ResearchGate

See discussions, stats, and author profiles for this publication at: https://www.researchgate.net/publication/308970383

Prevalence of Self-Medication Practice Among Al-Azhar Medical Laboratory University Students Gaza Strip...

Article · October 2016

CITATIONS
0

READS
59

5 authors, including:

Shadi Tarazi
Al-Azhar University - Gaza
18 PUBLICATIONS **23** CITATIONS
SEE PROFILE

Ammar Almaaytah
Jordan University of Science and Technology
29 PUBLICATIONS **139** CITATIONS
SEE PROFILE

Nahed Ali Al Laham
Al-Azhar University - Gaza
29 PUBLICATIONS **232** CITATIONS
SEE PROFILE

Basim M Ayesh
Al-Aqsa University
16 PUBLICATIONS **208** CITATIONS
SEE PROFILE

Some of the authors of this publication are also working on these related projects:

Public knowledge and awareness of cardiovascular disease and its risk factors in Gaza strip – Palestine View project

Peptide antimicrobial study View project

All content following this page was uploaded by Shadi Tarazi on 10 October 2016.

The user has requested enhancement of the downloaded file. All in-text references underlined in blue are added to the original document and are linked to publications on ResearchGate, letting you access and read them immediately.

Original Research Paper Medical Science

Prevalence of Self-Medication Practice Among Al-Azhar Medical Laboratory University Students Gaza Strip –Palestine

Shadi Tarazi	Department of Laboratory Medicine, Faculty of Applied Medical Sciences, Al-Azhar University, Gaza, Palestine
Ammar Almaaytah	Department of Pharmaceutical Technology, Faculty of Pharmacy, Jordan University of Science and Technology, Irbid, Jordan
Nahed Al Laham	Department of Laboratory Medicine, Faculty of Applied Medical Sciences, Al-Azhar University, Gaza, Palestine
Basim Ayesh	Department of Medical Technology, Al Aqsa University, Gaza, Palestine
Heba Arafat	Department of Laboratory Medicine, Faculty of Applied Medical Sciences, Al-Azhar University, Gaza, Palestine

ABSTRACT

Objective: Self-medication practice is common worldwide especially in developing countries , In Palestine little has been reported on self-medication practice. However, no data available for self-medication practice in Gaza Strip. Here we amid to determine self-medication practice prevalence, reasons ,type of drug used and symptoms of illness among Al Azhar university students.

Methods: A questionnaire based study carried on 145 respondent , Demographic information, information on drugs used for self-medication, symptoms of illness and Reasons of not consulting a doctor were collected.

Results: Respondents aged from 18 to 23 years old from different demographical rejoins in Gaza strip, 51.7% need from five to ten minutes of walking to reach the nearest medical center. 63.4% of respondents had use medicines on their own without consultation and so practice self-medication during the six months period preceding the study. The major reason for use self-medication by 41% of respondents is that the medical condition is mild and simple in addition to self-experience with this simple conditions before, from all symptoms over 80% declare that they use self-medication with Headache and fever. The most used drug for self-medication is paracetamol also antibiotics used for self-medication.

Conclusion: Self-medication is prevalent in Gaza strip among Al Azhar university students,

The reasons cited for self-medication by respondents in this study were similar to those reported in other studies, health education of the public and regulation of pharmacies may help in limiting the self-medication practices

KEYWORDS Self-medication , Gaza strip , Palestine, Al Azhar university, Health education

Introduction

Generally self-medication is defined as the use of drugs without medical consultation 1, self-medication practice recognize worldwide especially in developing countries where people treat most episodes of illness by self-medication 2,3,4 . Many drugs in developing countries are distrusted over without medical supervision In this case, self-medication provides a lower cost-alternative for people who cannot afford the cost of clinical service.5

Self-medication practice affected by different factors like gender, income ,medication knowledge and self-care orientation, the attitudes toward consumption of medications determine mainly by both self-care orientation and medication knowledge 6,7.

In Palestine, most people have access to all types of medications which makes self-medication an easy practice. However, little studies conducted to report this practice in Palestine and all done in west bank, and no previous studies conducted to report this practice in Gaza strip 7

The present study was carried out as first insight on self-medication practice in Gaza strip, to obtain baseline data on self-medication and reasons influencing this practice .

