

## Self-Medication of Antibiotics and Analgesics by Parents for Dental Problems of Children

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### Background

Oral hygiene in young children is a matter of concern among both, parents and healthcare practitioners. The prevailing statistics are alarming, by the age of three, every third child has dental caries; this proportion doubles in children of five years of age and reaches 50% [1]. This can lead to pain, inflammation, or infection, if not treated in time. However, parents often resort to self-medication rather than visiting doctors [2]. Owing to the adverse consequences of drug misuse, there exists a need to investigate the frequency of self-medication practices among parents for dental infection in the United Arab Emirates (UAE). Assessing the prevalence of self-medication will help in developing an appropriate health promotion strategy to spread the required awareness regarding antibiotic misuse [3].

### Materials & Methods

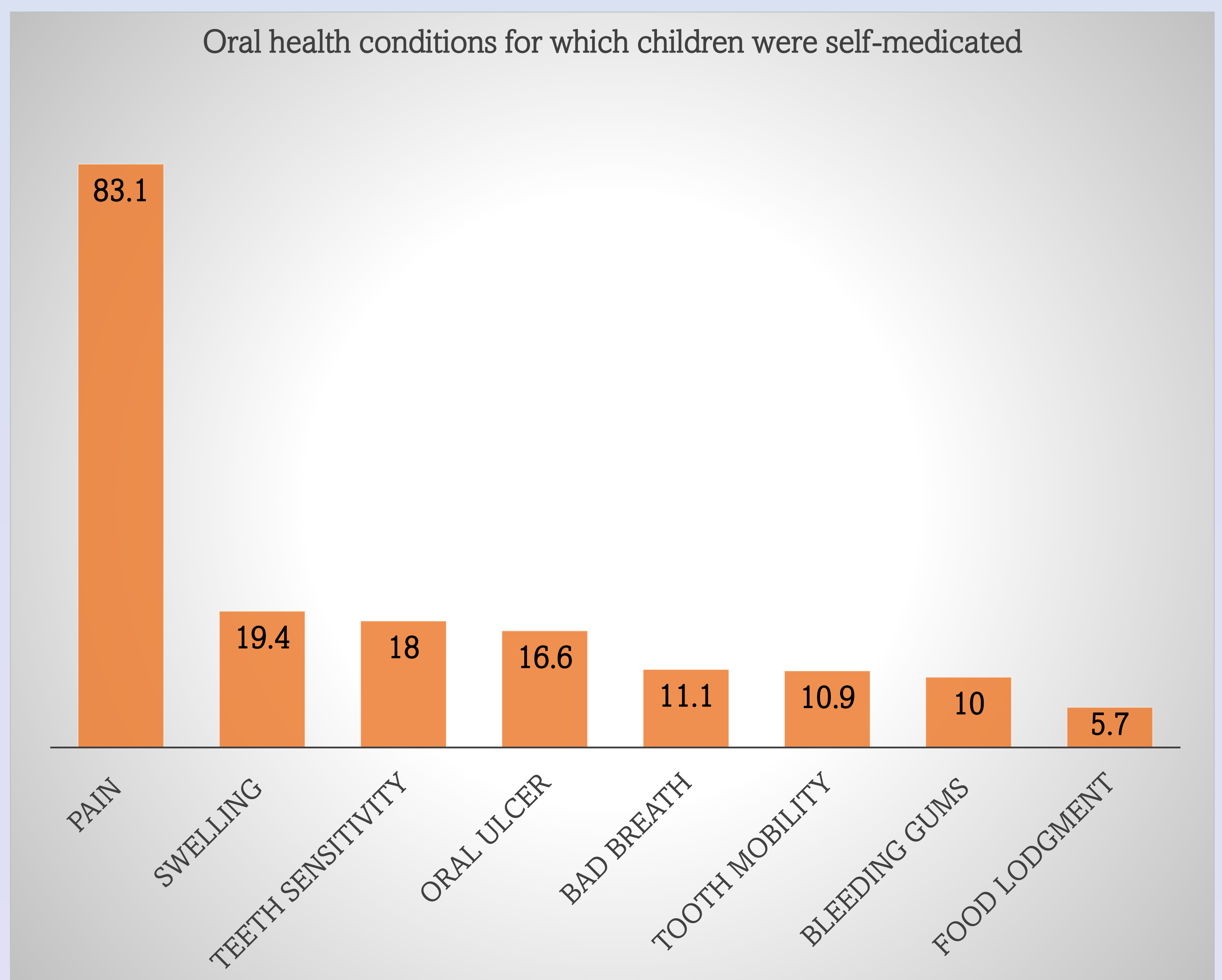
**Method:** Cross-sectional survey- Self administered  
**Sample Size:** 450 participants. (single proportion formula optimal sample size required was 377; adjusted for 90% response rate)  
**Sample population:** People in malls across the UAE, parents waiting in the pediatric outpatient hospitals in Ajman, and waiting areas at the University Dental Clinics in Ajman University.  
**Inclusion Criteria** Resident of the Northern Emirates who is a parent of a child aged 3-18 years  
**Exclusion criteria:** Inability to read or write English or Arabic.  
**Data Analysis:** Data entry - Excel 2016  
Analysis - SPSS version 23

