

Fertility Preferences and Intentions Among Employed Women and Full-time Housewives in Kano Metropolis, Nigeria

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ABSTRACT

Background: Fertility preferences are influenced by socioeconomic and sociocultural factors, but evidence comparing employed women and full-time housewives in northern Nigeria remains limited. **Aim:** To compare fertility preferences and intentions among employed women and full-time housewives in Kano Metropolis, Nigeria, and identify factors associated with preference for larger family size. **Materials and Methods:** A comparative cross-sectional study was conducted among 636 women aged 15–49 years, comprising 323 employed women and 313 full-time housewives. Data were collected using a structured, pretested, interviewer-administered questionnaire. We compared fertility preferences and intentions using Pearson's chi-square or Fisher's exact test, and used multivariable logistic regression to identify predictors of a preference for >4 children. Statistical significance was set at $p < 0.05$. **Results:** Desired family size did not differ significantly between employed women and housewives, with 16.1% and 14.7%, respectively, preferring >4 children ($p = 0.704$). Ideal family size (38.1% vs 31.0%; $p = 0.073$) and preferred birth interval (91.0% vs 86.3% preferring ≥ 2 years; $p = 0.077$) were also comparable. However, fertility intention differed significantly, with housewives more likely to intend additional childbearing (61.7% vs 49.8%; $p = 0.007$). Employment status was not independently associated with preference for >4 children (AOR=1.10, 95% CI: 0.68–1.78; $p = 0.693$). Fulani and Yoruba women had higher odds than Hausa women (AOR=2.33 and 2.66, respectively), while experiencing >4 child deaths was associated with increased odds (AOR=3.62, 95% CI: 1.28–10.22). Male-child preference was associated with lower odds (AOR=0.23, 95% CI: 0.06–0.84). **Conclusion:** Employment status was not independently associated with preference for larger families, whereas ethnicity and child mortality experience were important predictors. Family-planning interventions should therefore address sociocultural and reproductive factors alongside employment-related circumstances.

Keywords: Fertility preference; fertility intention; family size; employment status; child mortality; Nigeria.

INTRODUCTION

Fertility preferences are fundamental to reproductive health and population dynamics because they reflect desired family size, intentions regarding future childbearing, and preferences for birth timing and spacing.¹ Although biological factors influence fertility behaviour, fertility preferences arise from the interplay of socioeconomic, demographic, cultural, and household factors.² They are particularly important during fertility transition because discrepancies between desired and achieved fertility may indicate unmet reproductive intentions and inform contraceptive and family-planning needs.³ Global fertility has declined substantially over recent decades, although considerable disparities persist across regions and population groups.⁴ Sub-Saharan

Africa continues to experience relatively high fertility despite an ongoing fertility transition.^{4,5} Fertility preferences in the region are influenced by education, socioeconomic circumstances, gender norms, marriage patterns, child survival, access to reproductive health services, and culturally sanctioned expectations regarding family size.^{5,6}

Thus, fertility preferences cannot be understood solely from individual characteristics but must be interpreted within the broader social and economic context in which reproductive decisions are made. Women's employment may influence fertility preferences through financial autonomy, control over resources, and the opportunity

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costs of childbearing and childcare.^{6,7} Evidence from sub-Saharan Africa suggests that employed women, particularly those engaged in income-generating work, may have lower fertility preferences; however, this relationship varies with employment type, working conditions, household structure, and sociocultural context.⁶⁻⁸ Full-time housewives may face different opportunity costs of childbearing because their primary roles centre on household management and childcare, but their fertility preferences are likewise shaped by household income, partner preferences, education, reproductive experiences, contraceptive access, and prevailing cultural expectations.^{2,6}

In Nigeria, fertility preferences vary according to education, socioeconomic status, religion, residence, gender norms, and reproductive health service use.^{2,9,10} These influences are particularly salient in northern Nigeria, where fertility desire remains higher than in southern regions and reproductive decisions are strongly shaped by cultural and religious norms.^{15,16} Some northern states continue to record total fertility rates exceeding six children per woman, compared with substantially lower levels in southern states.^{17,18} At the same time, evidence on the relationship between women's employment and fertility remains inconsistent, with studies reporting both lower fertility among employed women and no significant differences by employment status.^{19,20} This suggests that employment may not independently determine reproductive preferences and that its influence may be conditioned by wider sociocultural and demographic circumstances.

