

Knowledge, Attitude and Practices of Antibiotic Resistance among Nurses at Services Hospital Lahore

Nirmal Habib¹, Rida Iqbal¹, Muhammad Ahmed Sohail², Johnny Gill³, Amna Bibi⁴, Muhammad Asim Amin²

¹Superior College of Nursing, Superior University, Lahore, Pakistan; ²Lahore School of Nursing, The University of Lahore, Pakistan; ³Shalamar Nursing College, Lahore, Pakistan; ⁴King Edward Medical University, Mayo Hospital, Lahore, Pakistan

ABSTRACT

Antibiotic acts by attacking the pathogenic bacteria on different levels in the human body. These medicines prevent bacterial infection. Overuse or misuse of antibiotics increases the risk of the spread of resistant strains of bacteria. Antibiotic resistance occurs when bacteria change in some way that eliminates the effects of drugs chemicals which are providing to cure or prevent infections.

Aim: This study will help nurses to increase the knowledge, attitude, and practice regarding antibiotics.

Background: Examining the knowledge, attitude, and practice of the nurses regarding antibiotic resistance and usage can help us in commendable proper educational involvements for nurses.

Methods: This study is done on 105 tests of nurses out of 600 nurses by Colvin's strategy and is conducted by exploiting a cross-sectional method that incorporates a distinctive Likert scale rating.

Results: Senior staff nurse and generic nurses have a good knowledge regarding antibiotic resistance as compared to diploma nurses.

Conclusions: Demoralization is considered to be further investigated for better understanding.

Keywords: Valvular heart surgery; Progressive muscle relaxation; Fatigue; Quality of sleep; Antibiotic resistance; Knowledge; Attitude; Practice; Antibiotic

INTRODUCTION

Antibiotic acts by attacking the pathogenic bacteria on different levels in the human body. These medicines prevent from bacterial infection. Overuse or misuse of antibiotics increases the risk of spread of resistant strains of bacteria. Antibiotic resistance occurs when bacteria change in some way that eliminates the effects of drugs chemicals which are providing to cure or prevent infections. Antibiotics are the most extensively used medication in clinical practices, this differentiate usage of antibiotic resistance is increasing at leaps and bounds and it presents a major challenge to health care facilities.

Global Incidence

Antimicrobial has become a global public health concern. The WHO estimated that this public health concern lead to an increase of mortality rate. A potential post antibiotic era threatens current and future medical advances the current worldwide increase in resistance bacteria and, at the same time, the downward trend in the development of new antibiotics has serious consequences.

National Incidence

In Pakistan there is avoidable use of antibiotic and due to over use of these drugs bacteria are developing resistance against the drugs. Scientific studies from different hospitals situated in different places of Pakistan have reported that bacteria from different infections now becoming gradually resistant to traditional bacteria.

Problem Statement

There is need to develop strategies to overcome the misuse of antibiotics and reduce the resistance of antibiotic. Misuse of antibiotics is associated to a wrong prescribing behavior amongst physicians. Patient's wrong habits and their insufficient knowledge also stand for another leading cause for antimicrobial resistance.

Significance

It is significant to empowered the community, apply strict policies on usage of antibiotic and bring a change in the behavior of client and it will promote the proper use of antibiotics.

*Corresponding author: Hbbib N, Superior College of Nursing, Superior University, Lahore, Pakistan, E-mail: Nirmalhabib@gmail.com

Received date: December 28, 2020; Accepted date: January 20, 2021; Published date: January 27, 2021

Citation: Habib N, Iqbal R, Sohail MA, Gill J, Bibi A, Amin MA (2021) Knowledge, Attitude and Practices of Antibiotic Resistance among Nurses at Services Hospital Lahore. J Perioper Crit Intensive Care Nurs 7: 164. doi:10.35248/2471-9870.21.7.164

Copyright: © Habib N, et al. (2021). This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