### Aims

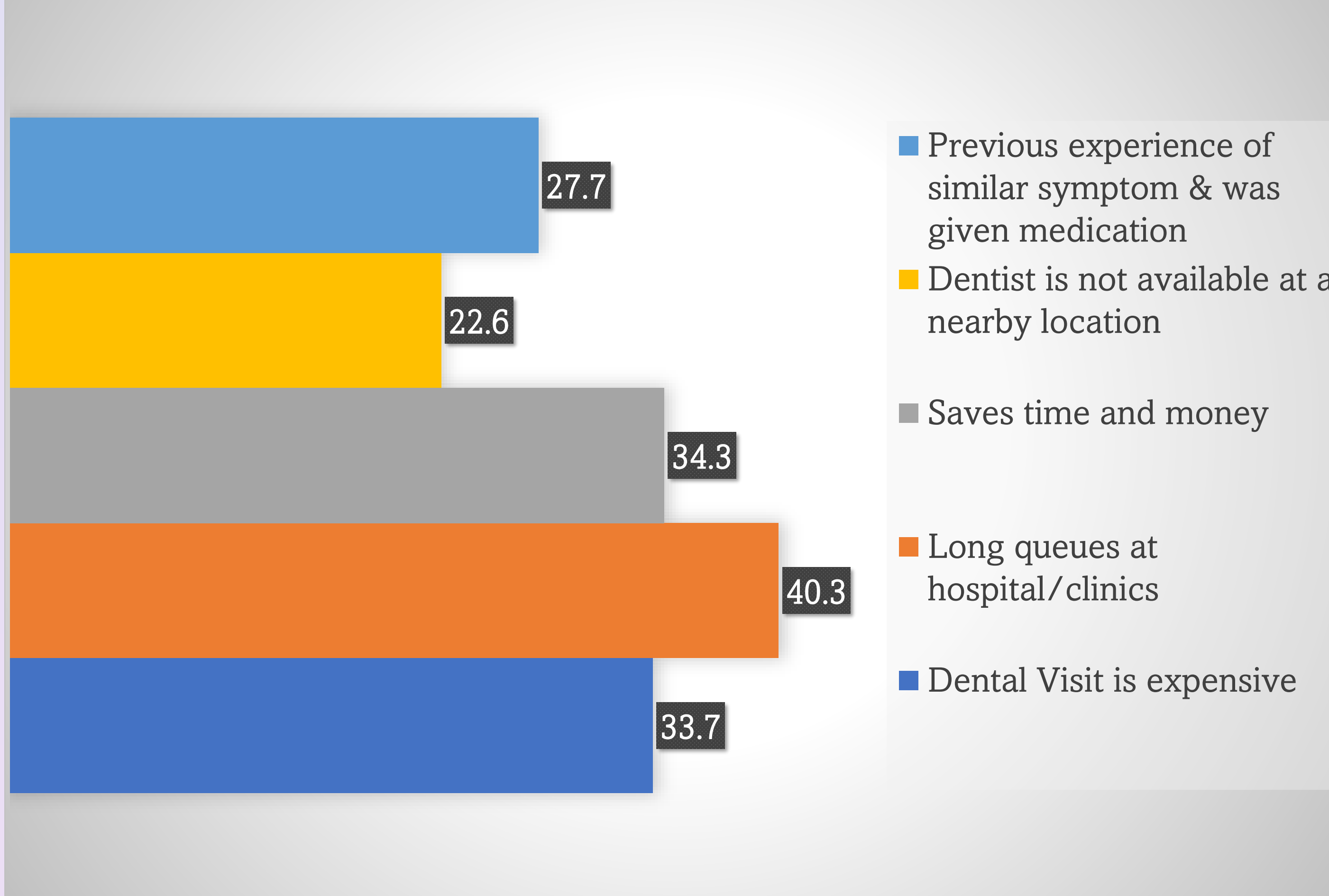
- To assess the reported prevalence of the practice of self-medication for child oral health problems among parents in the UAE
- To identify the reasons for self-medication practices by parents for child oral health problems.