Fertility preferences also encompass distinct but interrelated dimensions, including desired family size, ideal family size, fertility intention, and preferred birth interval.^{1,2,14} Desired and ideal family size describe aspirations concerning the number of children, whereas fertility intention reflects plans for additional childbearing, and preferred birth interval reflects desired spacing between pregnancies. These dimensions may not necessarily converge; women with similar desired family sizes may differ in their intention to have additional children or in their preferred spacing. Examining them separately, therefore, provides a more nuanced understanding of reproductive decision-making.

Despite extensive research on fertility in Nigeria, Evidence directly comparing employed women and full-time housewives across multiple dimensions of fertility

preferences remains limited.^{9,10} Previous studies have shown substantial variation in fertility by socioeconomic and contextual characteristics. Still, it remains unclear whether employment status is independently associated with preferences for larger families in a strongly pronatalist urban setting.^{11,12,19,20} This question is particularly relevant in northwestern Nigeria, where high-fertility norms and relatively low contraceptive use persist amid cultural and religious expectations favouring larger families.¹³

Kano Metropolis, with its strong pronatalist environment and diverse socioeconomic composition, provides an important setting in which to examine these relationships.^{12,13} Determining whether fertility preferences and intentions differ by employment status, and identifying the factors associated with preference for larger families, could provide evidence for more precisely targeted and culturally responsive family-planning interventions. Accordingly, this study compared fertility preferences and intentions among employed women and full-time housewives in Kano Metropolis, Nigeria, and examined factors associated with preference for larger family size.

MATERIALS AND METHODS

Study Design, Population, and Area

This comparative cross-sectional study was conducted among women aged 15-49 years residing in Kano Metropolis, Kano State, northwestern Nigeria, to compare fertility preferences and intentions between employed women and full-time housewives. Eligible participants were women engaged in formal or informal paid employment outside the home or full-time housewives whose primary roles involved household management and childcare. The study excluded women in part-time employment or unpaid family work.

Sample Size Estimation and Sampling Technique

The minimum sample size was estimated at 315 per group using the modified Fisher's formula for comparing two proportions,²¹ based on 98.1% and 93.1% proportions of employed women and full-time housewives, respectively, who preferred a birth interval of at least 2 years in a previous study.²² It was adjusted to 350 per group in anticipation of a 90% response rate. Since no previous Nigerian study had compared fertility preferences between employed women and full-time housewives using this composite outcome, the sample

size was calculated using the closest available estimates from a previous study of birth-interval practices and adapted to the Nigerian context.²² A multistage sampling technique was used. Four of the eight metropolitan LGAs (Fagge, Kano Municipal Council, Tarauni, and Ungogo) were selected by simple random sampling, followed by random selection of 11 Wards and one settlement from each selected Ward. Participants were proportionally allocated by household count, after which households were selected systematically using a random starting point and sampling interval. We selected one eligible woman per household. Ultimately, we enrolled 636 women, comprising 323 employed women and 313 full-time housewives.

Data Collection and Analysis

Data were collected using a structured, pretested, interviewer-administered questionnaire developed in English, translated into Hausa, and independently back-translated to ensure accuracy. Pretesting among 32 women in a non-selected LGA informed necessary modifications, and the instrument demonstrated acceptable internal consistency (Cronbach's $\alpha=0.72$). The questionnaire assessed sociodemographic characteristics, employment status, reproductive history, and fertility preferences, including desired and ideal number of children, number of living children, preferred birth interval, and intention to have additional children.²³ Desired and ideal family size were categorised as 1–4 or >4 children, based on the 28 Nigeria Demographic and Health Survey and regional fertility patterns.²³ The preferred birth interval was categorised as <2 or ≥ 2 years in accordance with WHO birth-spacing recommendations.²⁴ Fertility intention was classified as yes, no, or undecided. Trained research assistants conducted the interviews under supervision and checked completed questionnaires for completeness and consistency. Data were analysed using IBM SPSS Statistics version 22. We summarised categorical variables using frequencies and percentages and compared them using Pearson's chi-square or Fisher's exact test, as appropriate. Multivariable logistic regression was used to identify factors independently associated with preference for larger family size, with results presented as adjusted odds ratios (AORs) and 95% confidence intervals (CIs). Statistical significance was set at $p<0.05$.

Ethical Consideration

The Kano State Ministry of Health Ethical Review Board approved the study, and we obtained informed consent

from participants before data collection. For participants aged 15–17 years, we obtained parental/guardian permission and participant assent in accordance with the ethics committee's requirements. All information was treated confidentially and used solely for research purposes.

