

# Knowledge, Attitude and Practice towards Antibiotics use among the Public in Pakistan

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**Abstract Objective:** The aim and objective of the study was to identify the antibiotics use among the public.

**Methods and Materials:** Hundred pre-designed questionnaires were filled by the people. The questionnaire contained the content to determine the public knowledge, attitude and practice towards antibiotics use. Then the Performa's were evaluated based on percentages and then results were displayed in graphical form.

**Result:** The study found that the public usually consider that about 80% antibiotics needed to cure different diseases and 20% strongly agree with this statement. Majority of people think antibiotics are effective against bacteria. About 30% of people think that antibiotics can kill the bacteria that normally live on the skin. Majority of the people about 65% think that antibiotics work on most coughs and colds, while 5% disagree with this statement. Mostly people consider the antibiotics speed up the recovery from coughs and colds. About 55% of people agree with the statement that antibiotics are effective against viruses. Few people agree and few ones disagree with that Antibiotics can cause imbalance in the body.

**Conclusion:** It was concluded from the study that the people most commonly use antibiotics for coughs and cold. They consider it safe and effective against bacteria. Majority of people complete the course of antibiotics even if they feel better. People use antibiotics at home in case there may be a need them later. The public trust their prescribers whether they prescribe antibiotics or not. They public is satisfied that doctors tell them how to use antibiotics. Only few people know that antibiotics can cause allergies.

**Key words:** Antibiotic use, Antibiotics, Antibiotics treatment, Antibiotics knowledge

## Introduction:

Antibiotics are powerful medicines that fight certain infections and can save lives when used properly. They either stop bacteria from reproducing or destroy them. Before bacteria can multiply and cause symptoms, the immune system can typically kill them. White blood cells (WBCs) attack harmful bacteria and, even if symptoms do occur, the immune system can usually cope and fight off the infection. [1]

Antibiotics are not effective against viruses such as the common cold or influenza; drugs which inhibit viruses are termed antiviral drugs or antivirals rather than antibiotics. [2] Antibiotics may be given as a preventive measure and this is usually limited to at-risk populations such as those with a weakened immune system (particularly in HIV cases to prevent pneumonia), those taking immunosuppressive drugs, cancer patients and those having surgery. Their use in surgical procedures is to help prevent infection of incisions. They have an important role in dental antibiotic prophylaxis where their use may prevent bacteremia and consequent infective endocarditis. Antibiotics are also used to prevent infection in cases of neutropenia particularly cancer-related. [3][4] Antibiotics are used to treat or prevent bacterial infections, and sometimes protozoan infections. (Metronidazole is effective against a number of parasitic diseases). When an infection is suspected of being responsible for an illness but the responsible pathogen has not been identified, an empiric therapy is adopted. This involves the administration of a broad-spectrum antibiotic based on the signs and symptoms presented and is initiated pending laboratory results that can take several days. [5][6]

Antibiotics are screened for any negative effects before their approval for clinical use, and are usually considered safe and well tolerated. However, some antibiotics have been associated with a wide extent of adverse side effects ranging from mild to very severe depending on the type of antibiotic used, the microbes targeted, and the individual patient.[6] Side effects may reflect the pharmacological or toxicological properties of the antibiotic or may involve hypersensitivity or allergic reactions. Adverse effects range from fever and nausea to major allergic reactions, including photo dermatitis and anaphylaxis. Safety profiles of newer drugs are often not as well established as for those that have a long history of use. [7][8]

The trend of antibiotic use becomes common in public. Public have little knowledge about use of antibiotics and most often people used to self-medicate themselves. There are many issues regarding trust level on prescribers and that's why people use antibiotics

themselves. They consider antibiotic 100% safe and effective. Antibiotic resistance is rising to dangerously elevated levels in all parts of the world. New resistance mechanisms are emerging and spreading globally, threatening our ability to treat common infectious diseases. A growing list of infections such as pneumonia, tuberculosis, blood poisoning, and foodborne diseases are becoming harder, and sometimes impossible, to treat as antibiotics become less effective.