### Results

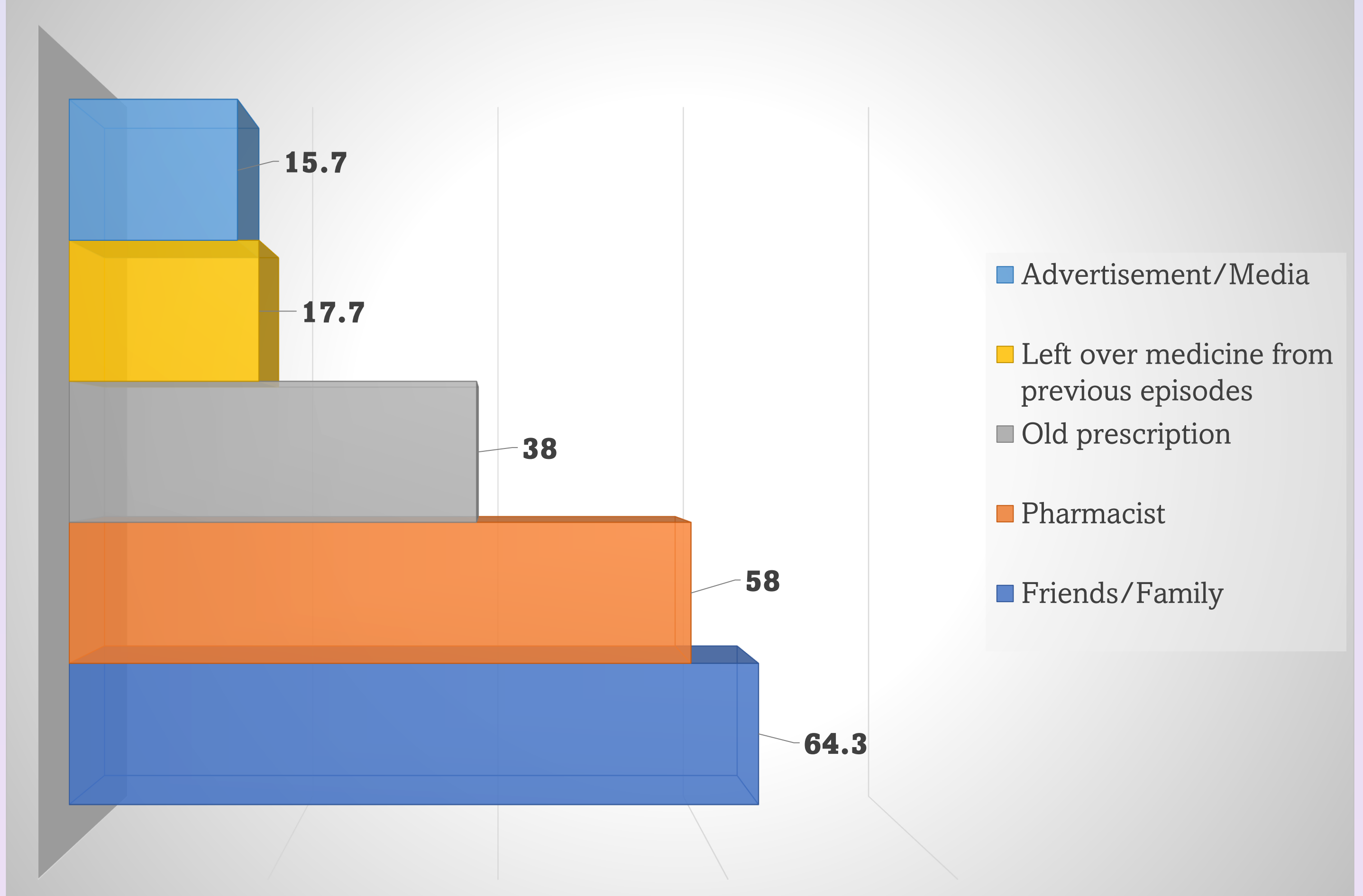
Sample characteristics	Frequency	Percent
Parents who were surveyed and completed the questionnaire	Mother	306 76.5
	Father	94 23.5
Number of children under 19	1	129 32.3
	2	134 33.5
	3 Or More	97 24.4
Educational level	Primary	45 11.3
	Secondary	73 18.3
	Graduate	162 40.5
	Masters	111 27.8
	PhD	9 2.3
Parents' income level	Less Than AED 500	46 11.5
	Between AED 5000 To AED 10000	102 25.5
	Between AED 10000 To AED 15000	77 19.3
	More Than AED 15000	175 43.8
Parents availing health insurance for their families	No	122 30
	Yes	278 70
Parents with dental insurance	No	207 51.1
	Yes	193 48.9
Medication without consultation	No	50 12.5
	Yes	350 87.5