RESULTS

Sociodemographic characteristics of respondents

A total of 636 women participated in the study, comprising 323 employed women and 313 full-time housewives. The two groups differed significantly in age distribution, marital status, religion, educational attainment, and ethnicity. Housewives were more concentrated in the 25–34-year age group (43.8% vs 35.6%), more likely to be married (86.6% vs 71.2%), Muslim (84.0% vs 67.8%), and to have no formal education or only Quranic education. Conversely, employed women had higher tertiary educational attainment (40.6% vs 25.2%). Hausa ethnicity predominated among housewives (57.5% vs 40.0%), whereas Igbo and Yoruba women were more represented among employed respondents [Table 1].

Fertility preferences and reproductive characteristics of respondents

The proportion of women desiring 1–4 children was similar among employed women and full-time housewives (83.9% vs 85.3%; $p=0.704$), with no significant difference in ideal family size (61.9% vs 69.0% preferring 1–4 children; $p=0.073$). In contrast, the actual number of children differed significantly between groups ($p<0.001$), with housewives more likely to have more than four children (43.8% vs 34.4%) and less likely to have no children (16.6% vs 31.3%). Preferred birth interval did not differ significantly, although most women in both groups preferred an interval of at least two years (91.0% vs 86.3%; $p=0.077$). Fertility intention, however, differed significantly: housewives were more likely to intend further childbearing than employed women (61.7% vs 49.8%; $p=0.007$), while employed women were more likely to report no intention of additional children (35.3% vs 24.9%). Gender preference did not differ significantly between groups ($p=0.925$) [Table 2].

Factors associated with desired family size

Among the 636 respondents, 538 (84.6%) desired 1–4 children, whereas 98 (15.4%) desired more than four. Bivariate analysis showed that desired family size was

significantly associated with ethnicity and the number of deceased children. Preference for more than four children was highest among Fulani women (23.5%) and lowest among Igbo women (9.3%) ($\chi^2=8.705$; $p=0.033$). Similarly, the proportion desiring more than four children increased with the number of deceased children, reaching 33.3% among women who had experienced more than four child deaths compared with 13.9% among those reporting no deceased child (Fisher's exact test; $p=0.042$). Desired family size was not significantly associated with age, employment status, religion, education, marital status, age at first marriage, number of living children, or gender preference ($p>0.05$) [Table 3].

Predictors of desired family size

In the multivariate logistic regression model, employment status was not independently associated with preference for more than four children (employed vs full-time housewife: AOR=1.10, 95% CI: 0.68–1.78; $p=0.693$). Ethnicity, number of deceased children, and gender preference were significant independent predictors. Compared with Hausa women, Fulani women had more than twice the odds of desiring more than four children (AOR=2.33, 95% CI: 1.34–4.05; $p=0.003$), as did Yoruba women (AOR=2.66, 95% CI: 1.19–5.95; $p=0.017$). Women who had experienced more than four child deaths had significantly higher odds of preferring more than four children (AOR=3.62, 95% CI: 1.28–10.22; $p=0.015$). In contrast, women who preferred male children had lower odds of desiring more than four children than those with no gender preference (AOR=0.23, 95% CI: 0.06–0.84; $p=0.025$) [Table 4].

DISCUSSION

This study examined fertility preferences and intentions among employed women and full-time housewives in Kano Metropolis. The principal findings were that the two groups had comparable desired and ideal family sizes and preferred birth intervals, despite a significant difference in fertility intention. Full-time housewives were more likely to intend additional childbearing, whereas employment status was not independently associated with preference for more than four children. Instead, ethnicity and experience of child mortality emerged as important positive predictors of larger desired family size, while preference for male children was associated with lower odds of desiring more than four children.

The absence of a significant difference in desired and ideal family size between employed women and full-time housewives suggests that employment status alone may have limited influence on underlying fertility preferences in this setting. This finding is consistent with evidence that the relationship between women's employment and fertility in Nigeria is complex and shaped by socioeconomic and contextual factors.²⁵ Although studies from sub-Saharan Africa have associated employment with lower fertility preferences through the opportunity costs of childbearing and competing work and family responsibilities,^{6,14} such mechanisms may be less influential where pronatalist norms strongly favour larger families.^{13,25} In northern Nigeria, cultural and religious expectations surrounding marriage, motherhood, and family size may exert a stronger influence on reproductive preferences than women's labour-force participation.^{11,12,20} Thus, employment may alter the practical circumstances of childbearing without necessarily changing deeply established preferences concerning family size.

