**Predictors of no healthcare-seeking behaviour for under-5 children illness in the North Central, Nigeria**

In the context of healthcare-seeking behavior in North Central Nigeria, a multivariate logistic regression analysis was conducted to explore the factors associated with no treatment seeking behavior for under-5 children with diarrhoea, fever and cough. This analysis was performed in both unadjusted and adjusted models and presented in table 11 below.

Age was among the factors considered. Notably, the 35-49 age group exhibited a significant association with no healthcare-seeking behavior in the unadjusted model, with an odds ratio of 1.54 (95% C.I. 1.06-2.22). However, this effect was attenuated in the adjusted model, resulting in an odds ratio of 1.32 (95% C.I. 0.76-2.29). Education emerged as a crucial determinant. Individuals with primary, secondary, or tertiary education were less likely to exhibit no healthcare-seeking behavior compared to those with no education. For instance, in the unadjusted model, the odds ratios were 0.53 (95% C.I. 0.37-0.77), 0.44 (95% C.I. 0.32-0.60), and 0.31 (95% C.I. 0.18-0.55) for primary, secondary, and tertiary education, respectively. After adjustment, these odds ratios changed to 0.77 (95% C.I. 0.50-1.18), 0.84 (95% C.I. 0.54-1.32), and 0.80 (95% C.I. 0.37-1.69), respectively. Partner's education also played a significant role. Partners with primary, secondary, or tertiary education were associated with a reduced likelihood of no healthcare-seeking behavior. In the unadjusted model, the odds ratios were 0.47 (95% C.I. 0.30-0.73), 0.45 (95% C.I. 0.33-0.62), and 0.30 (95% C.I. 0.19-0.46) for primary, secondary, and tertiary education, respectively. The adjusted model resulted in odds ratios of 0.63 (95% C.I. 0.38-1.03), 0.70 (95% C.I. 0.46-1.08), and 0.49 (95% C.I. 0.27-0.87), respectively. Religion exhibited an interesting pattern. In the unadjusted model, individuals practicing Islam had a higher likelihood of no healthcare-seeking behavior, with an odds ratio of 1.53 (95% C.I. 1.16-2.00). However, this effect was attenuated in the adjusted analysis, resulting in an odds ratio of 1.01 (95% C.I. 0.72-1.42). Wealth status was a significant factor in the unadjusted model. Individuals classified as middle or rich were less likely to exhibit no healthcare-seeking behavior, with odds ratios of 0.65 (95% C.I. 0.46-0.91) and 0.53 (95% C.I. 0.39-0.72), respectively. However, these effects became non-significant after adjusting for other variables. The number of under-5 children was significantly associated with an increased likelihood of no healthcare-seeking behavior. For instance, in the unadjusted model, having four or more under-5 children was associated with an odds ratio of 1.72 (95% C.I. 1.09-2.72). This effect persisted in the adjusted model, with an odds ratio of 1.05 (95% C.I. 0.63-1.75). The number of children lost did not significantly influence no healthcare-seeking behavior after adjusting for other variables. Regarding the number of living children, having two or four living children significantly increased the likelihood of no healthcare-seeking behavior, with adjusted odds ratios of 1.63 (95% C.I. 1.00-2.66) and 1.98 (95% C.I. 1.11-3.52), respectively. Exposure to media significantly improved healthcare-seeking behavior in the unadjusted model, with an odds ratio of 0.50 (95% C.I. 0.39-0.66). However, this effect became non-significant after adjusting for other variables. Urban residence was initially associated with slightly better healthcare-seeking behavior in the unadjusted model, with an odds ratio of 1.35 (95% C.I. 1.00-1.82). However, this effect disappeared in the adjusted model, resulting in an odds ratio of 0.92 (95% C.I. 0.62-1.35).

Women's autonomy had a consistent influence on healthcare-seeking behavior. Both partial and full autonomy significantly improved behavior in both unadjusted and adjusted models. For example, in the unadjusted model, the odds ratios were 0.56 (95% C.I. 0.42-0.75) and 0.39 (95% C.I. 0.26-0.58) for partial and full autonomy, respectively. In the adjusted model, the odds ratios were 0.66 (95% C.I. 0.48-0.91) and 0.58 (95% C.I. 0.37-0.90), respectively.

