 (8.3%) had positive practice, while majority 55 (91.7%) had negative level of practice. The results showed that, there was statistically significant association between their levels of practice and their selected socio-demographic variables such as level of education (tertiary) shows a significant association with a Chi-square value of 12.97 and a *p-value* of 0.01.

Conclusion

In conclusion, the results revealed that majority had adequate knowledge regarding first aid, and negative practice of first aid. There was statistically significant association between their levels of practice and their selected socio-demographic variable such as level of education (tertiary).

Nursing Implication

The finding of the study has implication in the field of nursing research, nursing education, nursing practice, and nursing administration.

- **Implication to nursing research:** The study findings will be use by nursing researchers for review of literature.”
- **Implication to nursing education:** The results of this study will be use to nurse educators to identify the gabs and continue strengthen health education of first aid.
- **Implication to nursing practice:** The study findings will be useful to nurse practitioners to health educate the mothers on knowledge of first aid.
- **Implication to nursing administration:** The study results will be useful to nurse managers/administrators to organize sensitization to mothers on first aid.

Recommendations

Base on the study findings of the study, the researcher recommends that a similar study to be conducted on knowledge of first aid among mothers using different setting

and large sample for generalization of the findings.’

Quasi-experimental study can also be conducted on knowledge and practice of first aid among mothers using different setting.

References

1. Wani JI, Almushayt NO, Abbag WF, Buhran LA, Nadeem M. Pediatric first aid, trauma knowledge and attitude among parents and general population in Aseer region, Southern Saudi Arabia. *Sage Open Medicine*. 2022;10:20503121221126762. doi:10.1177/20503121221126762
2. Zadain NS, Aziz AAM, Radwan RIM. Mothers knowledge and practice regarding first aid management of domestic accidents among under-five children in El-Beheira Governorate. *Egyptian Journal of Health Care*. 2022;13(4):1697-710.
3. Ala'a AS, Sabor S, Aldubai SAR. Knowledge and practice of first aid among parents attending primary health care centers in Madinah City, Saudi Arabia. *Journal of Family Medicine and Primary Care*. 2018;7(2):380.
4. Hosapatna M, Bhat N, Belle J, Priyadarshini S, Ankolekar VH. Knowledge and training of primary school teachers in first aid. *Kurume Medical Journal*. 2020;66(2):101-6. doi:10.2739/kurumemedj.MS662001
5. Alsulami M, Madkhali AA, Alharbi MT, Alzahrani AR, Aljohani IN, Al-Thaqafy MS, *et al.* Knowledge and attitude of pediatric first aid among elementary schoolteachers in Jeddah, Saudi Arabia. *Journal of Family Medicine and Primary Care*. 2022;11(11):6795-800. doi:10.4103/jfmmpc.jfmmpc_369_22
6. Mahmood S, El Awady S, Talaat T, Elderiny SN. First aid training for children caregivers in nursery. *International Journal of Novelty Research in Healthcare and Nursing*. 2019;6(1):907-920. Available from: www.noveltyjournal.com
7. Tse E, Plakitsi K, Vouglaris S, Alexiou GA. The role of first aid training program for young children: A systematic review. *Children (MDPI)*. 2023;10(3):431. doi:10.3390/children10030431
8. Bashekah KA, Alqahtani R, Aljifri AM, Ashram SY, Alghamdi E, Khallaf AM, *et al.* The knowledge, attitude and associated factors regarding first aid among the general public in Saudi Arabia. *Cureus*. 2023;15(7):e41387. doi:10.7759/cureus.41387
9. West BA, Rudd RA, Sauber-Schatz EK, Ballesteros MF. Unintentional deaths in children and youths: 2010-2011 and 2018-2019. *Journal of Safety Research*. 2021;78:322-30. doi:10.1016/j.jsr.2021.07.001
10. El Awady SMS, Talaat T, Elderiny SN. First aid training for children caregivers in nursery. *International Journal of Novelty Research in Healthcare and Nursing*. 2019;6(1):907-920.
11. Al-Bshri AS, Jahan S. Prevalence of home-related injuries among children under 5 years old and practice of mothers toward first aid in Buraidah, Qassim. *Journal of Family Medicine and Primary Care*. 2021;10(3):1234. doi:10.103/jfmmpc.jfmmpc_2265-20
12. AlQahtani MA, Alfadhel SF, Aljehani RH, Bakri KA, Zaina FA, Maryam O, *et al.* Knowledge of first aid skills among medical and non-medical students in Saudi Arabia. *Journal of Family Medicine and Primary Care*. 2020;9(1):202-205. doi:10.4103/jfmmpc.jfmmpc_928_19
13. Bassam SEA. Evaluate maternal knowledge and attitude regarding first aid among their children in Buraidah City, Saudi Arabia Kingdom (KSA). *Medical Archives*. 2022;76(3):164.
14. Kumar R, Ranjan R, Kumar RR, Kumari V. A descriptive study to assess level of knowledge regarding first aid management of accidents in the children among primary school teachers with a view to develop an information booklet in selected schools of Rohtas. *International Journal of Advanced Research*. 2023;1115-20. doi:10.21474/IJAR01/16769. Available from: <http://dx.doi.org/10.21474/IJAR01/16769>
15. Asif R, Azam N, Raza FA, Riaz M, Zulfikar S, Razzaq M. Knowledge, attitude and practices regarding first aid against domestic injuries in mothers of children less than 5 years of age attending Fauji Foundation Hospital. *Pakistan Journal of Public Health*. 2021;11(3):151-7. doi:10.32413/pjph.v11i3.761
16. Nour M, Alhardi W, Alaweh S, Al Ansari A, Al-Luqmani AD, Alhardi AF, *et al.* Knowledge, attitude and practice of mothers towards home accidents among children, Makkah, KSA. *European Journal of Pharmaceutical and Medical Research*. 2018;5(11):139-147.
17. Leung SM, Li KCE, Leung PY, Lo HW, Li SM, Lui YC, *et al.* Factors affecting first aid knowledge of citizens in Hong Kong. *International Journal of Community Medicine and Public Health*. 2022;9(11):4015. doi:10.18203/2394-6040.ijcmph20222894

How to Cite This Article

Umar S, Devi K, Mohammed A, Ijabula IJ, Abdulkadir AD, Ismail S. Mother's knowledge and practice of first aid in Kalgo community Nigeria. *International Journal of Advance Research in Community Health Nursing*. 2025;6(1):19-24

Creative Commons (CC) License

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 International (CC BY-NC-SA 4.0) License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.