The significant difference in fertility intention, despite similar desired and ideal family sizes, provides an important distinction between fertility preferences and intentions. Full-time housewives were significantly more likely to intend further childbearing than employed women. Fertility intentions are more proximate to reproductive behaviour than broad preferences and may therefore be more sensitive to women's immediate circumstances.^{1,2} The lower intention among employed women may reflect the practical demands of combining employment with pregnancy, childcare, and household responsibilities.^{19,20} Conversely, full-time housewives may perceive fewer work-related opportunity costs associated with additional childbearing. Nevertheless, because employment was not independently associated with preference for more than four children, the findings suggest that occupational status may influence the timing or likelihood of future childbearing more readily than the underlying ideal family size.

The finding that ethnicity independently predicted desired family size underscores the importance of sociocultural context in reproductive decision-making. Fulani and Yoruba women had significantly higher odds of desiring more than four children than Hausa women.

Table 1: Sociodemographic characteristics of the study participants

Variables	Employed women n = 323 Frequency (%)	Full-time housewives n = 313 Frequency (%)	Test of significance
Age group (years)			
15-24	104 (32.2)	68 (21.7)	$\chi^2 = 12.101$ $p = 0.007^*$
25-34	115 (35.6)	137 (43.8)	
35-44	84 (26.6)	96 (30.7)	
45-49	20 (6.2)	12 (3.8)	
Mean $\pm$ SD	30.2 $\pm$ 8.2	30.7 $\pm$ 8.7	$t = -0.783$; $p = 0.434$
Marital status			
Single	74 (22.9)	14 (4.5)	$\chi^2 = 45.924$ $p < 0.001^*$
Married	230 (71.2)	271 (86.6)	
Divorced	8 (2.5)	13 (4.2)	
Widowed	11 (3.4)	15 (4.8)	
Religion			
Islam	219 (67.8)	263 (84.0)	$\chi^2 = 21.925$ $p < 0.001^*$
Christianity	104 (32.2)	50 (16.0)	
Educational status			
None	16 (5.0)	14 (4.5)	$\chi^2 = 38.448$ $p < 0.001^*$
Quranic	11 (3.4)	44 (14.1)	
Primary	23 (7.1)	42 (13.4)	
Secondary	142 (44.0)	134 (42.8)	
Tertiary	131 (40.6)	79 (25.2)	
Ethnicity			
Hausa	129 (40.0)	180 (57.5)	$\chi^2 = 27.105$ $p < 0.001^*$
Fulani	67 (20.7)	65 (20.8)	
Igbo	29 (9.0)	14 (4.5)	
Yoruba	52 (16.1)	33 (10.5)	
Others	46 (14.2)	21 (6.7)	

χ^2 : Pearson's chi square test; t: Independent t-test; *Statistically significant ($p < 0.05$);

This is consistent with evidence demonstrating substantial ethnic and spatial variation in fertility preferences and behaviour in Nigeria.^{11,12} Such differences may reflect variations in family norms, marriage patterns, gender roles, socioeconomic circumstances, and culturally transmitted expectations regarding family size. The higher odds among Fulani women are compatible with the persistence of traditional norms favouring larger families. The finding among Yoruba women is particularly noteworthy given the generally lower fertility levels reported in southern Nigeria,^{16,17} and it suggests that ethnic fertility norms may persist even when women live outside their traditional geographic settings. However, this interpretation should be regarded cautiously because the study was conducted in an urban, ethnically diverse population, where migration and socioeconomic characteristics may modify traditional patterns.

Experience of child mortality was another important determinant of desired family size. Women who had experienced more than four child deaths had substantially higher odds of desiring more than four children than those who had experienced no child loss. This association is consistent with the replacement hypothesis, whereby the death of children may motivate subsequent childbearing to compensate for reproductive losses.¹⁷ In high-fertility settings, child mortality may also increase perceived uncertainty about child survival and encourage women to have more children to achieve their desired number of surviving offspring.^{20,26} The finding, therefore, highlights the close relationship between child survival and fertility preferences and suggests that improvements in child survival may have implications extending beyond mortality reduction to longer-term fertility transition.^{5,17,26,28}

Table 2: Fertility preferences and reproductive characteristics according to maternal employment status

