Summary Report on Findings: Factors Contributing to Antibiotic Misuse Among Parents of School-going Children in Dhaka City, Bangladesh

This study aimed to examine the factors contributing to the misuse of antibiotics among parents of school-going children in Dhaka City, Bangladesh. The focus was on parents' knowledge, attitudes, and practices (KAP) regarding antibiotic use, with the goal of understanding the socio-demographic factors influencing the appropriate or inappropriate use of antibiotics.

Key Findings:

1. **Knowledge Score**:
    - Parents with a good knowledge score (N=1531) had a median score of 11 (IQR: 10, 12), indicating a relatively high level of awareness.
    - Parents with a moderate knowledge score (N=2451) had a median score of 8 (IQR: 6, 9), and those with poor knowledge (N=3061) had a median score of 3 (IQR: 1, 4).
    - A significant difference in knowledge scores across these groups was found (**$p < 0.001$**).
2. **Attitude Score**:
    - There was no significant difference in attitude scores across the groups (Good, Moderate, Poor), with medians ranging between 5 (IQR: 2, 7) and 5 (IQR: 2, 8). The p-value for attitude scores was **0.2**, indicating no strong association with appropriate antibiotic use.
3. **Practice Score**:
    - Practice scores showed a significant difference across the groups (**$p = 0.028$**). The distribution of scores (from 0 to 6) revealed that more parents with poor knowledge or attitudes had inappropriate practices. For example, 74% of parents in the "Poor" group exhibited inappropriate practices.
    - Parents in the "Good" knowledge group had higher percentages of appropriate practices (39%) compared to those in the "Moderate" (28%) and "Poor" (26%) groups.

4. **Attitude Level**:
    - The distribution of attitudes among the groups showed that a majority of parents in all groups had a negative attitude toward antibiotic use (49% in "Good," 50% in "Moderate," and 41% in "Poor" groups).
    - Positive attitudes were observed in 25% of the "Good," 24% of the "Moderate," and 28% of the "Poor" groups, indicating a minimal difference in the overall attitude level across the three groups.
5. **Practice Level**:
    - A significant difference was found in the practice levels (**p = 0.015**). The "Good" knowledge group had the highest proportion (39%) of parents practicing appropriate antibiotic use, while the "Moderate" and "Poor" knowledge groups had lower percentages (28% and 26%, respectively).
    - The majority of parents in the "Moderate" (72%) and "Poor" (74%) knowledge groups demonstrated inappropriate practices.

In short :

- **Knowledge**: Parents' knowledge of antibiotics is strongly associated with the appropriate use of antibiotics. Higher knowledge scores correlate with more appropriate antibiotic practices.
- **Attitudes**: Attitudes toward antibiotic use showed no significant correlation with appropriate use, indicating that other factors might be influencing antibiotic misuse.
- **Practices**: Misuse of antibiotics is more prevalent in parents with poor knowledge and attitudes. The practice of purchasing antibiotics without prescriptions and self-medication was common across all groups, exacerbating the misuse issue.