Determinants of Children Ever Born Among Currently Married Women in a Metropolitan City in Nigeria: Evidence from a Community-based Survey

Introduction

The number of children ever born (CEB) is a key component of population dynamics that determines a country's population size, structure, and composition. This study aimed to identify the determinants of CEB among currently married women in a metropolitan city in Nigeria.

Methods

This was a cross-sectional design and community-based study focused on married women (n=739) aged 15-49 years enrolled using a 3-stage random sampling technique from three out of 11 Local Government Areas (LGAs) across five enumeration areas in Ibadan. The outcome variable was CEB. The electronic-based interviewer-administered questionnaire used consisted of women's demographic and child-related characteristics, decision making about woman's healthcare in the home. Data were analyzed using descriptive statistics and a logistic regression model ($\alpha 0.05$).

Results

The mean age of the women and children ever born was 35.8 ± 7.4 years and 2.8 ± 1.3 respectively. Overall, 266 (36.0%) women were aged 25-34 years, 464 (62.8%) women had completed secondary education, 384 (52.0%) women had used a contraceptive, and 324 (43.8%) women had given birth to <3 children.

In all, 148 (38.5%) women have used ever used injectables only, 87 (22.7%) had used an intrauterine device only, 50 (13.0%) had used contraceptive pills only, 26 (6.8%) had used implants only, 20 (5.2%) had used both injectables and implants, while 17(4.4%) had adopted standard days method. Also, 14 (3.6%) had used both injectables, intrauterine device, and contraceptive pills, 9 (2.3%) had used IUD and injectables, while 4 (1.0%) women had used IUD and pills.

Forty-six (95.8%) women aged <25 years had given birth to <3 children compared to 167 (62.8%) aged 25-34 years, 92 (29.9%) aged 35-44 years, and 19 (16.2%) aged \geq 45 years (p=<0.001). Twenty-one (19.3%) women with primary education had given birth to \leq 2 children compared to 204 (44.0%) with secondary and 99 (59.6%) with tertiary education (p=<0.001). Women aged <25 years had 147 times higher odds (AOR = 146.57, p=<0.001), those aged 25-34 years had five times higher odds (aOR=5.09, p=<0.001), and those aged 35-44 years had twice higher odds (aOR = 1.91, p<=0.028) of giving birth to <3 children. Women with secondary education had four times higher odds (aOR=3.52, p=<0.001) and those with tertiary education had six times higher odds (aOR=5.99, p=<0.001) of giving birth to <3 children.

Conclusion

CEB was lower among women with higher levels of education in Ibadan, Nigeria. CEB was higher among women who initiated childbearing at younger ages (<25 years). Investment in formal education to defer childbearing should be prioritized in public health interventions in Nigeria.

Results

Table 1: Sociodemographic characteristics of currently married women from selected communities in Ibadan, Nigeria

Characteristics	Frequency	%
Current Age (Years)		
24 and below	48	6.5
25-34 years	266	36.0
35-44 years	308	41.7
45 years and above	117	15.8
Number of marital unions		
1	687	
>1	52	
Family type		
Monogamy	398	53.9
Polygamy	341	46.1
Age at first birth		
24 years and below	313	42.4
>24 years	426	57.6
Number of children ever born		
Two and below	324	43.8
>2	415	56.2
Number of male children ever born		
<2	395	53.5
Two and above	344	46.5
Number of female children ever born	-	
Less than 2	459	62.1
Two and above	280	37.9
Level of education	200	57.5
At most primary	109	14.7
Secondary	464	62.8
Tertiary	166	22.5
Employment type (N = 693)	100	22.5
Unskilled manual	159	22.9
Skilled manual	270	39.0
Professional/Technical/Managerial	153	22.1
Clerical	111	16.0
	111	16.0
Monthly income	400	FF 2
<30,000 (Poor)	409	55.3
30,000 and above (Rich)	330	44.7
Husband's age	100	
<35	186	25.2
35-44	436	59.0
≥45	117	15.8
Husband's occupation		
Not employed	26	3.5
Unskilled manual	89	12.0
Skilled manual	278	37.6
Sales and services	165	22.3
Professional/Technical/Managerial	137	18.5
Others	44	6.0
Decision-making on woman's healthcare in the home		
Husband decides alone	83	11.2
Woman jointly decides with husband	656	88.8
Ever used a contraceptive		
Yes	384	52.0
No	355	48.0