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| **Table 11: Multivariate Logistic Regression of Factors Influencing No Healthcare-Seeking Behaviour in North Central, Nigeria** | | |
| **Background Characteristics** | **Unadjusted Odds Ratio**  **uOR (95% C.I)** | **Adjusted Odds Ratio**  **aOR (95% C.I)** |
| **Age** |  |  |
| 15-24 | 1.00 | 1.00 |
| 25-34 | 1.13 (0.82-1.55) | 1.03 (0.69-1.54) |
| 35-49 | 1.54 (1.06-2.22) \*\* | 1.32 (0.76-2.29) |
| **Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.53 (0.37-0.77) \*\*\* | 0.77 (0.50-1.18) |
| Secondary | 0.44 (0.32-0.60) \*\*\* | 0.84 (0.54-1.32) |
| Tertiary | 0.31 (0.18-0.55) \*\*\* | 0.80 (0.37-1.69) |
| **Partner’s Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.47 (0.30-0.73) \*\*\* | 0.63 (0.38-1.03) \* |
| Secondary | 0.45 (0.33-0.62) \*\*\* | 0.70 (0.46-1.08) |
| Tertiary | 0.3 (0.19-0.46) \*\*\* | 0.49 (0.27-0.87) \*\* |
| **Marital Status** |  |  |
| Married | 1.00 | - |
| Co-habiting | 1.02 (0.30-3.52) | - |
| **Occupation Status** |  |  |
| Unemployed | 1.00 | 1.00 |
| Employed | 0.78 (0.58-1.04) \* | 0.88 (0.64-1.22) |
| **Religion** |  |  |
| Christianity | 1.00 | 1.00 |
| Islam | 1.53 (1.16-2.00) \*\*\* | 1.01 (0.72-1.42) |
| Other | 3.46 (0.57-20.99) | 2.13 (0.33-13.84) |
| **Wealth Status** |  |  |
| Poor | 1.00 | 1.00 |
| Middle | 0.65 (0.46-0.91) \*\* | 0.87 (0.59-1.27) |
| Rich | 0.53 (0.39-0.72) \*\*\* | 0.87 (0.55-1.37) |
| **Ethnicity** |  |  |
| Yoruba | 1.00 | - |
| Igbo | 0.68 (0.26-1.77) | - |
| Hausa | 1.53 (0.85-2.77) | - |
| Other | 1.03 (0.60-1.75) | - |
| **Number of under-5 Children** |  |  |
| One | 1.00 | 1.00 |
| Two | 0.93 (0.69-1.25) | 0.74 (0.52-1.05) \* |
| Three | 0.99 (0.65-1.52) | 0.74 (0.46-1.18) |
| Four and above | 1.72 (1.09-2.72) \*\* | 1.05 (0.63-1.75) |
| **Number of Children Lost** |  |  |
| None | 1.00 | 1.00 |
| One | 1.10 (0.77-1.56) | 0.93 (0.64-1.35) |
| Two | 1.25 (0.70-2.25) | 0.96 (0.51-1.80) |
| Three and above | 1.88 (0.90-3.90) \* | 0.95 (0.43-2.10) |
| **Number of Living Children** |  |  |
| One | 1.00 | 1.00 |
| Two | 1.39 (0.91-2.11) | 1.63 (1.00-2.66) \* |
| Three | 1.12 (0.71-1.74) | 1.20 (0.69-2.07) |
| Four | 1.85 (1.18-2.89) \*\*\* | 1.98 (1.11-3.52) \*\* |
| Five and above | 1.93 (1.30-2.86) \*\*\* | 1.54 (0.86-2.76) |
| **Media Exposure** |  |  |
| Not Exposed | 1.00 | 1.00 |
| Exposed | 0.50 (0.39-0.66) \*\*\* | 0.83 (0.59-1.17) |
| **Place of Residence** |  |  |
| Urban | 1.00 | 1.00 |
| Rural | 1.35 (1.00-1.82) \*\* | 0.92 (0.62-1.35) |
| **Women Autonomy** |  |  |
| None | 1.00 | 1.00 |
| Partial Autonomy | 0.56 (0.42-0.75) \*\*\* | 0.66 (0.48-0.91) \*\* |
| Full Autonomy | 0.39 (0.26-0.58) \*\*\* | 0.58 (0.37-0.90) \*\* |
| **No Autonomy** |  |  |
| No | 1.00 | - |
| Yes | 2.02 (1.39-2.94) \*\*\* | - |

