
Demographic and Socioeconomic Factors Associated with Under-five Mortality in Nigeria's Federal Capital Territory

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Abstract: This study examined the influence of demographic and socioeconomic characteristics of women of child bearing age on the survival of their under- five years children. The cross-sectional descriptive study relied on quantitative data derived from primary sources. The respondents were women aged 15-49 years selected from communities in two Area Councils of the Federal Capital Territory using a multi-stage sampling technique. Data were collected using a structured questionnaire. The demographic and socioeconomic variables analyzed include age, Level of education, marital status, occupation, average monthly income, ethnicity, religion and living with spouse/partner. The binary logistic regression was used to determine the variables that were the most predictive of under-five mortality while the Wald (Chi square) test of significance was used to analyze the significant impact of each of the independent categorical data. The findings show that the average age of the respondents was 31.3 years with 39.0% of the mothers having experienced under-five mortality. The bivariate analysis of the demographic and socio-economic characteristics of the mothers who experienced under-five mortality shows a no statistical dependency between mothers' ethnic group, religion, marital status and under-five mortality. However, the analysis shows under-five mortality is dependent on women's level of education with a p-value $0.759 > 0.005$ (95%) and occupation with a p-value $0.064 > 0.05$ (95%) CI. The study concluded that the prevalence of under-five mortality is relatively high in the Federal Capital Territory of Nigeria with Mother's educational attainment, main occupation, average monthly income and ethnic group as significant predictors of under-five mortality. An improvement in girl education, provision of better maternal and child health services and employment for vulnerable mothers is recommended to boost women's income which is a major determinant of childhood mortality in the FCT.

Keywords: Demographic, Socio-economic, Under-five Mortality, Federal Capital Territory, Nigeria

1. Introduction

The United Nations in the year 2000, had the 191 member-states commit to the attainment of the Millennium Development Goals (MDGs) by 2015, among which was the reduction of childhood mortality [1]. Although child survival has been improving since 1990, there has been an accelerated improvement globally between 2000 and 2016 resulting in the prevention of 50 million childhood deaths in that period

[2]. Despite those remarkable improvements on the global stage, there remain the worrisome disparities in the under-five mortality rates across the different regions of the world. For instance, while the under-five mortality rate in the western industrialized countries is about 1 in 189, the corresponding rates in sub-Saharan African countries is 1 in 13, amounting to about 15-fold increase [2].

The United Nations Children's Fund (UNICEF) notes that children are at a greater risk of dying before age five if they

are born in rural areas, among the poor, or to mothers who have no basic education [3].

In 2016, the under-five mortality rate in low-income countries was 73.1 deaths per 1000 live births, about 14 times the average rate in high-income countries (5.3 deaths per 1000 live births) [4]. In Sub-Saharan Africa, 1 child in 13 died before the fifth birthday, amounting to 5.6 million under-five deaths in 2016 and 15,000 every day [4]. It is therefore necessary to reduce these inequities among countries in order to save more children's lives through ending preventable child deaths.

In some sub-Saharan African countries with low socio-economic standards, under-five mortality is relatively high with a recent reported national figure of 90 per 1000 live births in Ghana [5]. Nigeria loses about 2,300 under-fives and 145 women of childbearing age daily, making her the second largest contributor to the under-five and maternal mortality rate in the world [6]. The deaths of newborn babies in Nigeria represent a quarter of the total number of deaths of children under-five. The majority of these occur within the first week of life, mainly due to complications of pregnancy and delivery reflecting the intimate link between newborn survival and the quality of maternal care.

Under-five mortality rate in Nigeria in 2013 was 128/ 1000 live births, but there exist wide regional disparities in child health indicators with the North-Central geopolitical zone of the country having the child survival index of 100/1000 live births compared with indices of 91/1000 and 90/1000 live births live births for the South-South and South-West geopolitical zones respectively [7].

Millions of children under-five years of age die every year from preventable causes such as pneumonia, diarrhea and malaria [6] [8]. In about half of the cases, malnutrition plays a role, along with several other significant contributing factors. For this reason, child mortality is a key indicator not only for child health and well-being, but for overall progress towards the Sustainable Development Goals (SDGs) [8].