Methods

This cross sectional questionnaire based study was done in AL Azhar university , Faculty of Applied Sciences , Medical laboratory Department. The questionnaire is administrated to all medical laboratory students, One hundred forty five responded and fill in the questionnaire.

The questionnaire contain questions regarding gender , Age , Place of residency , Having health insurance , Time of walking in minutes to reach the nearest health post or medical store, using medicines without medical consultation in the last six months prior the present study, episodes of illness had in the preceding six months of the present study , Symptoms of illness and if there is any complication, Type and names of drugs also reasons for not consulting a doctor. Respondents were analyzed using the z test of proportions. A 'P' value of <0.05 was taken as statistically significant.

Results

Table1 : Shows respondents distribution based on region, Gender and having health insurance

City	No of respondent (percentage)
Gaza	68 (46.9%)
Jabalia	14 (9.7%)
Beithanon	11 (7.6%)
Deir al-Balah	11 (7.6%)

Nuseirat	13 (8.9%)
Rafah	11 (7.6%)
Khan Yunis	17 (11.7%)
Total	145
Gender	
Males	31 (21.4%)
Females	114 (78.6%)
Total	145
Health insurance	
Do Have health insurance	109 (75.2%)
Do not Have health insurance	36 (24.8%)
Total	145

Table 2: Shows respondents distance in minutes needed to reach the nearest medical center.

Distance in minutes	No. of respondents (percentage)
5 to 10 min	75 (51.7%)
10 to 20 min	55 (37.9%)
20 to 30 min	13 (9%)
30 to 60 min	2 (1.4%)
Total	145

Table3: Shows episodes of illness have you had in the preceding six months

Episodes of illness	No of respondent (percentage)
Once	48 (33.1%)
Twice	46 (31.7%)
Three or more	37 (25.5%)
Not at all	14 (9.7%)
Total	145

Table 4: Shows frequency of drugs/drug groups used by the respondents for self-medication

Drugs \ Drug groups	Frequency of usage
Paracetamol	(63) 38.2%
Other NSAIDs	(48) 29.1%
Antibiotics	(28) 16.9%
Herbs	(11) 6.7%
Other	(15) 9.1%
Total	165

Table 5 :Shows differences in the proportion of respondents using self-medication according to gender, having health insurance , Time needed to reach the nearest medical center and how many illness they had six months before the study

Character	Proportion use self medication
Male	0.23
Female	0.77 *
Have Health insurance	0.78**
Do not have Health insurance	0.22
Time to reach nearest medical center from 5-10 min and 10-20 min	0.92***
Time to reach the nearest medical center from 20-30 min and 30-60 min	0.08
Get ill once ,twice and three or more times	0.93****
Not get ill at all	0.07

* Z calculated =7.37, p less than 0.05, compared to male respondent.

** Z calculated=7.67, p less than 0.05, compared to respondents do not have health insurance

*** Z calculated=11.5, p less than 0.05, compared to respondents need 20-30 min and 30-60 min

**** Z calculated =11.79, p less than 0.05, compared to respondents not get ill at all

One hundred and forty five respondents from the Medical laboratory department students at Al-Azhar university –Gaza-Palestine, were answered the questionnaire for the present study. They all from 18 to 23 years old from different demographical rejoins in Gaza strip as shown in Table 1 . sixty eight (46.9%) were from Gaza city while twenty five (17.3%) lives in north Gaza strip (Jabalia and Beithanon) ,the rest fifty two (35.8%) lives in south Gaza strip (Deir al-Balah, Nuseirat, Rafah, Khan Yunis). According to gender thirty one (21.4%) of the respondents were male while on the other hand one hundred fortune (78.6%) of the respondents were female. The fact that majority of the students in the department are females is the major reason for difference in sex distribution and low male response rate .

Respondents were ask to determine the time needed to reach the nearest health post or medical store in minutes of walking from their homes as shown in Table 2. Majority seventy five respondent (51.7%) need from five to ten minutes of walking to reach the nearest medical center , fifty five (37.9%) respondents stated that they need from ten to twenty minutes of walking to reach the nearest medical center from their homes. Thirteen (9%) need from twenty minutes to thirty minutes of walking. Finally two (1.4%) need from thirty minutes to sixty minutes of walking to reach the nearest medical center

Table 3 shows how many times of illness respondents had during the preceding six months of the present study. Forty eight (33.1%) had ill once during the six months while forty six respondent(31.7%) had ill twice. Thirty seven (25.5%) of the respondent got ill three or more times during the six months . finally fourteen (9.7%) respondent never get ill during the six months preceding the study.