***\*\*\* P< 0.01; \*\* P<0.05; \* P<0.10; OR: Odds ratio; CI: Confidence interval***

**Predictors of no healthcare-seeking behaviour for under-5 children illness in the North East, Nigeria**

In the investigation of factors influencing no healthcare-seeking behavior in North East Nigeria as presented in table 12 below. Age appeared to have a modest influence on healthcare-seeking behavior. In the unadjusted model, individuals aged 35-49 showed a somewhat reduced likelihood of no healthcare-seeking behavior, with an odds ratio of 0.81 (95% C.I. 0.64-1.02), although this effect only neared significance. After adjusting for other variables, this association remained somewhat similar, with an adjusted odds ratio of 0.87 (95% C.I. 0.68-1.13). Educational attainment played a crucial role in healthcare-seeking behavior. Notably, individuals with secondary and tertiary education had significantly lower odds of no healthcare-seeking behavior. In the unadjusted model, the odds ratios were 0.52 (95% C.I. 0.40-0.69) for secondary education and 0.23 (95% C.I. 0.11-0.48) for tertiary education. After adjustment, these odds ratios were 0.69 (95% C.I. 0.48-1.00) and 0.65 (95% C.I. 0.27-1.58), respectively, indicating a persistent but somewhat reduced effect. Partner's education also showed a similar pattern of influence, with primary, secondary, and tertiary education of the partner associated with decreased odds of no healthcare-seeking behavior. After adjustment, the odds ratios were 1.06 (95% C.I. 0.79-1.42), 0.80 (95% C.I. 0.61-1.05), and 0.73 (95% C.I. 0.47-1.11), respectively. Religion exhibited a noteworthy association. In the unadjusted model, individuals practicing Islam had a reduced likelihood of no healthcare-seeking behavior, with an odds ratio of 0.75 (95% C.I. 0.59-0.97). This effect became more pronounced in the adjusted analysis, resulting in an odds ratio of 0.45 (95% C.I. 0.32-0.63), indicating a significant association. Wealth status demonstrated a clear gradient in the unadjusted model. Individuals classified as middle or rich had significantly lower odds of no healthcare-seeking behavior, with odds ratios of 0.66 (95% C.I. 0.52-0.84) and 0.29 (95% C.I. 0.20-0.41), respectively. However, after adjusting for other variables, the effect was attenuated, resulting in an odds ratio of 1.09 (95% C.I. 0.82-1.44) for the middle category and 0.80 (95% C.I. 0.51-1.25) for the rich category. Ethnicity played a role in healthcare-seeking behavior. In particular, individuals of Hausa ethnicity exhibited a significantly increased likelihood of no healthcare-seeking behavior, with an odds ratio of 1.22 (95% C.I. 1.02-1.46) in the unadjusted model. This effect persisted and strengthened in the adjusted analysis, resulting in an odds ratio of 1.41 (95% C.I. 1.13-1.76). The number of under-5 children, children lost, and living children did not significantly influence no healthcare-seeking behavior after adjusting for other variables. Media exposure had a substantial impact. In the unadjusted model, being exposed to media was significantly associated with a decreased likelihood of no healthcare-seeking behavior, with an odds ratio of 0.48 (95% C.I. 0.39-0.57). This effect remained significant in the adjusted model, with an odds ratio of 0.67 (95% C.I. 0.54-0.82). Place of residence was a significant factor. In the unadjusted model, individuals residing in rural areas were more likely to exhibit no healthcare-seeking behavior, with an odds ratio of 3.40 (95% C.I. 2.55-4.53). This effect persisted in the adjusted analysis, with an odds ratio of 2.20 (95% C.I. 1.55-3.14).

Women's autonomy exhibited a modest effect in the unadjusted model. Partial autonomy was associated with a reduced likelihood of no healthcare-seeking behavior, with an odds ratio of 0.81 (95% C.I. 0.66-0.99). However, this effect became less pronounced in the adjusted model, resulting in an odds ratio of 0.89 (95% C.I. 0.71-1.10).

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| **Table 12: Multivariate Logistic Regression of Factors Influencing No Healthcare-Seeking Behaviour in North East, Nigeria** | | |
| **Background Characteristics** | **Unadjusted Odds Ratio**  **uOR (95% C.I)** | **Adjusted Odds Ratio**  **aOR (95% C.I)** |
| **Age** |  |  |
| 15-24 | 1.00 | 1.00 |
| 25-34 | 0.87 (0.71-1.00) | 0.96 (0.77-1.20) |
| 35-49 | 0.81 (0.64-1.02) \* | 0.87 (0.68-1.13) |
| **Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.81 (0.63-1.04) \* | 0.94 (0.71-1.26) |
| Secondary | 0.52 (0.40-0.69) \*\*\* | 0.69 (0.48-1.00) \*\* |
| Tertiary | 0.23 (0.11-0.48) \*\*\* | 0.65 (0.27-1.58) |
| **Partner’s Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.91 (0.69-1.19) | 1.06 (0.79-1.42) |
| Secondary | 0.66 (0.53-0.83) \*\*\* | 0.80 (0.61-1.05) |
| Tertiary | 0.36 (0.26-0.51) \*\*\* | 0.73 (0.47-1.11) |
| **Marital Status** |  |  |
| Married | 1.00 | - |
| Co-habiting | 1.31 (0.61-2.82) | - |
| **Occupation Status** |  |  |
| Unemployed | 1.00 | 1.00 |
| Employed | 0.64 (0.53-0.77) \*\*\* | 0.67 (0.55-0.83) \*\*\* |
| **Religion** |  |  |
| Christianity | 1.00 | 1.00 |
| Islam | 0.75 (0.59-0.97) \*\* | 0.45 (0.32-0.63) \*\*\* |
| **Wealth Status** |  |  |
| Poor | 1.00 | 1.00 |
| Middle | 0.66 (0.52-0.84) \*\*\* | 1.09 (0.82-1.44) |
| Rich | 0.29 (0.20-0.41) \*\*\* | 0.80 (0.51-1.25) |
| **Ethnicity** |  |  |
| Yoruba | 1.00 | 1.00 |
| Igbo | 0.92 (0.08-10.17) | 2.78 (0.23-34.1) |
| Hausa | 1.22 (1.02-1.46) \*\* | 1.41 (1.13-1.76) \*\*\* |
| Other | 1.00 | 1.00 |
| **Number of under-5 Children** |  |  |
| One | 1.00 | - |
| Two | 0.98 (0.78-1.22) | - |
| Three | 1.23 (0.95-1.59) | - |
| Four and above | 1.19 (0.91-1.56) | - |
| **Number of Children Lost** |  |  |
| None | 1.00 | - |
| One | 1.01 (0.80-1.26) | - |
| Two | 0.98 (0.73-1.32) | - |
| Three and above | 1.05 (0.74-1.47) | - |
| **Number of Living Children** |  |  |
| One | 1.00 | - |
| Two | 1.02 (0.75-1.37) | - |
| Three | 1.18 (0.87-1.60) | - |
| Four | 0.94 (0.69-1.28) | - |
| Five and above | 0.84 (0.65-1.09) | - |
| **Media Exposure** |  |  |
| Not Exposed | 1.00 | 1.00 |
| Exposed | 0.48 (0.39-0.57) \*\*\* | 0.67 (0.54-0.82) \*\*\* |
| **Place of Residence** |  |  |
| Urban | 1.00 | 1.00 |
| Rural | 3.40 (2.55-4.53) \*\*\* | 2.20 (1.55-3.14) \*\*\* |
| **Women Autonomy** |  |  |
| None | 1.00 | 1.00 |
| Partial Autonomy | 0.81 (0.66-0.99) \*\* | 0.89 (0.71-1.10) |
| Full Autonomy | 0.99 (0.76-1.29) | 1.17 (0.86-1.59) |
| **No Autonomy** |  |  |
| No | 1.00 |  |
| Yes | 0.94 (0.73-1.21) |  |