Several factors influence child health and survival. These include mothers age, mother's education, sex of child, religion of parents, household headship and socio-economic status [9]. This justifies the need to integrate maternal, newborn and child health interventions.

Childhood mortality can be prevented through prompt and exclusive breastfeeding, access to skilled health personnel for antenatal, birth, and postnatal care, improving access to macro and micro nutrients, promoting knowledge of danger signs among family members, improving access to social amenities, and hygiene and providing immunizations [4]. Many of these lifesaving interventions are beyond the reach of the world's poorest communities.

This study examined the influence of the demographic and socioeconomic characteristics of women of child bearing age on the survival of their under- five years children in Nigeria's Federal Capital Territory (FCT).

2. Methods

2.1. The Study Area

The Federal Capital Territory is the home of Abuja, the capital of Nigeria. It is located between latitudes 8°25' and 9°25' North of the equator and longitudes 6°45' and 7° 45' east of Greenwich Meridian. Occupying an area of 8,000 square kilometers, the FCT is bordered by the States of Kaduna to the north, Nassarawa to the east, Kogi to the southwest and Niger to the west.

The 2006 population census put the population of the FCT at 1,406,239 made up 733,172 males and 673,067 females [10]. The occupation of the people is mainly farming as reflected in their notable vegetational zone, the Savannah (comprising the woodlands, park and shrub). The food crops grown include yam, guinea corn, maize, millet, cassava, rice., melon and garden egg. However, for people in the capital city and Area Council headquarters, the occupation is largely civil service and businesses/trading.

The FCT has been impacted by the Islamist insurgency of Boko Haram in Nigeria. As at June 2016, there were 2,620 households comprising 18,445 individuals internally displaced persons fleeing from the violence of Boko Haram [11].

2.2. Study Design

This was a cross sectional descriptive study, which used quantitative data derived from primary sources. The study sites were determined by multi-stage sampling technique. The first stage consisted of grouping the Northern States in Nigeria into three Geo-political zones - North East, North Central and North West from which the North Central was selected. The second stage was the selection of FCT from the North- Central. The third stage was a systematic selection of two (1/3) of the six Area Councils (ACs) from FCT. The ACs selected were Abuja Municipal Area Council (AMAC) and Kwali. The fourth stage consisted of selecting representative communities in each Area Council (AC) (with the aid of locality/enumeration areas list prepared for 2006 Population Census). The fifth stage consisted of selection of respondents in each of the selected communities.

The respondents were women aged 15-49 years, who have had or reared children. Households were the sampling unit in this study, which included individuals living together in the same house or compound and sharing the same source of food and recognize themselves as a social unit.

The sample size was determined by the Krejcie and Morgan formula and adopted as follows [12]:

$$n = \frac{\chi^2 * N * P * (1-P)}{(ME^2 * (N-1)) + (\chi^2 * P * (1-P))} \quad (1)$$

Where n is the minimum sample size.

χ^2 is chi-squared value for the specified confidence level at 1 degree of freedom.

N is total population size.

P is population proportion.

ME is the desired margin of error expressed as a percentage.

For this study, P was set at 0.50 consistent with standard practice when no information is available about the sample proportion. Further, a confidence interval of 95% and a 2.5% margin of error (ME) were adopted. According to the National Population Commission (NPC), 2010, the total number of women aged 15-49 years in the selected ACs was 230,480 [13]. Imputing these figures in the above formula gave a minimum sample size, n, of 200. Next, this sample

size was distributed among the two ACs as a weighted proportion of population. Thus:

$$\left(\frac{POP_i}{N}\right) * C.I. (0.95); ME (.25) \quad (2)$$

Where POP_i is the population of each AC and n (for confidence interval 95% and 2.5% ME) is 200. Finally, the sample size for each AC (182 for AMAC and 18 for Kwali) was as shown in Table 1 below:

Table 1. Sample size (Sampling frame) for Sampled ACs.