Where antibiotics can be bought for human or animal use without a prescription, the emergence and spread of resistance is made worse. Similarly, in countries without standard treatment guidelines, antibiotics are often over-prescribed by health workers and veterinarians and over-used by the public. [9]

#### **Materials and methods:**

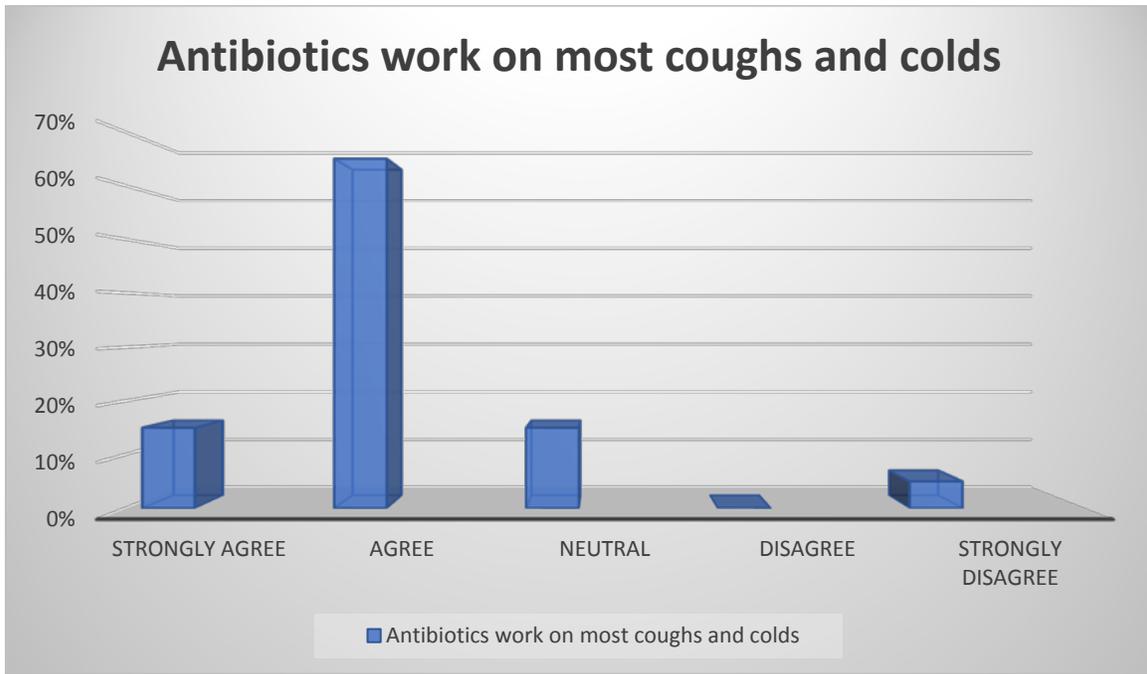
Hundred pre-designed questionnaires were filled by hand in the face to face interaction with people. It was observational and questionnaire based study. Sample size of 100 was selected based on random sampling and questionnaires were filled with detail questioning. Hundred accurately filled questionnaires were then evaluated for study. Questionnaires were designed to observe Knowledge, Attitude and Practice towards antibiotics use. Data was analyzed in percentages and results are shown in various forms of graphs to show the results.