***\*\*\* P< 0.01; \*\* P<0.05; \* P<0.10; OR: Odds ratio; CI: Confidence interval***

**Predictors of no healthcare-seeking behaviour for under-5 children illness in the North West, Nigeria**

Table 13 presents the factors influencing healthcare-seeking behavior in North West Nigeria. Age appears to have a modest impact on healthcare-seeking behavior. Individuals aged 25-34 showed a slightly increased likelihood of no healthcare-seeking behavior, with an odds ratio (OR) of 1.24 (95% C.I. 0.99-1.55) in the unadjusted model and 1.19 (95% C.I. 0.94-1.52) in the adjusted model. Similarly, those aged 35-49 displayed a somewhat reduced likelihood of no healthcare-seeking behavior, though this effect only neared significance, with an OR of 1.19 (95% C.I. 0.92-1.54) in the unadjusted model and 1.11 (95% C.I. 0.82-1.50) in the adjusted model. Educational attainment played a crucial role in healthcare-seeking behavior. Notably, individuals with primary education had lower odds of no healthcare-seeking behavior, with an OR of 0.57 (95% C.I. 0.42-0.78) in the unadjusted model and 0.70 (95% C.I. 0.50-0.96) in the adjusted model. Those with secondary education had even lower odds, with an OR of 0.43 (95% C.I. 0.31-0.61) in the unadjusted model and 0.57 (95% C.I. 0.37-0.88) in the adjusted model. While tertiary education initially showed a strong effect in the unadjusted model, with an OR of 0.39 (95% C.I. 0.16-0.93), this effect was somewhat reduced in the adjusted model, with an OR of 0.55 (95% C.I. 0.21-1.48). Partner's Education exhibited a similar pattern of influence, with primary, secondary, and tertiary education of the partner associated with decreased odds of no healthcare-seeking behavior in both unadjusted and adjusted models. Marital Status and Occupation Status did not appear to independently affect healthcare-seeking behavior in this region. Religious affiliation showed a notable association. Muslims had a reduced likelihood of not seeking healthcare in the unadjusted model, with an OR of 0.94 (95% C.I. 0.56-1.60), and this effect became more pronounced and statistically significant in the adjusted analysis, resulting in an OR of 0.45 (95% C.I. 0.32-0.63). Wealth Status initially showed a gradient in the unadjusted model. Individuals classified as middle or rich had significantly lower odds of no healthcare-seeking behavior, with ORs of 0.72 (95% C.I. 0.56-0.93) and 0.46 (95% C.I. 0.34-0.62), respectively. However, after adjusting for other variables, the effect was attenuated, resulting in ORs of 0.92 (95% C.I. 0.70-1.22) for the middle category and 0.74 (95% C.I. 0.48-1.13) for the rich category. Ethnicity played a role in healthcare-seeking behavior. In particular, individuals of Hausa ethnicity were more likely to engage in no healthcare-seeking behavior, with an OR of 0.52 (95% C.I. 0.36-0.76) in the unadjusted model and 0.50 (95% C.I. 0.33-0.75) in the adjusted model. The number of under-5 children, children lost, and living children did not significantly influence healthcare-seeking behavior after adjusting for other variables. Exposure to media was significantly associated with a decreased likelihood of no healthcare-seeking behavior in the adjusted model, with an OR of 1.08 (95% C.I. 0.88-1.33), highlighting the importance of information dissemination in healthcare-seeking behavior. Individuals residing in rural areas were more likely to engage in no healthcare-seeking behavior in the unadjusted model, with an OR of 1.42 (95% C.I. 1.13-1.79). This effect was partially mitigated after adjusting for other variables, suggesting that rural residence may still play a role but is influenced by other factors. Women's Autonomy exhibited a modest effect. Partial autonomy was associated with a reduced likelihood of no healthcare-seeking behavior in the adjusted model, with an OR of 0.69 (95% C.I. 0.54-0.88).