LITERATURE REVIEW

It is identified that student start antibiotics by their self with subsequent reasons such as cold, flu, sore throat, cough, abdominal pain and skin infections. The conclusion to start antibiotics was predisposed by being fulfilled from earlier antibiotics use, test fees, drug store and surrounding advice [1]. The knowledge regarding how to take and how to store the antibiotics insufficient among health care professionals. Results show that neither doctor nor pharmacist gives advice regarding consumption of antibiotics [2]. Antibiotics are used to fight bacterial infections and these are not effective against viral infection. Frequent use of antibiotics will lead to resistance and decrease future effectiveness [3]. There is and highly need for proper rule of antibiotics control polices restricting the availability of drugs to the public. Educational programmers should make health care practitioner aware including pharmacist/chemist and consumers alike. Safe practices need to be repeating [4]. Antibiotic resistance is a major health problem and it requires great attention. Individuals related to medical should have great knowledge about antibiotics. Sufficient knowledge should be given to the doctors of the future and the better healthcare system [5].

Health care professionals do not practice what they know. It is significant to create more attentiveness around this issue throughout their students. Results showed that the students had a fair good knowledge regarding the part of antibiotics their consumptions and the linked adverse reactions [6]. Low compensation and middle wages countries are essential in worldwide response to antimicrobial defiance. Civilian were conscious of antibiotics. But the usage of specialized concepts of antibiotics was diminished by sectional interpretation like ant inflammatory medicine [7].

Nurses are the main source of information in healthcare profession. Nurses have good knowledge about antibiotics defiance but some misconceptions were also present [8]. Antibiotic resistance is a major health problem and it requires great attention. Individuals related to medical should have great knowledge about antibiotics. Sufficient knowledge should be given to the doctors of the future and the better healthcare system [5]. Healthcare-associated infections and antimicrobial resistance are substantial threats to community health and wellbeing. As resistant organisms continue to transpire and grow, and antimicrobial drugs become less effective, infection prevention and control remains a vigorous characteristic of preserving public health, predominantly amongst susceptible and vulnerable population groups such as older people and young children. Since the aggregate convolution of healthcare managements and involvements, patients are becoming progressively vulnerable to healthcare-associated infections and resistant organisms [7]. Adult persons in the community use antibiotics to a great extent. A cross sectional study was showed. Adults had lack of knowledge related to antibiotic resistance. More information should be provided to them [9]. Resistance to antibiotics has converted a foremost wellbeing risk universal, and one of the furthermost vital funding features is the prevalent overdoing of antimicrobials. However, miserable knowledge and awareness among caregivers of children also results in inappropriate demand for antibiotic preparations for their children. However, insufficient time and funding are superficial to be major come across in the application of such stewardship programs in many centers in the USA [10].

Research Tool

Questionnaire used as a research tool for conducting research among study participants.

There were four sections in questionnaire Section 1: demographic data. It included 4 items (age, gender, qualification, experience and marital status) Section 2: Knowledge regarding antibiotic resistance. It included 10 items Section 3: Attitude regarding antibiotic resistance. It included 5 items. Section 4: practice regarding antibiotic resistance. It included include 5 items

Data Collection

Data from study participants was collect from 16 April10 May 2020

Including Criteria

Diploma holder nurses, Post RN Nurses and BSN nurses were included to identify knowledge and awareness among them.

Excluding Criteria

Pregnant nurses and nurses on sick leave were excluded.

Statistical Test

SPSS version 20 used for data analysis. Data analyzed by SPSS version 20. Questionnaire developed by using Likert scale included dichotomous. Data presented on simple writing, and tabular form.

