



University of Groningen

Awareness level of parents toward antibiotics those are prescribed to their children in al-dammam city

Alsolmi, Marwan Saleh; Mulla, Hatem Hassan; Sindi, Sulafa Taher A.; Nazer, Njood Waleed M.; Almarzooq, Mukhtar Mohammed Hussain; Alhamood, Mustafa Abdulrazaq; Alsadah, Zainab Hashem; Alqattan, Azhar Abdullah; Alharthi, Mohammed Saleh Mohsen; Alsadeq, Kauther Mohammed S.

Published in:

Indo american journal of pharmaceutical sciences

DOI:

[10.5281/zenodo.2205473](https://doi.org/10.5281/zenodo.2205473)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version

Publisher's PDF, also known as Version of record

Publication date:

2018

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Alsolmi, M. S., Mulla, H. H., Sindi, S. T. A., Nazer, N. W. M., Almarzooq, M. M. H., Alhamood, M. A., ... AlSabi, A. F. H. (2018). Awareness level of parents toward antibiotics those are prescribed to their children in al-dammam city. *Indo american journal of pharmaceutical sciences*, 5(12), 15969-15972. <https://doi.org/10.5281/zenodo.2205473>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

Available online at: <http://www.iajps.com>

Research Article

AWARENESS LEVEL OF PARENTS TOWARD ANTIBIOTICS THOSE ARE PRESCRIBED TO THEIR CHILDREN IN AL- DAMMAM CITY

Marwan Saleh Alsolmi¹, Hatem Hassan Mulla², Sulafa Taher A Sindi², Njood Waleed M Nazer², Mukhtar Mohammed Hussain Almarzooq³, Mustafa Abdulrazaq Alhamood⁴, Zainab Hashem Alsadah⁴, Azhar Abdullah Alqattan⁴, Mohammed Saleh Mohsen Alharthi⁵, Kauther Mohammed S. Alsadeq⁶, Ahmed Fakhri H AlSabi⁷

¹Um Alqura University, ²King Abdulaziz University, ³Algafer General Hospital, ⁴Imam Abdulrahman Bin Faisal University, ⁵Najran University, ⁶Groningen University in the Netherlands, ⁷Al-Jouf University

Abstract

Background: Misuse of antibiotics is worldwide problem and annoying pediatricians. This misuses result in the increase the prevalence of one of global health problem which is antibiotic Resistance. Many studies mentioned that misusing of antibiotics is related to antibiotic resistance. The main reason of antibiotics misuse is low public awareness towards antibiotics indications. Also, patient's knowledge and practice with the antibiotic like self-prescription is common in developing countries. The antibiotics prescribed from private pharmacies are given to parents and parents are responsible to give medications to their children. So, we need to increase parents' awareness toward antibiotics usage to decrease the incidence of antibiotic resistance.

Objective: To evaluate the parents' level of awareness towards antibiotics those prescribed to their children in Al-Dammam city, Saudi Arabia.

Methods: Questionnaire based on cross-sectional study. Questionnaires filled by parents whom have children less than 12 years old in public places randomly in the period from October to November 2018. The questionnaires has two parts: the first part is containing social-demographic data. While the second part: KAP of parents towards antibiotics. Data entering and analysis by SPSS.

Results: Questionnaires have been distributed to 450 parents, most of participants were aged 20-29 years/old, the vast majority of participants have misconception regarding the antibiotics indications and (40%) of participants chose that antibiotics use for fever, (22%) for cough and (21%) do not know. Regarding parents' attitude toward antibiotics, (71.3%) have used antibiotics for their children but fortunately, Majority of the participants believe that their children don't need to antibiotics every time when they are sick (70%). In addition, Most of the participants believe that antibiotics may harm the children (60%)

Conclusion: Level of awareness of parents in Dammam city is moderately acceptable. We can expect antibiotics resistance to happen among new generation in Al-Dammam city if there is no enough campaigns to increase the awareness and to fill the gap.

Keywords: Antibiotic, Awareness, Saudi Arabia, KAP, Antibiotic resistance.

Corresponding author:

Marwan Saleh Alsolmi,
Um Alqura University.

QR code



Please cite this article in press Marwan Saleh Alsolmi et al., *Awareness Level Of Parents Toward Antibiotics Those Are Prescribed To Their Children In Al-Dammam City.*, Indo Am. J. P. Sci, 2018; 05(12).