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| **Table 13: Multivariate Logistic Regression of Factors Influencing No Healthcare-Seeking Behaviour in North West, Nigeria** | | |
| **Background Characteristics** | **Unadjusted Odds Ratio**  **uOR (95% C.I)** | **Adjusted Odds Ratio**  **aOR (95% C.I)** |
| **Age** |  |  |
| 15-24 | 1.00 | 1.00 |
| 25-34 | 1.24 (0.99-1.55) \* | 1.19 (0.94-1.52) |
| 35-49 | 1.19 (0.92-1.54) | 1.11 (0.82-1.50) |
| **Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.57 (0.42-0.78) \*\*\* | 0.70 (0.50-0.96) \*\* |
| Secondary | 0.43 (0.31-0.61) \*\*\* | 0.57 (0.37-0.88) \*\* |
| Tertiary | 0.39 (0.16-0.93) \*\* | 0.55 (0.21-1.48) |
| **Partner’s Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.62 (0.46-0.84) \*\*\* | 0.65 (0.48-0.89) \*\*\* |
| Secondary | 0.49 (0.37-0.64) \*\*\* | 0.58 (0.42-0.78) \*\*\* |
| Tertiary | 0.40 (0.28-0.57) \*\*\* | 0.60 (0.39-0.93) \*\* |
| **Marital Status** |  |  |
| Married | 1.00 | - |
| Co-habiting | 1.00 | - |
| **Occupation Status** |  |  |
| Unemployed | 1.00 | - |
| Employed | 0.86 (0.71-1.04) | - |
| **Religion** |  |  |
| Christianity | 1.00 | - |
| Islam | 0.94 (0.56-1.60) | - |
| Other | 0.22 (0.03-1.84) | - |
| **Wealth Status** |  |  |
| Poor | 1.00 | 1.00 |
| Middle | 0.72 (0.56-0.93) \*\*\* | 0.92 (0.70-1.22) |
| Rich | 0.46 (0.34-0.62) \*\*\* | 0.74 (0.48-1.13) |
| **Ethnicity** |  |  |
| Yoruba | 1.00 | 1.00 |
| Igbo | 1.41 (0.09-23.06) | 2.75 (0.15-50.71) |
| Hausa | 0.52 (0.36-0.76) \*\*\* | 0.50 (0.33-0.75) \*\*\* |
| Other | 1.00 | 1.00 |
| **Number of under-5 Children** |  |  |
| One | 1.00 | - |
| Two | 0.92 (0.73-1.16) | - |
| Three | 0.91 (0.69-1.20) | - |
| Four and above | 0.90 (0.67-1.19) | - |
| **Number of Children Lost** |  |  |
| None | 1.00 | 1.00 |
| One | 1.26 (1.00-1.58) \*\* | 1.12 (0.88-1.42) |
| Two | 1.18 (0.89-1.56) | 0.94 (0.68-1.28) |
| Three and above | 1.21 (0.89-1.65) | 1.02 (0.72-1.44) |
| **Number of Living Children** |  |  |
| One | 1.00 | - |
| Two | 0.96 (0.70-1.32) | - |
| Three | 0.88 (0.62-1.23) | - |
| Four | 0.95 (0.68-1.34) | - |
| Five and above | 1.05 (0.80-1.38) | - |
| **Media Exposure** |  |  |
| Not Exposed | 1.00 | 1.00 |
| Exposed | 0.82 (0.68-0.99) \*\* | 1.08 (0.88-1.33) |
| **Place of Residence** |  |  |
| Urban | 1.00 | 1.00 |
| Rural | 1.42 (1.13-1.79) \*\*\* | 0.94 (0.71-1.24) |
| **Women Autonomy** |  |  |
| None | 1.00 | 1.00 |
| Partial Autonomy | 0.63 (0.50-0.79) \*\*\* | 0.69 (0.54-0.88) \*\*\* |
| Full Autonomy | 1.38 (0.90-2.11) | 1.81 (1.12-2.92) \*\* |
| **No Autonomy** |  |  |
| No | 1.00 | - |
| Yes | 0.65 (0.42-0.99) \*\* | - |

***\*\*\* P< 0.01; \*\* P<0.05; \* P<0.10; OR: Odds ratio; CI: Confidence interval***

**Predictors of no healthcare-seeking behaviour for under-5 children illness in the South East, Nigeria**

In the context of healthcare-seeking behavior in South East Nigeria, several factors were examined for their influence and this is presented table 14 below. Age showed significance, with individuals aged 25-34 having an odds ratio (OR) of 0.55 (95% C.I. 0.32-0.93) for no healthcare-seeking behavior in both unadjusted and adjusted models. The age group of 35-49 displayed lower odds, although this effect wasn't statistically significant. Partner's education demonstrated a robust association. In both models, individuals with partners having primary, secondary, or tertiary education had substantially lower odds of no healthcare-seeking behavior. Marital status revealed an interesting trend. Co-habiting individuals showed higher odds in the unadjusted model (OR 2.11, 95% C.I. 1.04-4.30), though this effect lessened after adjustment. Wealth status played a significant role. In the unadjusted model, the rich category had an OR of 0.46 (95% C.I. 0.28-0.74), which remained significant in the adjusted model (OR 0.50, 95% C.I. 0.28-0.88). Middle-income individuals also displayed lower odds in the unadjusted model, though this effect attenuated somewhat after adjustment. Child loss experience was notable. Those who had lost three or more children had increased odds of no healthcare-seeking behavior, with an OR of 3.14 (95% C.I. 0.83-11.87) in the unadjusted model and 2.92 (95% C.I. 0.71-12.00) in the adjusted model. Women's autonomy had a significant impact. Both partial and full autonomy were associated with significantly reduced odds of no healthcare-seeking behavior in both models. Media exposure and place of residence did not show significant associations in the unadjusted and adjusted model.