Although one hundred and nine respondents (75.2%) did have health insurance (Table1), Ninety two of the 145 respondents (63.4%) had use medicines on their own without consultation and so practice self-medication during the six months period preceding the study. While 53 (36.6%) did not take any form of self-medication in the past six months.

The ninety two respondent consume 165 drugs for self-medication in the last six months before the study, on average of 1.8 drug per one respondent per the six months period. Table 4 shows the type of drugs used. The most used drug for self-medication is paracetamol used sixty three times (38.2%) while Herbs record the lowest rate of usage eleven times (6.7%). some other analgesic drugs used forty eight times (29.1%) also antibiotics used twenty eight times (16.9%).

From all symptoms over 80% declare that they use self-medication with Headache and fever. 70% said that they keep drugs at their home especially paracetamol and analgesic while 30 % don't keep any drugs at their homes. The major reason for use self-medication by 41% of respondents is that the medical condition is mild and simple in addition to self-experience with this simple conditions before while 19% informed that they do not trust doctors and they have bad experience with doctor's prescription before. Also don't caring, a pharmacist family member and laziness was cited for using self-medication practice.

Table 5 shows the distribution of respondents practice self-medication according to gender, having health insurance, Time needed to reach nearest medical center and how many illness they have acquired six months before the study. In case of gender female proportion using self-medication was significantly higher than male proportion ($P < 0.05$) . Significant higher proportion of respondents had health insurance, another significant higher proportion of respondents stated that they need from 5-10 min and 10-20 min to reach the nearest medical center compared with respondents needed 20-30 min and 30-60 min. Significant higher proportion of respondents practice self-medication get ill once ,twice ,three times or more in the past six months before the study when compared to respondents did not get sick at all.

Discussion

This study was the first in Gaza strip-Palestine that shows that self-medication practices are very common among Al Azhar university, Medical Laboratory students , Unfortunately, there are no data available regarding self-medication practices among the general public in Palestine which makes it difficult to compare the extent of self-medication among university students with those in the general public while little studies repot self-medication behavior in Palestine-West bank, one at Al Najah university recorded 98 % of self-medication practice among university students **7**.

63.4% of all respondents had use medicines on their own without consultation and so practice self-medication during the six months period preceding the study, this is almost the same percent concluded by other study in the northern part of Palestine **8** and low comparing with other study conducted at Al Najah university stated that 98% of students practice self-medication, also a study conducted in west bank stated that 87.0% of respondent practice self-medication **9**. Due to different demographic profiles of the population and different sample size it is hard to compare the results.

Higher significant proportion of respondent practice self-medication have health insurance also

higher significant proportion of respondent practice self-medication live in less than 20 minutes

Of walking from their homes to reach the nearest medical center. The more illness time respondents acquire during six months before the present study, higher significant proportion of using self-medication **(Table 5).** The net average number of drugs used per one respondent is 1.8 in the last six months prior the study, this is almost the same average concluded by different other studies **10**.

In the present study different type of drugs used for self-medication, Paracetamol headache reliever is the most commonly used followed by other NSAIDs drugs these results similar to different other studies in literature **11-16** .Self-medication with antibiotic also common as reported in this study which could results in several un wanted health consequences to the individual and the health system which is an alarming practice in developing countries especially and it may lead to antibiotic resistance and different other serious effects **17-20**. Herbs are also used for self-medication in the present study , similar to other studies in developing countries **(Table 4) 10**.

The most common health conditions reported in this study treated by self-medication were Headache and fever. Such these health conditions were also reported to be commonly in other parts of the world for self-medication practice **21**. The reasons cited for self-medication by respondents in this study like mild and simple medical condition were similar to those reported in other studies **22**.

Factors influencing self-treatment include patient satisfaction with the healthcare provider, cost of the drugs, educational level, socioeconomic factors, age and gender. Decreased healthcare cost may be a major reason in developing countries. Interactions between prescribed drugs and the drugs taken for self-medication and self-medication with antibiotics are an important risk factors of which healthcare providers must be aware of **10.**

Further studies on the prevalence, the factors influencing and the appropriateness of self and non-doctor prescribing are required.