DISCUSSION

This study provides the useful information regarding the knowledge, practice and attitudes among nurses towards antibiotics resistance and usage. Results showed the bulk of the nurses questioned had a good knowledge about the role of antibiotics, their consumption and therefore the related adverse reactions. Most of the sample answered correctly to any or all the things administered. Indeed, around most junior nurses' sample was not aware that use of antimicrobial drugs, antipyretic and anti-inflammatory. These results established by current studies on this subject. A survey performed in Services Hospital Lahore how most the nurses interviewed were aware that inappropriate use of antimicrobials could harm patients and cause antibiotic resistance. Regardless of the fair good level of data, high rates of incorrect behaviors were observed. Hence, it looks as if despite having a sufficient hypothetical background; School of nursing students does not practice what they learn. Indeed, 9% of the sample declared to prevent taking antibiotics when symptoms improve and to use leftover antibiotics without consulting a doctor. A mainstream always consulted a doctor before starting on an antibiotic and most of always completed the total course of the prescribed treatment. Previous studies have shown high rates of self-medication amongst nurses with regard to antibiotics.

CONCLUSION

It demonstrates that almost all of the scholars were tuned in to the antimicrobial resistance, its consequences, and its usage. The sole concern was their unpremeditated attitude about the antibiotic use. The extent of data about antibiotics was quite high amongst the experienced and well-educated nurses but there are attitudes and practices that are still incorrect mostly in junior nurses. Further educational interventions are necessary to boost their understanding and perceptions on antibiotic resistance, also as their attitude towards antibiotic use. Since the nurses are going to be a behavioral model for citizens and patients and, it's important to make more awareness on this subject during the courses. It might be advisable to introduce a selected course and training on antibiotics within the core curriculum of the varsity of Nursing.

REFERENCES

1. Donmez S, Gungor K, Gov P. Knowledge, attitude and practice of self-medication with antibiotics among nursing students. *Int J Pharmacol*. 2018;14(1):136-143.
2. Limaye D, Ziesenis P, Limaye V, Ahmad M, Saeed F, Rizvi R, et al. Knowledge, attitude and practices of antibiotic usage among university students from Karachi, Pakistan. *Int J Res Med Sci*. 2019;7:519-525.
3. Sadasivam K, Chinnasami B, Ramraj B, Karthick N, Saravanan A. Knowledge, attitude and practice of paramedical staff towards antibiotic usage and its resistance. *Biomed Pharmacol J*. 2016;9(1):337-343.
4. Banerjee D, Raghunathan A. Knowledge, attitude and practice of antibiotic use and antimicrobial resistance: a study post the 'Red Line' initiative. *Curr Sci*. 2018;114(9).
5. Alfalah AM, Alghamdi HA, Alghamdi AA, Albuhayri AS, Alzahrani MA, Alghamdi AA, et al. Knowledge and attitude toward antibiotics among the Saudi population.
6. Scaioli G, Gualano MR, Gili R, Masucci S, Bert F, Siliquini R. Antibiotic use: a cross-sectional survey assessing the knowledge, attitudes and practices amongst students of a school of medicine in Italy. *PLoS one*. 2015;10(4):e0122476.
7. Nicholson A, Tennant I, White L, Thoms-Rodriguez CA, Cook L, Johnson S, et al. The knowledge, attitudes and practices of doctors regarding antibiotic resistance at a tertiary care institution in the Caribbean. *Antimicrob Resist Infect Control*. 2018;7(1):1-9.
8. Jayaweerasingham M, Angulmaduwa S, Liyanapathirana V. Knowledge, beliefs and practices on antibiotic use and resistance among a group of trainee nurses in Sri Lanka. *BMC Res Notes*. 2019;12(1):1-6.
9. Leangapichart T, Rolain JM, Memish ZA, Al-Tawfiq JA, Gautret P. Emergence of drug resistant bacteria at the Hajj: a systematic review. *Travel Med Infect Dis*. 2017;18:3-17.
10. Ye D, Yan K, Zhang H, Liu S, Yang C, Jiang M, et al. A survey of knowledge, attitudes and practices concerning antibiotic prescription for upper respiratory tract infections among pediatricians in 2018 in Shaanxi Province, China. *Expert Rev Anti Infect Ther*. 2020;18(9):927-936.