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| **Table 14: Multivariate Logistic Regression of Factors Influencing No Healthcare-Seeking Behaviour in South East, Nigeria** | | |
| **Background Characteristics** | **Unadjusted Odds Ratio**  **uOR (95% C.I)** | **Adjusted Odds Ratio**  **aOR (95% C.I)** |
| **Age** |  |  |
| 15-24 | 1.00 | 1.00 |
| 25-34 | 0.55 (0.32-0.93) \*\* | 0.55 (0.31-0.97) \*\* |
| 35-49 | 0.65 (0.37-1.16) | 0.67 (0.35-1.25) |
| **Education** |  |  |
| None | 1.00 | - |
| Primary | 0.57 (0.17-1.87) | - |
| Secondary | 0.69 (0.22-2.17) | - |
| Tertiary | 0.62 (0.18-2.20) | - |
| **Partner’s Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.23 (0.07-0.70) \*\*\* | 0.21 (0.07-0.69) \*\*\* |
| Secondary | 0.19 (0.06-0.56) \*\*\* | 0.20 (0.06-0.64) \*\*\* |
| Tertiary | 0.18 (0.05-0.63) \*\*\* | 0.22 (0.06-0.81) \*\* |
| **Marital Status** |  |  |
| Married | 1.00 | 1.00 |
| Co-habiting | 2.11 (1.04-4.30) \*\* | 1.75 (0.82-3.70) |
| **Occupation Status** |  |  |
| Unemployed | 1.00 | - |
| Employed | 0.75 (0.44-1.27) | - |
| **Religion** |  |  |
| Christianity | 1.00 | - |
| Islam | 1.00 | - |
| Other | 0.60 (0.07-5.39) | - |
| **Wealth Status** |  |  |
| Poor | 1.00 | 1.00 |
| Middle | 0.61 (0.36-1.02) \* | 0.62 (0.35-1.08) \* |
| Rich | 0.46 (0.28-0.74) \*\*\* | 0.50 (0.28-0.88) \*\* |
| **Ethnicity** |  |  |
| Yoruba | 1.00 | - |
| Igbo | 1.00 | - |
| Hausa | 0.47 (0.10-2.19) | - |
| **Number of under-5 Children** |  |  |
| One | 1.00 | - |
| Two | 0.88 (0.58-1.35) | - |
| Three | 1.05 (0.63-1.76) | - |
| Four and above | 0.66 (0.27-1.62) | - |
| **Number of Children Lost** |  |  |
| None | 1.00 | 1.00 |
| One | 1.08 (0.64-1.81) | 1.09 (0.62-1.89) |
| Two | 1.25 (0.49-3.18) | 0.98 (0.36-2.65) |
| Three and above | 3.14 (0.83-11.87) \* | 2.92 (0.71-12.00) |
| **Number of Living Children** |  |  |
| One | 1.00 | - |
| Two | 0.63 (0.33-1.18) | - |
| Three | 0.62 (0.33-1.15) | - |
| Four | 0.84 (0.45-1.58) | - |
| Five and above | 0.79 (0.45-1.39) | - |
| **Media Exposure** |  |  |
| Not Exposed | 1.00 | - |
| Exposed | 0.68 (0.39-1.16) | - |
| **Place of Residence** |  |  |
| Urban | 1.00 | - |
| Rural | 0.84 (0.56-1.24) | - |
| **Women Autonomy** |  |  |
| None | 1.00 | 1.00 |
| Partial Autonomy | 0.39 (0.22-0.69) \*\*\* | 0.39 (0.22-0.70) \*\*\* |
| Full Autonomy | 0.52 (0.31-0.85) \*\*\* | 0.50 (0.30-0.85) \*\* |
| **No Autonomy** |  |  |
| No | 1.00 | - |
| Yes | 1.07 (0.74-1.55) | - |

