

Evaluation of General Public's Knowledge and Perception of Appropriate Antibiotics use in Salem District

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ABSTRACT

Objective: The objective of this study was to evaluate the general population's current knowledge, expectations, and usage of antibiotic in Salem district of Tamil Nadu. **Method:** The survey was developed based on previous researches. The survey was initially developed in English and then translated to Tamil. The survey gathered demographic information and collected data on knowledge, preferences, expectations, and antibiotic usage in population of Salem district. **Results:** Survey has 142 participants in which 92 responded well representing a 65% response rate. 63.9% of respondents believed that they could stop taking antibiotics if their symptoms of infection improved. Around half of the population (43.5%) believed antibiotics are effective for most of the colds and over a half of respondents (55.4) stated that, they prefer to keep antibiotics at home for emergencies. Approximately a one third of respondent (36.1%) would give their antibiotics to a family member if they caught an infection, 14.2% of respondents identified that, and they have bought an antibiotic from community pharmacies at Salem without a prescription. **Conclusion:** The study showed that the population in Salem has a number of misconceptions relating to appropriate antibiotic use, particularly relating to use of antibiotics for treatment of viral infections. As antibiotics are widely used in Salem as well as India, proper education should be given about rational use of antibiotics to the public.

Key words: Rational Use, Antibiotics, Prospective study, Public Knowledge, Appropriate.

INTRODUCTION

Evaluation of the general population's understanding of appropriate antibiotic use has demonstrated gaps in knowledge. Studies completed nationally have demonstrated an alarming number of patients believe that antibiotics can be used in the treatment of viral infections and other self-limited illnesses.

Despite misconceptions, patients often reported a high expectation of receiving antibiotics from their health care providers, several trials have demonstrated a positive correlation between patient expectations and Physicians prescription.

Education to physicians, patients, and the public has been identified as the most

effective to reduce inappropriate antibiotic use.

In order to implement such strategies in Salem, a baseline assessment of knowledge, attitudes and current antibiotic uses by the public is to be evaluated.

STUDY OBJECTIVE

The objective of this study was to evaluate the general population's current knowledge, expectations, and uses of antibiotic in Salem District of Tamil Nadu.

METHODS

Design: Cross-sectional survey

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Survey Development: The survey was developed based on previous researches. The survey was initially developed in English and then translated to Tamil language using a process of back-translation. The survey was reviewed by two pharmacists with expertise in survey development and based on the feedback from the pilot study, the survey was revised.

Survey Content: The survey gathered demographic information and collected data on knowledge, preferences, expectations, and current antibiotic usage of general population. The criteria's evaluated in the survey are described in Table 2 and 3.

Participants: Members of the general population living in Salem, who were above 18 years of age were eligible to be participate in the study.

Data collection: Participants are selected among the hospital visitors, person visiting community pharmacy and patient bystanders in selected hospitals of Salem District.

RESULTS

General

In the Survey 92 out of 142 participants responded to the survey representing 65% response rate.

Baseline characteristics of the 96 respondents were included in this study and are outlined in Table 1.

Knowledge of Appropriate use of Antibiotics

The proportion of participants who correctly respondent to questions about knowledge of appropriate antibiotic use are outlined in Table 2.

- 34.6% of participants indicated that antibiotics were effective for treating infections caused by viruses.

Table 1: Demographics		
CHARACTERISTICS	NUMBER	PERCENTAGE
Gender		
Male	39	42%
Female	53	58%
LEVEL OF EDUCATION		
Primary School	32	35%
High school	38	41%
College/University	18	19%
Post Graduate	4	0.04%

Table 2: Knowledge of appropriate antibiotic use.