Variables	Employed women n = 323 Frequency (%)	Full-time housewives n = 313 Frequency (%)	Test of significance
Desired number of children			
1-4	271 (83.9)	267 (85.3)	$\chi^2 = 0.144$ p = 0.704
>4	52 (16.1)	46 (14.7)	
Ideal number of children			
1-4	200 (61.9)	216 (69.0)	$\chi^2 = 3.225$ p = 0.073
>4	123 (38.1)	97 (31.0)	
Actual number of children			
None	101 (31.3)	52 (16.6)	$\chi^2 = 18.985$ p < 0.001*
1-4	111 (34.4)	124 (39.6)	
>4	111 (34.4)	137 (43.8)	
Preferred birth interval			
<2 years	29 (9.0)	43 (13.7)	$\chi^2 = 3.129$ p = 0.077
≥2 years	294 (91.0)	270 (86.3)	
Fertility intention			
Yes	161 (49.8)	193 (61.7)	$\chi^2 = 9.888$ p = 0.007*
No	114 (35.3)	78 (24.9)	
Undecided	48 (14.9)	42 (13.4)	
Gender preference			
None	267 (82.7)	256 (81.8)	$\chi^2 = 0.155$ p = 0.925
Male	23 (7.1)	22 (7.0)	
Female	33 (10.2)	35 (11.2)	

χ^2 : Pearson's chi square test; *Statistically significant (p < 0.05);

The inverse association between preference for male children and desire for more than four children warrants cautious interpretation. Women who preferred male children had lower odds of desiring more than four children than women who expressed no sex preference. This finding does not necessarily imply that a lower preference for larger families follows from son preference. Rather, it may reflect differences in existing family composition, the number and sex of surviving children, or reproductive circumstances not fully captured by the available variables. Evidence from northwestern Nigeria indicates that the sex composition of surviving children can influence subsequent childbearing intentions, particularly in high-fertility populations.²⁰ Similarly, women who have already achieved their preferred sex composition may be less likely to desire additional children. The unexpected direction of this association, therefore, merits further investigation in

studies that include detailed information on the sex composition of living children, parity, and achievement of desired family composition.

An important finding with programmatic relevance was the high proportion of women who preferred a birth interval of at least two years in both groups. Although the preferred birth interval did not differ significantly by employment status, this widespread preference represents a potential entry point for family-planning interventions that promote healthy birth spacing.^{22,24} Counselling and social and behavioural change interventions could build on existing preferences for longer intervals while addressing barriers to contraceptive uptake and sustained use. Such approaches may be particularly valuable in northern Nigeria, where high fertility preferences coexist with substantial unmet reproductive health needs.^{13,16}

Table 3: Association between sociodemographic factors and desired family size

Variables	Desired family size (1-4) n = 538 Frequency (%)	Desired family size (>4) n = 98 Frequency (%)	Test of significance
Age group (years)			
15-24	146 (84.9)	26 (15.1)	$\chi^2 = 0.176$ p = 0.756
25-34	217 (86.1)	35 (13.9)	
35-44	149 (82.8)	31 (17.2)	
45-49	26 (81.3)	6 (18.8)	
Employment status			
Employed	271 (83.9)	52 (16.1)	$\chi^2 = 0.241$ p = 0.624
Housewife	267 (85.3)	46 (14.7)	
Religion			
Islam	402 (83.4)	80 (16.6)	$\chi^2 = 2.161$ p = 0.142
Christianity	136 (88.3)	18 (11.7)	
Ethnicity			
Hausa	271 (87.7)	38 (12.3)	$\chi^2 = 8.705$ p = 0.033*
Fulani	101 (76.5)	31 (23.5)	
Igbo	39 (90.7)	4 (9.3)	
Yoruba	70 (82.4)	15 (17.7)	
Others	57 (85.1)	10 (14.9)	
Educational level			
None	9 (81.8)	2 (18.2)	Fe; p = 0.432
Quranic only	46 (79.3)	12 (20.7)	
Primary	57 (82.6)	12 (17.4)	
Secondary	248 (87.3)	36 (12.7)	
Tertiary	178 (83.2)	36 (16.8)	
Marital status			
Single	82 (88.2)	11 (11.8)	Fe; p = 0.512
Married	423 (83.9)	81 (16.1)	
Divorced	10 (76.9)	3 (23.1)	
Widowed	23 (88.5)	3 (11.5)	
Age at first marriage			
15-24	399 (83.3)	80 (16.7)	$\chi^2 = 2.493$ p = 0.285
25-34	57 (89.1)	7 (10.9)	
Unmarried	82 (88.2)	11 (11.8)	
No. of living children			
None	131 (85.6)	41 (13.5)	$\chi^2 = 3.459$ p = 0.188
1-4	263 (86.5)	35 (19.6)	
>4	144 (80.5)	22 (14.4)	
No. of deceased children			
None	446 (86.1)	72 (13.9)	Fe; p = 0.042*
1-4	84 (79.3)	22 (20.7)	
>4	8 (66.7)	4 (13.4)	
Gender preference			
Male sex	43 (95.6)	2 (4.4)	$\chi^2 = 5.001$ p = 0.082
Female sex	59 (86.8)	9 (13.2)	
Indifferent	436 (83.4)	87 (16.6)	