INTRODUCTION:

Pediatricians are responsible to educate parents about how to take care of their children health and parents should be aware about any harmful products before giving to their children. In which the treatment of children depends on prescription of doctors and on perceptions of parents. Antibiotics are very useful and kill harmful organisms but also is harms the body if we misuse and may cause antibiotics resistance. Infectious diseases were participating in increasing mortality and morbidity all over the world [1]. Misuse of antibiotic is participating in increasing the prevalence of one of global health problem which is Antibiotic Resistance. The main use of antibiotic is eradicating Bacterial infection [2]. Upper respiratory tract infection (URTIs) is one of the most common causes of prescribing antibiotics in pediatric clinics [3]. But in fact, the virus is the main cause of most of URTIs cases [4]. Also, some bacterial infections are self-limited and don't need any kind of antibiotics such as otitis media and sinusitis [5]. Many studies revealed that the misuse of antibiotics is related to antibiotic resistance and this problem is increasing in developing countries [6].

In Saudi Arabia, antibiotic resistance is already existing and the rate of resistance is increased in the last decade [7]. In one study, they found that there is a high percentage of self-medication in Saudi Arabia and most of the self-treating medicines are antibiotics [8].

In the present study, we aimed to evaluate the level of awareness of antibiotics among parents by evaluating knowledge, attitude, and practice of parents in Al-Dammam city, Saudi Arabia.

METHODS:

This study is A cross- sectional study based on questionnaire which was distributed on 450 parents from AL-Dammam city, Saudi Arabia. Surveys distributed among parents in public places like malls and gardens randomly in the period from October to November 2018.

The questionnaire has two parts, the first part, was containing Socio-demographic data like age, gender and educational level. While the second part: included evaluating knowledge, attitude, and practice

of parents towards antibiotics.

Knowledge, attitude, and practice (KAP) level have been evaluated and have been analyzed by using SPSS.

RESULT:

Questionnaires have been distributed to 450 parents. Most of the participants were in age from 20 – 29 years (36.7%), 135 between age 30-39 (30%) and 150 were more than 40 years old. Majority were male (61.1%) while female were only (39.9%). Regarding educational level, most of the participants have high school degree (43.8%) and (30%) have bachelor degree, (17.3%) have been only to primary school while the minority of participants didn't enter school (2.4%) [Table 1].

Regarding awareness assessment, participants chose that antibiotics fight all kinds of microorganism as the main indication of antibiotics (23.1%) and to fight only bacteria were (20.3%) and to fight virus were almost (19%) while (20.4%) were don't know what was the main indication of antibiotics. Regarding the most common symptoms that let parents to give their children antibiotics was fever (40%) then cough (22.7%) and about (21.3%) don't know for which symptom.

Regarding parents' attitude toward antibiotics, (71.3%) have used antibiotics for their children while (28.7%) have never used antibiotics for their children before. Majority of the participants believe that their children don't need to antibiotics every time when they are sick (70%) while (30%) believe they need antibiotics every time when they are sick. Most of the participants believe that antibiotics may harm the children (60%) while (40%) don't believe with the harmful antibiotics.

Majority of the participants don't use the previous prescription to buy antibiotics to their children while third of the participants use the previous prescription to buy antibiotics. Most of the participants don't know the antibiotics resistance (83%) while only (17%) know the antibiotics resistance. (69%) of the participants usually ask their doctors to prescribe antibiotics to their children while (31%) don't ask for antibiotics. (71%) of the participants said that doctors prescribe antibiotics excessively. [Table 2]

Table 1: shows the personal information of participants (N=450):

questions	Choices	Number/ %
Age	20 – 29	165(36.7)
	30 – 39	135(30)
	40 – 49	95(21.1)
	50 and above	55(12.2)
Gender	male	275(61.1)
	female	175(38.9)
Educational level	Did not enter school	11(2.4)
	Primary school	78(17.3)
	high school	197(43.8)
	Bachelor	135(30)
	High degrees	29(6.4)

Table 2: shows the KAP of included participants:

	Frequency	Percentage %
What is the main use of antibiotics?		
To fight Virus	85	18.9
To fight Bacteria	93	20.7
To fight Virus & Bacteria	76	16.9
To fight all types of Microorganisms	104	23.1
I don't Know	92	20.4
What is the most common cause to use antibiotics?		
Fever	179	39.8
Cough	102	22.7
Diarrhea	64	14.2
Skin Infections	9	2
I don't know	96	21.3
Questions		
	Yes (%)	No (%)
Did you use antibiotic for your children before?	321(71.3)	129(28.7)
Does your child need antibiotic each time he/she gets sick?	134(29.8)	316(70.2)
Do you think antibiotic can harm your child?	270(60)	180(40)
Did you buy antibiotic for your child from previous prescription?	154(34.2)	296(65.8)
Do you know Antibiotic Resistance?	75(16.7)	375(83.3)
Do you ask your doctor to prescribe antibiotic to your child?	139(30.9)	311(69.1)
Do you think doctors prescribe antibiotics excessively?	320(71.1)	130 (28.9)

DISCUSSION:

This study was aimed to evaluate parents' level of awareness towards antibiotics which given to their children because we need to eradicate antibiotic resistance in next generation. In which parents are the main source of drug administration for children.

Acceptable knowledge, attitude and practice (KAP) have noticed in our population. This is may be because of the high incidence rate of infections and this will be directly proportional to the experience about antibiotic also, people who used antibiotics previously have better KAP than those who did not.

In our study, we found only (20%) one-fifth know that it is mainly to fight bacterial infection. In India, it is a little bit more (28%). Also in Lebanon, more than 80% know that antibiotic is antiviral and 73.5% don't know that antibiotics don't treat viral infection [9, 10]. Most of our participants agree that antibiotics can cause harm (60%) and better result found in other countries such India (73.6%) and that is Palestine (78.1%).

More than (53%) of participants declared that they could ask their doctors to prescribe antibiotics to their children. The most important point is 71% of parents agree that doctors prescribe antibiotic excessively

CONCLUSION:

Level of awareness, knowledge and attitude of people in Dammam city, Saudi is moderately acceptable. Large numbers of the parents want their child to get antibiotics each time they got sick. One-third of parents has the habit of buying antibiotic to their child using previous prescriptions.

We could expect that antibiotics resistance will occur among the new generation in future. We need to fill the gap to improve the awareness of parents to avoid the excessive using of antibiotics

REFERENCE:

1. **Agarwal S, Yewale VN, Dharmapalan D(2015).** Antibiotics Use and Misuse in Children: A Knowledge, Attitude and Practice Survey of Parents in India. *J Clin Diagn Res.*,9(11):SC21-4.
2. **Cantarero-arévalo L, Hallas MP, Kaae S (2017).** Parental knowledge of antibiotic use in children with respiratory infections: a systematic review. *Int J Pharm Pract.* ,25(1):31-49.
3. **Zyoud SH, Abu taha A, Araj KF et al. (2015).**Parental knowledge, attitudes and practices regarding antibiotic use for acute upper respiratory tract infections in children: a cross-sectional study in Palestine. *BMC Pediatr.* ,15:176.
4. **Harnden A, Perera R, Brueggemann AB, Mayon-White R, Crook DW, Thomson A et al.(2007).** Respiratory infections for which general practitioners consider prescribing an antibiotic: a prospective study. *Arch Dis Child*,92(7):594-7. doi: 10.1136/adc.2007.116665.
5. **Panagakou SG, Spyridis N, Papaevangelou V et al.(2011).** Antibiotic use for upper respiratory tract infections in children: a cross-sectional survey of knowledge, attitudes, and practices (KAP) of parents in Greece. *BMC Pediatr.*,11:60.
6. **Cizman M (2003).** The use and resistance to antibiotics in the community. *Int J Antimicrob Agents*,21(4):297-307.
7. **Zowawi HM (2016).** Antimicrobial resistance in Saudi Arabia. An urgent call for an immediate action. *Saudi Med J.* ,37(9):935-40.
8. **Aljadhey H, Assiri GA, Mahmoud MA, Al-aeel S, Murray M (2015).** Self-medication in Central Saudi Arabia. Community pharmacy consumers' perspectives. *Saudi Med J.* ,36(3):328-34.
9. **Huang Y, Gu J, Zhang M et al.(2013).** Knowledge, attitude and practice of antibiotics: a questionnaire study among 2500 Chinese students. *BMC Med Educ.* ,13:163.
10. **Mouhieddine TH, Olleik Z, Itani MM et al.(2015).** Assessing the Lebanese population for their knowledge, attitudes and practices of antibiotic usage. *J Infect Public Health*,8(1):20-31.