Characteristics	Children ever born		Chi-square	p-value
	<3	≥3		
Current Age (Years)				
24 and below	46 (95.8)	2 (4.2)	152.08	<0.001
25-34 years	167 (62.8)	99 (37.2)		
35-44 years	92 (29.9)	216 (70.1)		
45 years and above	19 (16.2)	98 (83.8)		
Number of marital unions				
1	310 (45.1)	377 (54.9)	6.50	0.011
>1	14 (26.9)	38 (73.1)		
Family type				
Monogamy	193 (48.5)	205 (51.5)	7.57	0.006
Polygamy	131 (38.4)	210 (61.6)		
Age at first birth				
24 years and below	135 (43.1)	178 (56.9)	0.11	0.738
>24 years	189 (44.4)	237 (55.6)		
Ideal family size	× /	× /		
Three and below	116 (75.3)	38 (24.7)	88.55	<0.001
4-5	146 (40.8)	212 (59.2)		
>5	62 (27.3)	165 (72.7)		
Woman's level of education	- (
At most primary	21 (19.3)	88 (80.7)	43.57	<0.001
Secondary	204 (44.0)	260 (56.0)		
Tertiary	99 (59.6)	67 (40.7)		
Employment type	((,,,,))			
Unemployed	52 (32.7)	25 (54.3)	17.84	<0.001
Unskilled manual	52 (32.7)	107 (67.3)	17.01	00001
Skilled manual	134 (49.6)	136 (50.4)		
Professional/Technical/Managerial	58 (37.9)	95 (62.1)		
Clerical	59 (53.2)	52 (46.8)		
Husband's age (Years)	57 (33.2)	52 (70.0)		
<35	141 (75.8)	45 (24.2)	120.26	<0.001
<35 35-44	164 (37.6)	45 (24.2) 272 (62.4)	120.20	~0.001
>45	19 (16.2)	98 (83.8)		
243 Husband's occupation	19 (10.2)	90 (03.0)		
Not employed	10 (38.5)	16 (61.5)	14.36	0.013
Unskilled manual	29 (32.6)	60 (67.4)	17.50	0.015
Skilled manual	123 (44.2)	155 (55.8)		
Sales and services	68 (41.2) 77 (56.2)	97 (58.8) 60 (43.8)		
Professional/Technical/Managerial	77 (56.2)	60 (43.8) 27 (61.4)		
Others	17 (38.6)	27 (61.4)		
Decision-making on woman's healthcare in th	ie			
home	(0, (27, 0))	100 ((5.0)	0.00	0.011
High	69 (35.0) 212 (4(-4)	128 (65.0)	8.99	0.011
Medium	213 (46.4)	246 (53.6)		
Low	42 (50.6)	41 (49.4)		
Ever used a contraceptive	126 (25.4)	040 (64.6)	22.05	-0 001
Yes	136 (35.4)	248 (64.6)	23.05	<0.001
No	188 (53.0)	167 (47.0)		

 Table 2: Association between children ever born and sociodemographic characteristics of married women and their husbands

Adjusted Odds Ratio	Model One 95% CI	p-value		Model Two	
Ouus Natio		p-value	Adjusted Odds Ratio	95% CI	p-value
177.49	34.80 - 905.19	<0.001	146.57	30.24 - 710.44	<0.001
5.71	2.86 - 11.43	<0.001	5.09	2.65 - 9.79	<0.001
2.13	1.16 - 3.89	0.014	1.91	1.07 - 3.41	0.028
1			1		
0.80	0.38 - 1.70	0.563			
1					
1.04	0.71 - 1.54	0.834			
1					
2.58	1.66 - 4.01	<0.001	2.49	1.62 - 3.81	<0.001
1			1		
1			1		
3.52	1.79 - 6.93	<0.001	3.25	1.72 - 6.16	<0.001
5.99	2.80 - 12.81	<0.001	6.82	3.41 - 13.66	<0.001
1					
	0.20 - 1.48	0.237			
1.00	0.50 2.51	0.925			
3.41	1 89 - 6 16	<0.001	3 33	1 88 - 5 90	<0.001
5.71	1.07 0.10	-0.001	5.55	1.00 0.70	-0.001
1			1		
1			1		
0.35	0.07 - 1.64	0.180			
	0.00 0.40	0.517			
1					
	0.42 1.63	0.605			
	5.57 = 1.51	0.205			
1					
1.99	1 30 2 72	~0.001	1.00	1 22 2 71	<0.001
	1.50 - 2.72	~0.001		1.55 - 2.71	~0.001
•	5.71 2.13 1 0.80 1 1.04 1 2.58 1 1 3.52	5.71 2.86 - 11.43 $2.13 1.16 - 3.89$ 1 $0.80 0.38 - 1.70$ 1 $1.04 0.71 - 1.54$ $2.58 1.66 - 4.01$ 1 $3.52 1.79 - 6.93$ $5.99 2.80 - 12.81$ 1 $0.55 0.20 - 1.48$ $0.93 0.36 - 2.44$ $0.54 0.20 - 1.50$ $1.05 0.38 - 2.91$ $3.41 1.89 - 6.16$ 1 $0.35 0.07 - 1.64$ $0.59 0.22 - 1.56$ $0.77 0.34 - 1.73$ $0.72 0.31 - 1.68$ $1.34 0.55 - 3.25$ 1 he home $0.84 0.43 - 1.63$ $0.72 0.39 - 1.31$ 1 $1.88 1.30 - 2.72$	5.71 $2.86 - 11.43$ < 0.001 2.13 $1.16 - 3.89$ 0.014 1 0.80 $0.38 - 1.70$ 0.563 1 $0.71 - 1.54$ 0.834 2.58 $1.66 - 4.01$ < 0.001 1 3.52 $1.79 - 6.93$ < 0.001 1 3.52 $1.79 - 6.93$ < 0.001 1 0.55 $0.20 - 1.48$ 0.237 0.93 $0.36 - 2.44$ 0.884 0.54 $0.20 - 1.50$ 0.239 1.05 $0.38 - 2.91$ 0.923 3.41 $1.89 - 6.16$ < 0.001 1 0.35 $0.07 - 1.64$ 0.180 0.59 $0.22 - 1.56$ 0.287 0.77 $0.34 - 1.73$ 0.525 0.72 $0.31 - 1.68$ 0.447 1.34 $0.55 - 3.25$ 0.514 1 0.283 $1.30 - 2.72$ < 0.001	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

Table 3: Predictors of having two or fewer children among currently married women