χ^2 : Pearson's chi square test; Fe: Fisher's exact test; *Statistically significant (p<0.05);

Overall, the findings indicate that fertility preferences among women in Kano Metropolis are shaped by factors extending beyond employment status. While employment appears to distinguish women's intentions regarding further childbearing, it does not independently explain preference for larger families. Ethnic and reproductive experiences, particularly ethnicity and child mortality, were more strongly associated with desired family size. These findings support a shift from employment-centred

explanations of fertility preferences towards a broader understanding that incorporates sociocultural norms, reproductive experiences, child survival, and family composition. Family-planning programmes in Kano and similar high-fertility settings should therefore be culturally responsive and address the wider determinants of fertility preferences rather than targeting women solely according to employment status.

Table 4: Predictors of desired family size among employed women and full-time housewives

Predictor	AOR	95% CI	p-value
Employment status			
Full-time housewife	1.00	Reference	
Employed	1.10	0.68 – 1.78	0.693
Age group			
15-24	1.00	Reference	
25-34	0.82	0.42 – 1.61	0.570
35-44	0.80	0.39 – 1.67	0.560
45-49	0.83	0.30 – 2.29	0.717
Religion			
Islam	1.00	Reference	
Christianity	0.54	0.23 – 1.27	0.156
Ethnicity			
Hausa	1.00	Reference	
Fulani	2.33	1.34 – 4.05	0.003*
Igbo	1.52	0.50 – 4.61	0.461
Yoruba	2.66	1.19 – 5.95	0.017*
Others	2.04	0.85 – 4.88	0.109
Number of living children			
None	1.00	Reference	
1-4	1.09	0.57 – 2.06	0.802
>4	1.43	0.70 – 2.91	0.327
Number of deceased children			
None	1.00	Reference	
1-4	1.55	0.92 – 2.60	0.098
>4	3.62	1.28 – 10.22	0.015*
Gender preferences			
Indifference	1.00	Reference	
Female sex	0.55	0.27 – 1.15	0.114
Male	0.23	0.06 – 0.84	0.025*

AOR: Adjusted odds ratio; CI: Confidence interval; *Statistically significant ($p < 0.05$);

STUDY LIMITATIONS

Some limitations should be considered when interpreting the findings of this study. Its cross-sectional design precludes establishing temporality or causality, while self-reported fertility preferences may be affected by recall error, social desirability, cultural expectations, and interviewer influence. Categorising desired family size as ≤ 4 versus > 4 children may also have reduced information and obscured more nuanced associations. Selection bias and limited generalizability are possible because the study selected only one woman per household and was conducted exclusively in an urban population. Although the sample size accounted for the design effect, the analysis did not incorporate clustering and may have underestimated standard errors. Some subgroup analyses had small cell sizes, although exact tests were used where appropriate. Furthermore, the binary classification of employment did not capture differences in occupation, working conditions, income, working hours, workplace support, or childcare arrangements. Partner fertility preferences, contraceptive use, women's autonomy,

household decision-making, family-planning information, and community influences were also not comprehensively assessed, leaving potential residual confounding. These limitations warrant cautious interpretation and restrict causal inference and generalizability.

CONCLUSION

Employed women and full-time housewives in Kano Metropolis had similar desired and ideal family sizes and preferred birth intervals, although full-time housewives were more likely to intend additional childbearing. Employment status was not independently associated with preference for more than four children; rather, ethnicity and experience of child mortality were significant predictors of larger desired family size. These findings suggest that fertility preferences in this setting are shaped more strongly by sociocultural and reproductive factors than by women's employment status alone. The widespread preference for birth intervals of at least two

years provides an important opportunity to strengthen culturally responsive family-planning interventions that promote healthy birth spacing and informed reproductive decision-making. Integrating family-planning with child-survival interventions may be particularly relevant where child mortality influences fertility preferences, while supportive workplace policies may help employed women reconcile reproductive intentions with work and family responsibilities.

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Conflict of interest

None declared.

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