State/ Status	Total ACs	Sampled As	Population of Women Aged 15-49 Years	(95% CI; 2.5% ME)
FCT	6	AMAC	209, 681	182
		Kwali	20, 799	18
Total			230, 480	200

Source: Field Survey, 2017.

A structured questionnaire was used to collect data on the respondents' demographic, cultural and socio-economic characteristics as well as their experience of under-five mortality. The questionnaire was pretested in selected households before administration by trained field assistants.

Socioeconomic determinants of child mortality/survival were categorized into maternal, environmental contamination, nutrient deficiency and injury [14]. The study focused on the maternal factors such as age, level of education, marital status, occupation, income, ethnicity, religion and type of spousal ties.

2.3. Ethical Considerations

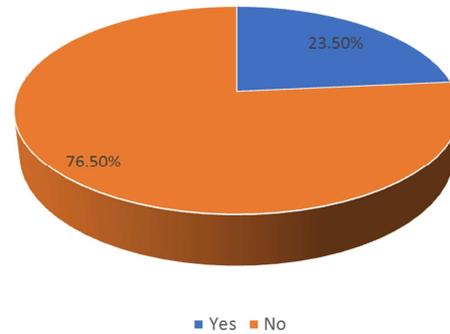
Ethical clearance was obtained from the FCT Health Research Ethics Committee (FCTHREC) and informed consent was obtained from all the respondents

The data was analyzed using SPSS version 23.0. Chi square was used to test for significance

3. Results

3.1. Demographic Characteristics of the Study Respondents

Two hundred women aged between 15 to 49 years with a mean age of 31.3 years were respondents for this study. Of this number 47 (23.5%) admitted 'Yes', they have experienced under-five mortality (Figure 1).



Source: Field Survey, 2017.

Figure 1. Respondents' Experience of Under-five Mortality.

3.2. Socioeconomic Characteristics of the Respondents

Educationally, most (41.5%) of the respondents had secondary education while 12.0% of them had no formal education. Based on ethnicity, majority (18.0%) of the respondents were Gbagyi followed by Hausa (17.5%), the Igbo (10.5%), while 31.5% of 'other' respondents belonged to 21 other ethnic groups. In terms of religious affiliation, majority (66.5%) of the respondents were Christians and 32.0% were Muslims. About 1.5% of them did not indicate their religion. As regards marital status, majority (95.5%) were married out of which 183 (91.5%) were living with their husbands (Table 2).

Table 2. Demographic and Socio-economic Characteristics of Respondents.

	Frequency (N = 200)	Percentage (100.0)
Age group (Years)		
15 - 24	76	38.0
25 - 34	72	36.0
35 - 44	49	24.5
45 - 49	3	1.5
Highest level of education		
No Formal	24	12.0
Primary	25	12.5
Secondary	83	41.5
Tertiary	67	33.5
No Response	1	0.5

	Frequency (N = 200)	Percentage (100.0)
Ethnic group		
Gbagyi	36	18.0
Bassa	6	3.0
Hausa	35	17.5
Fulfulde	6	3.0
Igbo	21	10.5
Yoruba	15	7.5
Tiv	15	7.5
Others	63	31.5
No Response	3	1.5
Religion		
Christianity	133	66.5
Islam	64	32.0
No Response	3	1.5
Marital status		
Married	191	95.5
Widowed	1	0.5
Divorced	2	1.0
Separated	1	0.5
Single	5	2.5
Living with partner		
No	10	5.0
Yes	183	91.5
No Response	7	3.5
Occupation		
Civil Service	48	24.0
Farming	11	5.5
Housewife	62	31.0
Trading/Business	75	37.5
No Response	4	2.0
Average monthly income (₦)		
< N1,000.00	8	4.0
1,001-10,000.00	75	37.5
10,001- 50,000.00	48	24.0
> N50,000.00	38	19.0
No Response	31	15.5
Occupation of Spouse or partner		
Civil Service	42	21.0
Farming	11	5.5
Artisan	62	31.0
Trading/Business	73	36.5
Others	11	5.5
No Response	1	0.5

Source: Field Survey, 2017.