#### **Results:**

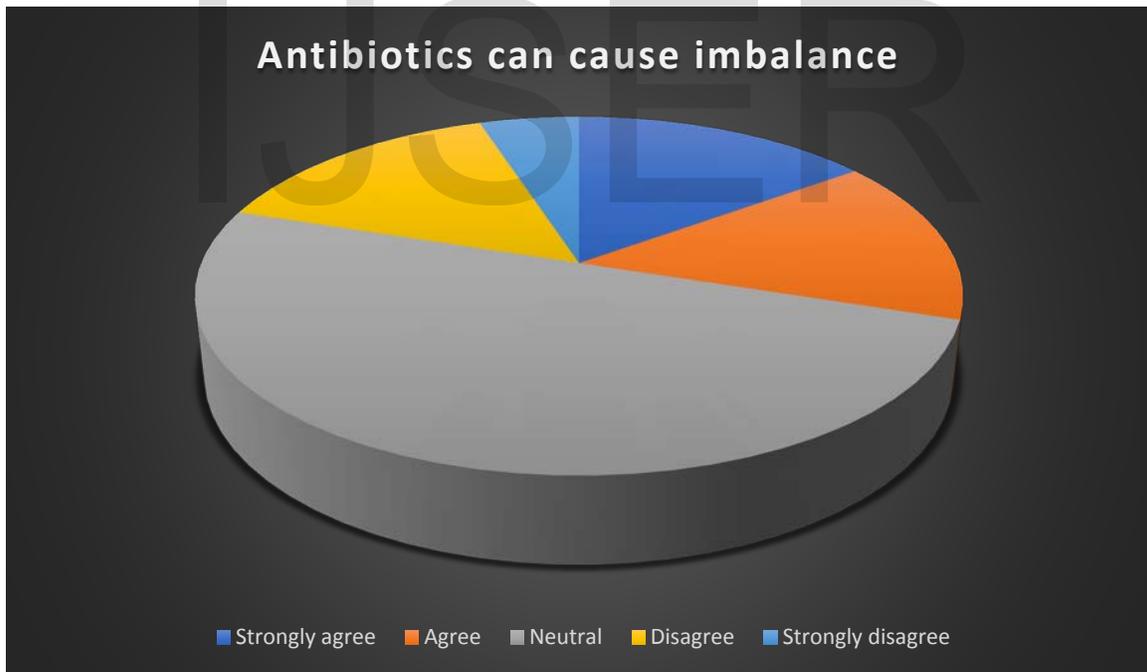
In this study it was observed that the public usually consider that 80% antibiotics needed to cure different diseases and 20% strongly agree with this statement. Majority of people think antibiotics are effective against bacteria. About 30% of people think that antibiotics can kill the bacteria that normally live on the skin. Majority of the people about 65% think that antibiotics work on most coughs and colds, while 5% disagree with this statement. Mostly people consider the antibiotics speed up the recovery from coughs and colds. About 55% of people agree with the statement that antibiotics are effective against viruses. Few people agree and few ones disagree with that Antibiotics can cause imbalance in the body. About 30% people agree that antibiotics should be prescribed after lab tests are done. Majority of public didn't know and give neutral response when they asked that antibiotics use might lead to dangerous allergies.

Next section was attitude towards antibiotics use, in which about 60% of people said they complete the course of antibiotics even if they feel better. About 45% people said they buy medicine with prescription. 40% said they keep their medicines at home in case there may be a need for them later. majority of people use antibiotics in case of sore throat. About 25% people use antibiotics when they feel infected themselves.

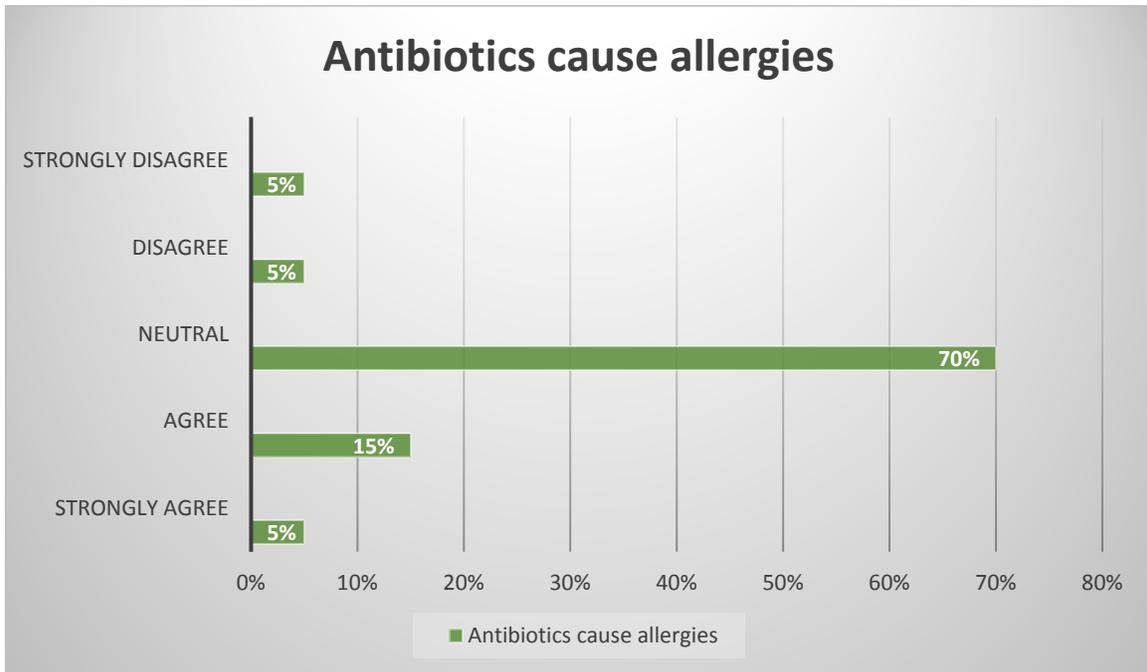
The next and last part of survey was practice of public towards antibiotics use. About 65% of people agree that prescriber often tell them how to use antibiotics. Majority of people said they trust the doctor's decision when doctor prescribes antibiotics or not. 25% of people said doctors often take time to consider carefully whether antibiotics are needed or not.



