**Summary Report:**

A total of 704 parents were surveyed to assess their knowledge, attitudes, and practices (KAP) regarding rational antibiotic use in children. Descriptive studies from the analysis showed that 78% were female, with the majority aged 25-35 years (54%). In contrast, only 22% were male. Regarding education, most of the participants had secondary education (54%), followed by postgraduate (25%), undergraduate (16%), and primary (5%) (Table 01).

The analysis indicated that the primary sources of information about antibiotics were provided by doctors or prescribers, accounting for about 86%, followed by dispensers (pharmacists), the internet, and social media at 36%, 30%, and 23%, respectively (Table 02). Descriptive studies revealed that 17% of parents had good knowledge, 45% moderate knowledge, and 38% poor knowledge. Concerning attitudes, 30% exhibited a positive stance towards antibiotic use, whilst only 36% demonstrated good antibiotic practices, with the remaining 64% misusing antibiotics (Table 03).

Ordinal logistic regression was conducted to determine significant associations between knowledge level and demographic factors. Parents aged above 25 years had significantly lower odds of possessing good knowledge, whereas lower education levels and being unemployed were associated with higher odds of poor knowledge (Table 04). Similarly, secondary education was linked to lower odds of a positive attitude; however, other factors, such as age, sex, family type, income, etc., did not demonstrate any significant association (Table 05).

To measure the level of practice (good vs. misuse), binary logistic regression analysis was performed in R, revealing that the parents from low- and middle-income households were significantly more likely to misuse antibiotics compared to those from high-income households. Additionally, parents with positive and uncertain attitudes had significantly lower odds of antibiotic misuse. Other factors such as gender, education, employment, family type, and knowledge did not show any significance (Table 06).