Occupationally, more than one third (37.5%) of the respondents were traders, 31.0% were artisans and 21.0% were civil servants. Only 5.5% were farmers. The economic status of respondents based on average monthly income depicts that majority of the respondents 75 (37.5%) earned less than ₦ 10,001.00 monthly (\$30.00), which is less than the national minimum wage of ₦ 18,000.00 (\$50.00). Only 19.0% had an average monthly income of > ₦ 50,000.00 (\$140.00).

3.3. Bivariate Analysis of Demographic and Socio-economic Characteristics of Mothers' Experience of Under-five Mortality

As a prelude to understanding the variation in under-five mortality by the demographic and socio-economic characteristics of respondents, they were asked if they had experienced under-five mortality. The results show that 23.5% (n = 47) had experienced under five mortality, while 76.5% (n = 153) had not experienced such deaths.

The bivariate analysis of the demographic and socio-

economic characteristics of the mothers who experienced under-five mortality is shown in Table 3. Those aged 35-44 years (53.2%) had the highest incidence of childhood mortality followed by those aged 15-24 years, constituting 27.7% of respondents. The p-value $0.000 < 0.05$ (95%) CI, depicts a no statistical dependency between mothers' age and under-five child mortality.

Based on education, the results show that under-five mortality is dependent on women's level of education with a p-value $0.759 > 0.005$ (95%). Respondents with secondary, primary and informal education were more likely to experience under-five mortality compared to those with tertiary level of education.

However, the results on ethnicity, show a p-value $0.000 < 0.05$ (95%) CI depicting a no statistical dependency between mothers' ethnic group and under-five child mortality. Under-five mortality was highest amongst the Hausas (25.5%), followed by the Gbagyi (17.0%), while the Yoruba ethnic group reported the lowest (2.1%) incidence of under-five mortality.

Similarly, the results on religion indicate a p-value of

0.000 < 0.05 (95%) CI implying a no statistical dependency between mothers' religion and under-five child mortality. However, the data showed higher (51.1%) under-five mortality for Christians mothers than the Muslims mothers (44.7%).

Findings on marital status also indicates a p-value 0.010 < 0.05, 95% CI showing a no statistical dependency between mothers' marital status and under-five child mortality. Although the married had the highest (86%) under-five mortality, followed by the divorced and single (4.3%) each. Also, those whose husbands/partners were civil servants had the highest (46.8%) under-five mortality compare with mothers whose husbands are in other occupations. The p-value 0.004 < 0.05 (95%) CI show a no statistical

dependency between partner occupation and under-five child mortality.

The results further show that under-five mortality is dependent on women's occupation with a p-value 0.064 > 0.05 (95%) CI. Thus, housewives had a higher (42.6%) incidence of under-five deaths compared to those with other occupations.

Based on mother's monthly income however, the data show a p-value 0.001 < 0.05 (95%) CI indicating that under-five mortality does not depend on average monthly income. Although, the cross tabulation shows respondents with lower monthly income of < ₦ 10,001.00 (< \$30.00) were more likely to experience under-five child mortality than women with higher income.

Table 3. Bivariate analysis of mothers' experience of child death.