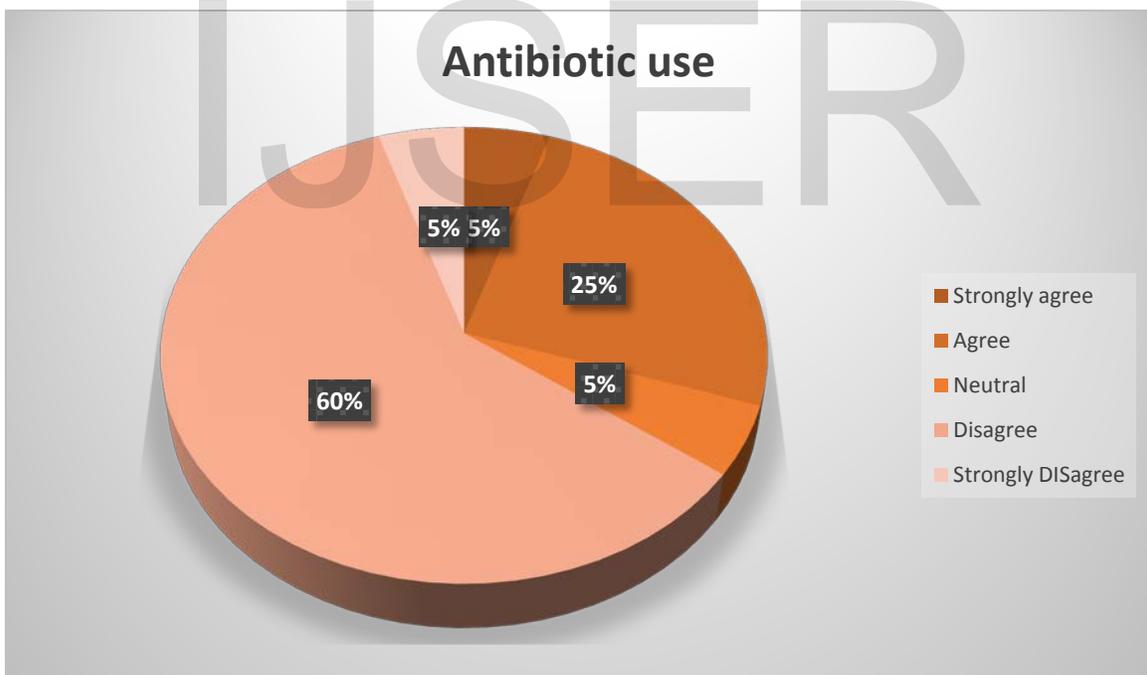
Antibiotics work on most coughs and colds