### Reasons for self medication



### Sources of information for self-medication



### Discussion

Antimicrobial resistance has recently emerged as a cause of global health concern and is accentuated by antibiotic misuse and overuse. [4]. A greater proportion of parents (87.5%) indicated that they do not seek a doctor's consultation before dispensing medications for dental problems of their children. This finding is in line with that of Gohar et al., which established that 77.25% of parents treat their children via the practice of self-medication [5]. Thus, these findings demonstrate the role of parents in the self-medication of their children. Based on the analysis of factors that predispose parents to exercise self-medication, the pain was the only dominant factor (83.1%). Other studies also identified pain as the prime factor that compels parents to use self-medication [3,6]. Kamal Raj et al. in their study noted that almost all patients with dental issues, practice self-medication [7]. This study also identified analgesics as the dominant type of medication used for self-medication (59.7%). Comparatively, Nayyar and Tavargeri identified both antibiotics and analgesics as dominant types of drugs taken as self-medication [6]. The leading source of drugs for self-medication is the pharmacist, which is in tandem with what other studies have established [2,3,6,8].

### Conclusion

Most parents affirmed that they do not seek consultation services from doctors before medication use for managing dental problems of their children. These findings imply that a significant proportion of parents employ self-medication for managing the dental problems of their children. The most significant factor that forced parents to seek self-medication was dental pain. Usually, analgesics were dispensed as self-medication on a pharmacist's recommendation, whereas antibiotics, herbal remedies, and ointments were not common choices for self-treatment.

### References

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