Statement	N	(%)
Most cold, cough, and flu illnesses are caused by viruses	76	80.5
Antibiotics are effective for most colds	40	43.5
Antibiotics are effective for treating infections caused by bacteria	62	67.5
Antibiotics are effective in treating infections caused by viruses	32	34.6
Not receiving an antibiotic for cold, cough, and flu symptoms will lengthen the duration of illness	40	43.8
If taken too often, antibiotics are less likely to work in the future	71	77.8
You can stop taking antibiotics if your symptoms of infection improved	58	63.9
Antibiotics can cure all types of infections	54	58.6
Used antibiotics within past 5 years.	88	95.8
Bought antibiotics without prescription from community pharmacy	13	14.2

- 63.9% of participants believed that they could stop taking antibiotics if their symptoms of infection improved.
- Around half of the population (43.5%) believed that antibiotics are effective for most colds and a similar proportion (43.8%) stated that not receiving an antibiotic for cold, cough, and flu symptoms will lengthen the duration of illness.

Antibiotics Preferences and Expectations

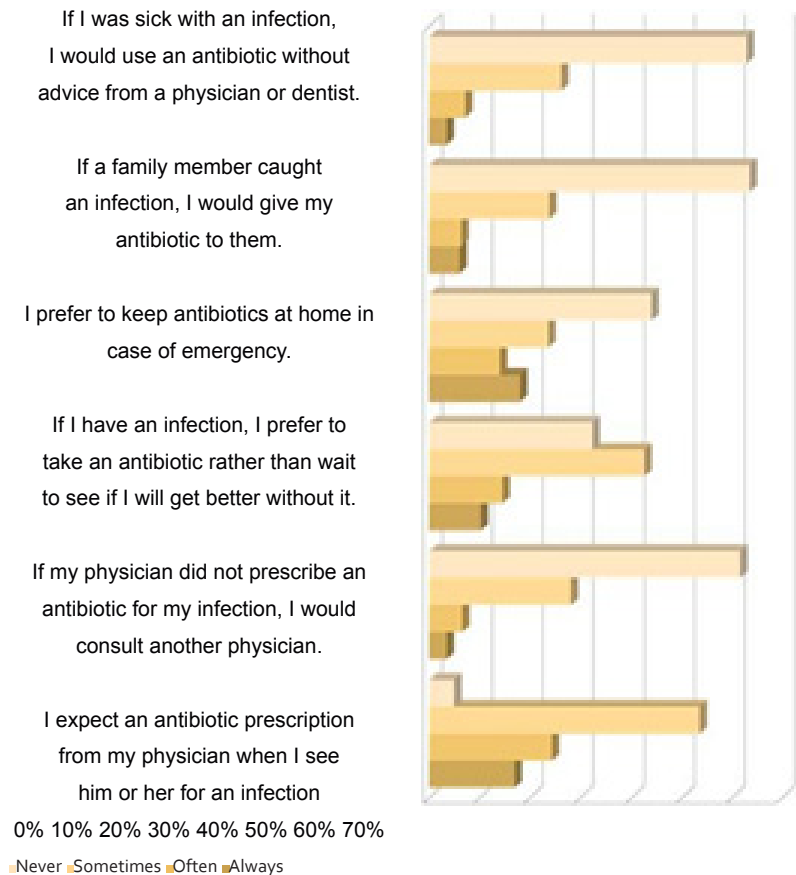
Details on participant preferences and expectations relating to antibiotic use are outlined in Figure 1.

- The majority (61.7%) of respondents said that if their physician did not prescribe an antibiotic for their infection, they would consult another physician to prescribe it for them.
- Over half (55.4%) of respondents stated that they prefer to keep antibiotics at home in case of emergency.
- Approximately a one third of participants (36.1%) would give their antibiotics to a family member if they caught an infection.

Antibiotic Usage

- Almost all respondents (95.8%) used an antibiotic within past 5 years and 47.2% of participants had used an antibiotic within the past 6 months.
- Although antibiotics require a prescription to be dispensed, 14.2% of respondents identified that they have bought an antibiotic from community pharmacies in Salem District without a prescription within the last 5 years.

Figure 1: Antibiotics Preferences and expectations.



CONCLUSION

- This is the first study to assess the general public’s knowledge and perception of appropriate antibiotic use in Salem.
- Results of the study showed that the population in Salem has a number of misconceptions relating to appropriate antibiotic use particularly relating to use of antibiotics for treatment of viral infections.
- As antibiotics are widely used in Salem, educational interventions about appropriate antibiotic use are needed.

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CONFLICT OF INTEREST

None

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