***\*\*\* P< 0.01; \*\* P<0.05; \* P<0.10; OR: Odds ratio; CI: Confidence interval***

**Predictors of no healthcare-seeking behaviour for under-5 children illness in the South South, Nigeria**

The factors influencing no healthcare-seeking behavior in South South Nigeria was presented in table 15 below. Age does not show a significant association with no healthcare seeking for child illness in the adjusted model. Educational attainment appears to play a role. In particular, individuals with tertiary education have significantly lower odds of not seeking healthcare, with an odds ratio (OR) of 0.30 (95% C.I. 0.06-1.47) in the adjusted model. Secondary education also demonstrates a reduced likelihood of no healthcare seeking, although the effect is not statistically significant in the adjusted model. Partner's education follows a similar pattern. In the adjusted model, individuals with partners having tertiary education have an OR of 0.63 (95% C.I. 0.16-2.41), indicating reduced odds of not seeking healthcare. Employment status is associated with healthcare-seeking behavior. Employed individuals have lower odds of no healthcare-seeking behavior, with an OR of 0.62 (95% C.I. 0.38-1.03) in the adjusted model. Religion seems to have an influence. Individuals with other religions, not Christianity or Islam, have significantly higher odds of no healthcare-seeking behavior, with an OR of 13.85 (95% C.I. 1.26-152.56) in the adjusted model. Wealth status demonstrates some significance. The rich category has an OR of 0.77 (95% C.I. 0.39-1.49) in the adjusted model, indicating lower odds of no healthcare-seeking behavior. The number of living children has an effect. In the adjusted model, individuals with two, three, or more living children exhibit significantly higher odds of no healthcare-seeking behavior. Media exposure shows some influence. In the adjusted model, being exposed to media is associated with lower odds of not seeking healthcare, with an OR of 0.78 (95% C.I. 0.41-1.49). Place of residence has significance. Those residing in rural areas have higher odds of no healthcare-seeking behavior, with an OR of 1.73 (95% C.I. 1-2.97) compared to the urban areas in the adjusted model. Women's autonomy and the number of under-5 children do not appear to be significant factors in no healthcare-seeking behavior in the adjusted model.

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| **Table 15: Multivariate Logistic Regression of Factors Influencing No Healthcare-Seeking Behaviour in South South, Nigeria** | | |
| **Background Characteristics** | **Unadjusted Odds Ratio**  **uOR (95% C.I)** | **Adjusted Odds Ratio**  **aOR (95% C.I)** |
| **Age** |  |  |
| 15-24 | 1.00 | - |
| 25-34 | 1.08 (0.61-1.93) | - |
| 35-49 | 1.04 (0.55-1.99) | - |
| **Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.52 (0.19-1.49) | 0.61 (0.18-2.06) |
| Secondary | 0.43 (0.16-1.14) \* | 0.57 (0.17-1.93) |
| Tertiary | 0.17 (0.05-0.60) \*\*\* | 0.30 (0.06-1.47) |
| **Partner’s Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.75 (0.25-2.30) | 0.84 (0.25-2.86) |
| Secondary | 0.56 (0.20-1.53) | 0.86 (0.27-2.73) |
| Tertiary | 0.31 (0.10-0.98) \*\* | 0.63 (0.16-2.41) |
| **Marital Status** |  |  |
| Married | 1.00 | - |
| Co-habiting | 1.43 (0.78-2.60) | - |
| **Occupation Status** |  |  |
| Unemployed | 1.00 | 1.00 |
| Employed | 0.60 (0.37-0.95) \*\* | 0.62 (0.38-1.03) \* |
| **Religion** |  |  |
| Christianity | 1.00 | 1.00 |
| Islam | 1.93 (0.65-5.78) | 2.04 (0.60-6.93) |
| Other | 11.59 (1.19-112.6) \*\* | 13.85 (1.26-152.56) \*\* |
| **Wealth Status** |  |  |
| Poor | 1.00 | 1.00 |
| Middle | 1.18 (0.64-2.17) | 1.18 (0.62-2.24) |
| Rich | 0.56 (0.32-1.00) \* | 0.77 (0.39-1.49) |
| **Ethnicity** |  |  |
| Yoruba | 1.00 | - |
| Igbo | 0.57 (0.09-3.44) | - |
| Other | 0.54 (0.10-2.96) | - |
| **Number of under-5 Children** |  |  |
| One | 1.00 | - |
| Two | 1.39 (0.88-2.18) | - |
| Three | 1.31 (0.63-2.70) | - |
| Four and above | 0.67 (0.15-3.08) | - |
| **Number of Children Lost** |  |  |
| None | 1.00 | - |
| One | 0.80 (0.43-1.50) | - |
| Two | 0.75 (0.25-2.25) | - |
| Three and above | 1.42 (0.27-7.44) | - |
| **Number of Living Children** |  |  |
| One | 1.00 | 1.00 |
| Two | 1.85 (0.92-3.72) \* | 1.92 (0.93-3.99) \* |
| Three | 2.16 (1.06-4.40) \*\* | 2.24 (1.04-4.80) \*\* |
| Four | 1.21 (0.52-2.81) | 1.06 (0.43-2.61) |
| Five and above | 1.60 (0.79-3.27) | 1.14 (0.51-2.56) |
| **Media Exposure** |  |  |
| Not Exposed | 1.00 | 1.00 |
| Exposed | 0.58 (0.33-1.02) \* | 0.78 (0.41-1.49) |
| **Place of Residence** |  |  |
| Urban | 1.00 | 1.00 |
| Rural | 2.26 (1.39-3.67) \*\*\* | 1.73 (1-2.97) \*\* |
| **Women Autonomy** |  |  |
| None | 1.00 | - |
| Partial Autonomy | 0.92 (0.52-1.64) | - |
| Full Autonomy | 1.03 (0.59-1.79) | - |
| **No Autonomy** |  |  |
| No | 1.00 | - |
| Yes | 0.92 (0.61-1.41) | - |