Independent Determinants	Under-Five Mortality			Pearson Chi-Square		
	Yes	No	Total	Value	Df	p-value
Age Group (Years)						
15 - 24 years	13 (27.7%)	63 (41.2%)	76 (38.0%)	30.800 ^a	6	0.000
25 - 34 years	9 (19.1%)	63 (41.2%)	72 (36.0%)			
35 - 44 years	25 (53.2%)	24 (15.7%)	49 (24.5%)			
45 - 49 years	0 (0.0%)	3 (2.0%)	3 (1.5%)			
Total	47 (100%)	153 (100%)	200 (100%)			
Highest Education						
No formal	9 (19.1%)	15 (9.8%)	24 (12.0%)	6.640 ^a	10	0.759
Primary	7 (14.9%)	18 (12.1%)	25 (12.5%)			
Secondary	20 (42.6%)	63 (40.9%)	83 (41.5%)			
Tertiary	11 (23.4%)	56 (36.2%)	67 (33.5%)			
No Response	0 (0.0%)	1 (0.7%)	1 (0.5%)			
Total	47 (100%)	153 (100%)	200 (100%)			
Ethnic Group						
Gbagyi	8 (17.0%)	28 (18.3%)	36 (18.0%)	149.366 ^a	64	0.000
Bassa	3 (6.4%)	3 (2.0%)	6 (3.0%)			
Hausa	12 (25.5%)	23 (15.4%)	35 (20.5%)			
Fulfulde	4 (8.5%)	2 (1.3%)	6 (3.0%)			
Igbo	2 (4.3%)	19 (12.4%)	21 (10.5%)			
Yoruba	1 (2.1%)	14 (9.2%)	15 (7.5%)			
Tiv	2 (4.3%)	13 (8.5%)	15 (7.5%)			
Others	15 (31.9%)	48 (31.4%)	63 (31.5%)			
No Response	0 (0.0%)	3 (2.0%)	3 (1.5%)			
Total	47 (100%)	153 (100%)	200 (100%)			
Religion Affiliation						
Christianity	24 (51.1%)	109 (71.2%)	133 (66.5%)	25.652 ^a	4	0.000
Islam	21 (44.7%)	43 (28.1%)	64 (32.0%)			
No Response	2 (4.3%)	1 (0.7%)	3 (1.5%)			
Total	47 (100%)	153 (100%)	200 (100%)			
Marital Status						
Married	42 (89.4%)	149 (97.4%)	191 (95.5%)	20.044 ^a	8	0.010
Divorced	2 (4.3%)	0 (0.0%)	2 (1.0%)			
Separated	1 (2.1%)	0 (0.0%)	1 (0.5%)			
Single	2 (4.3%)	3 (2.0%)	5 (2.5%)			
Widowed	0 (0.0%)	1 (0.7%)	1 (1.5%)			
Total	47 (100%)	153 (100%)	200 (100%)			
Occupation						
Civil Service	5 (10.6%)	37 (24.1%)	42 (21.0%)	27.874 ^a	18	0.064
Farming	6 (12.8%)	5 (3.4%)	11 (5.5%)			
Housewife	20 (42.6%)	42 (27.4%)	62 (31.0%)			
Trading/Business	13 (27.7%)	60 (39.2%)	73 (36.5%)			
Others	3 (6.4%)	8 (5.2%)	11 (5.5%)			
No Response	0 (0.0%)	1 (0.7%)	1 (0.5%)			
Total	47 (100%)	153 (100%)	200 (100%)			
Average monthly income (₦)						
< N1,000.00	4 (8.5%)	4 (2.6%)	8 (4.0%)	26.783 ^a	8	0.001
1,001-10,000.00	28 (59.6%)	47 (30.7%)	75 (37.5%)			
10,001-50,000.00	7 (14.9%)	41 (26.2%)	48 (24.0%)			
> 50,000.00	5 (10.6%)	33 (22.1%)	38 (19.0%)			
No Response	3 (6.4%)	28 (18.8%)	31 (15.5%)			
Total	47 (100%)	153 (100%)	200 (100%)			
Spouse/Partner Occupation						

Independent Determinants	Under-Five Mortality			Pearson Chi-Square		
	Yes	No	Total	Value	Df	p-value
Civil Service	22 (46.8%)	85 (55.6%)	107 (53.5%)	26.160 ^a	10	0.004
Farming	8 (17.0%)	7 (4.6%)	15 (7.5%)			
Trading/business	13 (27.7%)	41 (26.8%)	54 (27.0%)			
Others	0 (0.0%)	17 (11.1%)	17 (8.5%)			
No Response	4 (8.5%)	3 (2.0%)	7 (3.5%)			
Total	47 (100%)	153 (100%)	200 (100%)			

Source: Researcher Analysis, 2017.