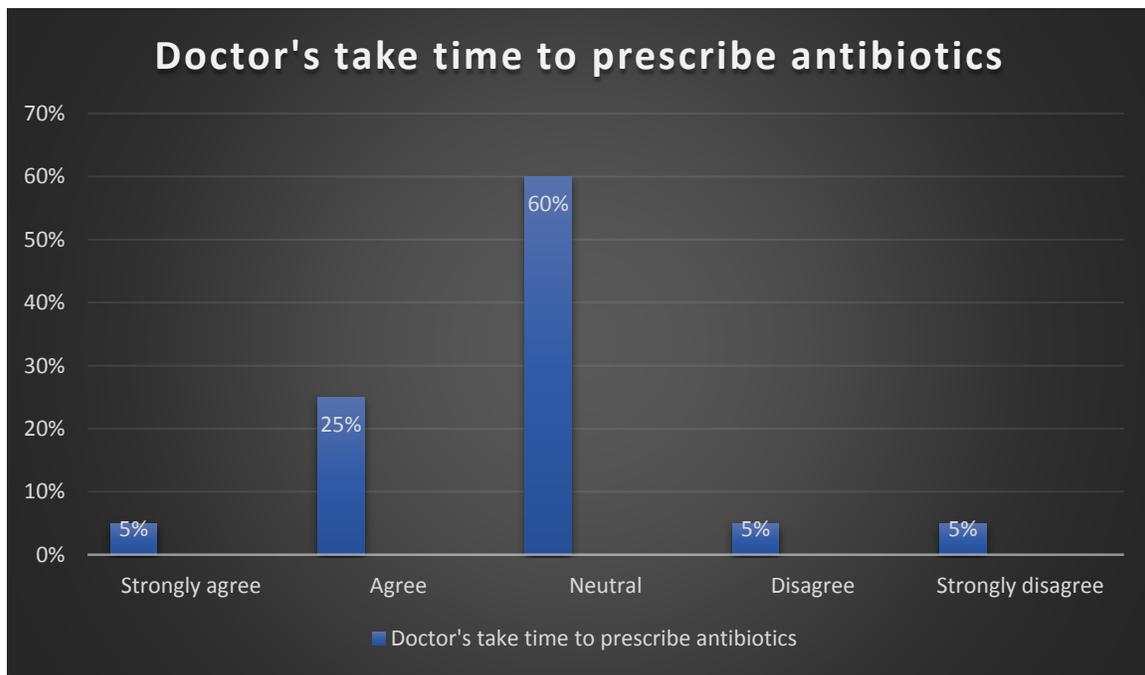
Antibiotics can cause serious imbalance in the body



Antibiotics can cause allergies



Antibiotics use when people feel themselves infected



Doctors often take time to prescribe antibiotics

#### Discussion:

The survey was conducted to check the public knowledge, attitude and practice towards antibiotics use. According to survey, it was observed that majority of people consider antibiotics safe for coughs and colds. They used to self-medicate when they feel infected themselves. People strongly agree with statement that different antibiotics are needed to cure different diseases. Majority of people consider that antibiotics are effective against bacteria. People give neutral response that antibiotics cause imbalance in the body. In another question public give neutral response to some extent that antibiotics can cause allergies. Majority of the people said that they always complete the course of treatment even if they feel better. When they asked that they buy antibiotics from pharmacy without prescription, they disagree with the statement. Majority of public considered that there is no such hazard of antibiotics use. People commonly use antibiotics for sore throat, coughs and colds. Majority of the public said they keep antibiotics at home in case there may be a need for them later. People agree with that prescribers often tell them how to use antibiotics. People said they are agree whether doctor prescribe antibiotics or not. People give neutral response that doctor's often take time to consider carefully whether antibiotics are needed or not.

#### Conclusion:

It was concluded from the study that people most commonly use antibiotics for sore throats, coughs and cold. They consider it safe and effective against bacteria. Majority of people complete the course of antibiotics even if they feel better. People use antibiotics at home in case there may be a need them later. The public trust their prescribers whether they prescribe antibiotics or not. They public is satisfied that doctors tell them how to use antibiotics. Only few people know that antibiotics can cause allergies.

#### Acknowledgment:

I am very grateful to the people for their cooperation and support in collecting this data. I would like to thank my parents who helped me a lot in this research and data collection within the limited time frame.

#### References:

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