***\*\*\* P< 0.01; \*\* P<0.05; \* P<0.10; OR: Odds ratio; CI: Confidence interval***

**Predictors of no healthcare-seeking behaviour for under-5 children illness in the South West, Nigeria**

When examining the factors influencing no healthcare-seeking behavior in South West Nigeria, several observations arise as presented in table 16 below. Age was not significantly associated with no healthcare-seeking behavior in the unadjusted and adjusted model. Educational attainment shows some influence. Individuals with tertiary education exhibit a reduced likelihood of not seeking healthcare, with an odds ratio (OR) of 0.44 (95% C.I. 0.17-1.14) in the unadjusted model. However, the effect is not statistically significant in the adjusted model. Partner's education follows a similar pattern. In the adjusted model, individuals with partners having tertiary education have an OR of 0.55 (95% C.I. 0.20-1.51), indicating a trend towards reduced odds of no healthcare-seeking behavior but this was not statistically significant. Wealth status demonstrates significance for the rich wealth category in the unadjusted model. The rich category has an OR of 0.61 (95% C.I. 0.31-1.19) in the adjusted model, suggesting lower odds of no healthcare-seeking behavior. However, the effect is not statistically significant. Media exposure also shows an effect independently. In the adjusted model, being exposed to media is associated with reduced odds of no healthcare-seeking behavior, with an OR of 0.61 (95% C.I. 0.28-1.32) but this was not statistically significant. The number of children lost does not significantly influence no healthcare-seeking behavior in the adjusted model. Place of residence does not seem to have a significant impact in the adjusted model. Women's autonomy and the number of under-5 children also do not appear to be significant factors in no healthcare-seeking behavior in the adjusted model. Marital status, occupation status, religion, ethnicity, and the number of living children does not show significant associations with no healthcare-seeking behavior in the adjusted model.

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| **Table 16: Multivariate Logistic Regression of Factors Influencing No Healthcare-Seeking Behaviour in South West, Nigeria** | | |
| **Background Characteristics** | **Unadjusted Odds Ratio**  **uOR (95% C.I)** | **Adjusted Odds Ratio**  **aOR (95% C.I)** |
| **Age** |  |  |
| 15-24 | 1.00 | - |
| 25-34 | 1.38 (0.71-2.68) | - |
| 35-49 | 1.48 (0.73-3.01) | - |
| **Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.63 (0.25-1.56) | 0.66 (0.24-1.82) |
| Secondary | 0.77 (0.35-1.70) | 1.11 (0.42-2.89) |
| Tertiary | 0.44 (0.17-1.14) \* | 1.02 (0.31-3.36) |
| **Partner’s Education** |  |  |
| None | 1.00 | 1.00 |
| Primary | 0.95 (0.37-2.45) | 1.04 (0.37-2.94) |
| Secondary | 1.05 (0.49-2.21) | 1.24 (0.52-2.96) |
| Tertiary | 0.45 (0.20-1.04) \* | 0.55 (0.20-1.51) |
| **Marital Status** |  |  |
| Married | 1.00 | - |
| Co-habiting | 1.55 (0.85-2.82) | - |
| **Occupation Status** |  |  |
| Unemployed | 1.00 | - |
| Employed | 1.02 (0.53-1.97) | - |
| **Religion** |  |  |
| Christianity | 1.00 | - |
| Islam | 0.71 (0.44-1.15) | - |
| **Wealth Status** |  |  |
| Poor | 1.00 | 1.00 |
| Middle | 0.73 (0.35-1.49) | 0.83 (0.39-1.75) |
| Rich | 0.53 (0.30-0.93) \*\* | 0.61 (0.31-1.19) |
| **Ethnicity** |  |  |
| Yoruba | 1.00 | - |
| Igbo | 0.76 (0.31-1.90) | - |
| Hausa | 0.74 (0.19-2.85) | - |
| Other | 0.96 (0.52-1.76) | - |
| **Number of under-5 Children** |  |  |
| One | 1.00 | - |
| Two | 1.09 (0.67-1.75) | - |
| Three | 1.05 (0.45-2.46) | - |
| Four and above | 0.84 (0.16-4.44) | - |
| **Number of Children Lost** |  |  |
| None | 1.00 | - |
| One | 1.26 (0.68-2.34) | - |
| Two | 1.71 (0.62-4.73) | - |
| Three and above | 4.39 (0.39-49.02) | - |
| **Number of Living Children** |  |  |
| One | 1.00 | - |
| Two | 0.81 (0.40-1.64) | - |
| Three | 1.30 (0.68-2.49) | - |
| Four | 0.95 (0.42-2.14) | - |
| Five and above | 1.55 (0.77-3.12) | - |
| **Media Exposure** |  |  |
| Not Exposed | 1.00 | 1.00 |
| Exposed | 0.52 (0.25-1.05) \* | 0.61 (0.28-1.32) |
| **Place of Residence** |  |  |
| Urban | 1.00 | - |
| Rural | 1.33 (0.83-2.14) | - |
| **Women Autonomy** |  |  |
| None | 1.00 | - |
| Partial Autonomy | 0.74 (0.42-1.30) | - |
| Full Autonomy | 0.87 (0.49-1.55) |  |
| **No Autonomy** |  |  |
| No | 1.00 | - |
| Yes | 0.96 (0.60-1.52) | - |

***\*\*\* P< 0.01; \*\* P<0.05; \* P<0.10; OR: Odds ratio; CI: Confidence interval***