The result of cox and Snell R-square depicts 0.613 which means that all the independent variables (Age Group, Education, main occupation, secondary occupation, monthly income, ethnic group, religion, marital status, mothers living together with partner, spouse/partner occupation) are jointly

explaining the dependent variable (under-five mortality) at 61.3%. This implies that if a respondent were to experience the best of the independent variables, the chance of her experiencing under -five mortality will drop by .613.

Table 4. Result of cox and Snell R-square.

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	28.115 ^a	.613	.924

Source: Researcher Analysis, 2017.

Results on the binary logistic regression presented in Table 5 shows the influence of age group, education, main occupation, secondary occupation, monthly income, ethnic group, religion affiliation, marital status, mothers living together with partner, spouse/partner occupation when regressed on the under-five mortality variable. The results indicate p-value 0.996 for age which is greater than 0.05 (5%) level of significance, which implies that the mothers age does not have a significant impact on under-five mortality.

Mother's education, main occupation, secondary

occupation, monthly income, ethnic group all have a significant positive impact on the dependent variable (under-five mortality) with beta values of 34.443, 274.485, 347.917, 300.424 and 617.817 respectively having corresponding p-values of 0.019, 0.004, 0.005, 0.064 significant at 5% level and 0.091 significant at 10% level for the variables respectively. Mother's religion, marital status, mothers living together with partner and spouse/partner occupation has no significant relationship with the under-five mortality variable.

Table 5. Results of Binary Logistic Regression of Determinants of Under-Five Mortality.

	Beta coefficient	S. E.	Wald (chi-square sig)	P < 0.05
Age Group	-118.658	24046.699	0.000	0.996
Education	34.443	22845.995	0.000	0.019*
Ethnic Group	617.817	52409.039	0.000	0.091*
Marital Status	-139.833	49841.305	0.000	0.398
Religion	138.269	21352.183	0.000	0.125
Living together with partner	100.068	19610.051	0.000	0.216
Main Occupation	274.485	42606.752	0.000	0.005*
Secondary Occupation	347.917	7734.060	0.002	0.004*
Monthly Income	300.424	6646.422	0.002	0.064*
Spouse/partner occupation	-108.623	2467.213	0.002	0.445
Constant	-684.723	71022.469	0.000	0.912

Source: Researcher Analysis, 2017.

4. Discussion

It is obvious from the findings of this study that demographic and socioeconomic factors have profound impact on under-five mortality in the Federal Capital territory of Nigeria. The mean age of the respondents was 31.3 years with 23.5% of the mothers reporting having experienced under-five mortality of at least one of their children. This finding is low compared to a similar study carried out in Adamawa State, Nigeria in which 39.3% of mothers had experienced under-five mortality [15]. Similarly, in Northern Ghana 37.3% of the mothers had lost at least one child within age 1-5 [16]. The relative lower mortality in the FCT could

be because its status as the Federal Capital territory of Nigeria affords it the advantage of attracting medical personnel and better facilities including access to sources of childhood immunization kits. Studies carried out in both low and middle-income countries reported the aggregated under-five mortality rate as 64.6 deaths per 1000 live births in the poorest households [17]. This rate is much higher than the findings in this study. Likely, this is as a result of the lump value for many countries brought together dissimilar to the small geographical population area used in this study. Generally, there are more opportunities of educational enhancement, occupation, more sources of monthly income and employment in the FCT compared with many states in Nigeria as results of the position it serves as the

administrative headquarters of Nigeria.

The age group of 35-44 years was shown in this study to be the highest contributor of child mortality however, age at binary logistic model is not one of the important predictors of under-five deaths. This is in disagreement with findings in Adamawa State, Nigeria in which mothers in younger age group of 15-24 years experienced higher under-five mortality [15]. Similarly, findings of a study done in Delhi, showed that younger age of mothers (≤ 19 years) is associated with high risk of childhood mortality [18]. Thus, other factors not naivety in nurturing children were observed to be responsible for childhood mortality.

