

Chi-Square Test Results for Awareness of Antimicrobial Resistance (AMR) by Demographic

Variable	X ²	df	N	p-value
Gender	0.077	1	646	0.781
Age Group	2.072	2	646	0.355
Geopolitical Zone	5.822	5	646	0.324

No statistically significant association were found at the $p < .05$ level.

The results indicated no statistically significant association between AMR awareness and gender, $X^2(1, N = 646) = 0.077$, $p = .781$; age group, $X^2(2, N = 646) = 2.072$, $p = .355$; or geopolitical zone, $X^2(5, N = 646) = 5.822$, $p = .324$. These findings suggest that awareness of AMR is relatively consistent across various socio-demographic categories in the sampled population.

Predictor	B	SE	Wald X ²	p-value	Exp(B)
Gender					
Male vs Female	-0.072	0.233	0.095	0.758	0.931
					-
Age Group			1.790	0.409	
18 – 24 vs 31+	1.371	1.039	1.742	0.187	3.939
25-30 vs 31+	-0.026	0.265	0.010	0.922	0.974
Geopolitical Zone			5.898	0.316	-
North West vs South East	-0.168	0.376	0.200	0.655	0.845
North East vs South East	0.408	0.423	0.932	0.334	1.504
North Central vs South East	0.296	0.334	0.790	0.374	1.345
South West vs South East	-0.306	0.343	0.796	0.372	0.736
South South vs South East	-0.343	0.380	0.815	0.367	0.710
Constant	1.725	0.283	37.113	<.001	5.614

Table 2 presents the results of a binary logistic regression predicting awareness of antimicrobial resistance (AMR) based on gender, age group, and geopolitical zone. None of the predictors were statistically significant at the $p > 0.05$ level. Males were slightly less likely to report awareness than females ($p = 0.758$), and although respondent aged 18 – 24 had a higher odd of awareness ($\text{Exp}(B) = 3.939$), this was not significantly ($p = 0.187$). Differences across geopolitical zones were also not statistically significant.

Table 3: Spearman's Correlation Between Potential Factors and the Use of Antibiotics in Malaria

Variables	q(Spearman)	p-value	Strength & Direction
Do you believe antibiotics are always needed when you are sick?	0.329	0.001	Moderate positive (Statistically significant)
Do you think it's okay to stop taking antibiotics once you feel better, even if you haven't finished the course?	0.087	0.026	Weak positive (Statistically significant)
Do you complete the full course of antibiotics prescribe to you?	0.026	0.509	Very positive (Statistically significant)
Are you aware of antimicrobial resistance and its consequences?	-0.041	0.299	Very weak negative (not significant)
Do you think the misuse of antibiotics can contribute to AMR?	-0.008	0.844	Negligible negative (not significant)

This table presents the Spearman correlation results between selected behavioral and knowledge-based variables and the use of antibiotics in malaria therapy. A moderate, statistically significant positive correlation was found with the belief that antibiotics are always needed when one is sick ($q = 0.329$, $p < 0.001$). A weak but significant positive relationship was also observed for the belief that it's okay to stop antibiotics once feeling better ($q = 0.087$, $p = 0.026$). Other variables, such as completing the full course of antibiotics, awareness of AMR, and belief that misuse contribute to AMR, showed no statistically significant association