Respondents who had no formal education, those with Primary and secondary as the highest level of education experienced more of under-five mortality compared to those with tertiary level of education showing p-value 0.759 (95%) CI. This is similar to the findings in Nigeria's Demographic and Health Survey in 2013, where mothers with no education, those with Primary and secondary education experienced more of under-five mortality compared to those with tertiary education [9]. Such a similarity was also found in a study by Aristide *et. al.*, in some selected African countries, which showed that under-five mortality rates of children born to mothers without formal education are higher than those of children of educated mothers [19].

The findings on mother's ethnicity and childhood mortality showed that under-five mortality was more among the Hausas, Gbagyi and Fulfulde compared to the other ethnic groups. This finding is similar to another study done in Nigeria by Sunday *et. al.*, which found substantial differences in under-five mortality by ethnic affiliations. For instance, the risks of death were significantly lower for children of the Yoruba, Tiv and Igbo tribes and children of the minority ethnic groups compared to children of the Hausa, Fulani [20]. This can be explained by observations of better standard of living and small family size amongst the Yoruba, Igbo and minority ethnic groups compared to the Hausa, Gbagyi and Fulfulde tribes who are known to have large family size with low standard of living.

Although the data on marital status showed the married had the highest (89.4%) under-five mortality, the p-value $0.010 < 0.005$ (95%) CI shows no statistical significance of influence on under-five mortality. This finding is a departure from the findings in Nigeria by Oyewale *et. al.*, where marital status was a significant variable in influencing infant mortality [21].

This study found out that religious affiliation has no statistical influence on under-five mortality. This finding is negated by similar studies conducted in Mozambique by Cau, *et al.*, which showed that religious affiliation has relationship with child mortality [22]. Saabneh also found that child mortality in Egypt was lower among Christians than among Muslims and that may be due to differences in their socio-economic status [23]. Finally, Heaton also found both systematic and non-systematic differences and argued that Muslims and Traditionalists seemed to have a disadvantage in terms of wealth and education compared to other religious

groups [24]. The FCT been the administrative headquarters of Nigeria attracts people with sound educational attainment, proximity to medical personnel and facilities as well as been the closest to sources of childhood immunization kits negate the influence of religion as a determinant of childhood diseases.

The mother's occupation had a significant positive impact on child's mortality with housewives having the highest under-five mortality with p (0.064) > 0.005 (95%) CI. This finding contradicts a study done in Uganda by Nafiu *et. al.*, where mother's occupation depicts no influence on under-five mortality [25]. Also, Isa *et. al.*, study in Indonesian shows that working mothers had 2.22 times risk of experiencing under-five mortality compared with children from mothers who do not work contrary to the findings of this study [26].

Husband's/partner's occupation had no statistical significance on child's mortality (p 0.004 < 0.005 (95%) CI) although those whose husbands/partners were civil servants had the highest under-five mortality with This finding is similar to the findings in a study done in Uganda by Nafiu *et. al.*, where paternal occupation had no influence on under-five mortality [25].

Mothers with average monthly income below the national minimum wage experienced greater under-five mortality compared to mothers whose average monthly income was higher than the national minimum wage. This agrees with the findings of a study carried out by Solomon *et. al.*, in Ethiopia which revealed that the risk of under-five mortality for a child whose mother earned less than her husband was higher by 43.9% relative to a child whose mothers earned more than her husband [27].

5. Conclusion

The findings in this study demonstrate that the prevalence of under-five mortality is high in the Federal Capital Territory of Nigeria but comparatively lower compared with findings from other studies particularly in the developing countries of the world. Bivariate analysis revealed that the independent variables examined such as mother's education and occupation were significantly associated with under-five mortality. Results of the binary logistic regression showed Mother's education, main occupation, secondary occupation, monthly income, ethnic group all have a significant positive impact on the dependent variable (under-five mortality).

6. Recommendations

Prior to conclusion of this study, it is highly recommended for improvement in girl child and young mothers' education, provision of better maternal and child health services, provision of employment for vulnerable mothers as these will help boost their income which is a major determinant of childhood mortality in the Federal Capital Territory of Nigeria.

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