Conclusion

Self-medication is an important health issue in this area and prevalent in Gaza strip at Al Azhar university students with 63.4 % of respondents using some form of self-medication in the six-month period preceding the study. The most commonly used drugs for self-medication reported were paracetamol and NSAIDs and antibiotics also were used or self-medication which is a serious practice with multiple medical effects also herbs were used for self-medication.

The reasons cited for self-medication by respondents in this study like prior experience and mild condition were similar to those reported in other studies. Health education of the public and regulation of pharmacies may help in limiting the self-medication practices Future research regarding the prevalence of self-medication among other categories is recommended.

Compliance with Ethical Standards

All Authors declares that they have no conflict of interests This study was approved by laboratory Medicine Department ethical comity –Faculty of Applied Biological Science at Al-Azhar University Gaza-Palestine Informed consent was obtained from all individual participants included in the study

References

1. Ruiz ME. Risks of self-medication practices. Current drug safety. 2010;5(4):315-323.
2. Osemene KP and Lamikanra A. A Study of the Prevalence of Self-Medication Practice among University Students in Southwestern Nigeria. Tropical Journal of Pharmaceutical Research 2012 ; 11 (4): 683-689
3. Selvaraj K, S GK, Ramalingam A. Prevalence of self-medication practices and its associated factors in Urban Puducherry, India. Perspect Clin Res 2014;5:32-6.
4. World Health Organization (WHO). The benefits and risks of self-medication: general policy issues. WHO Drug Info 2000;14(1):1–2.
5. Abay SM, Amelo W. Assessment of Self-Medication Practices Among Medical,Pharmacy, and Health Science Students in Gondar University,Ethiopia, J Young Pharm. 2010;2(3): 306-310.
6. Beitz R, Doren M, Knopf H, Melchert HU. Selfmedication with over-the-counter (OTC) preparations in Germany. Bundesgesundheitsblatt Genundheitsforschung Gesundheitsschutz 2004;47(11):1043–1050.
7. Sawalha AF. A descriptive study of self-medication practices among Palestinian medical and nonmedical university students. Research in Social and Administrative Pharmacy 4 (2008) 164–172.
8. Sweileh W. Self – Medication and Over-the-Counter Practices: A Study in Palestine. J. Al-Aqsa Unv., 8, 2004
9. Al-Ramahi R. Patterns and attitudes of self-medication practices and possible role of community pharmacists in Palestine, Int J Clin Pharmacol Ther. 2013; 51(7):562-7. doi: 10.5414/CP201814.
10. Shankar PR, Partha P , Shenoy N. Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal: a questionnaire-based study. BMC Family Practice 2002; 3:17. DOI: 10.1186/1471-2296-3-17.
11. James H, Handu SS, Al Khaja KAJ, Otoom S, Sequeira RP. Evaluation of the knowledge, attitude and practice of self medication among first-year medical students. Med Princ Pract 2006;15:270–275.
12. Shivamurthy S, Manchukonda RS, Gurappanavar D. Evaluation of self-medication patterns among under-graduate medical students of Adichunchanagiri institute of medical sciences, Karnataka, India: a cross-sectional questionnaire-based study. Int J Basic Clin Pharmacol . 2016; 5(3): 965-968 doi: 10.18203/2319-2003.ijbcp20161553
13. Jain M , Prakash R , Bapna D , Jain R. PREVALENCE AND PATTERN OF SELF-MEDICATION PRACTICES IN URBAN AREA OF SOUTHERN RAJASTHAN. National Journal of Community Medicine 2015; 6(4):474-477.
14. Lee See G, Arce Jr F, Caño J, Ann Plaza J. Consumers' Knowledge, Attitude and Practices on Over-the-Counter (OTC) Medicine use in Cebu City. International Journal of Pharmacy Teaching & Practices 2015; 6(3): 2136-2139.
15. Tanwar K, Mathur S. To study the pattern, efficacy and tolerability of analgesic self medication among undergraduate medical students: a questionnaire based survey. Int J Basic Clin Pharmacol. 2015; 4(3): 446-448 doi: 10.18203/2319-2003.ijbcp20150012.
16. Aslam Solangi M, Ali M, Mushtaq D, Zaid M, Riaz M, Nasir A. Parent-based self-medication in Pakistani children: a qualitative cross-sectional survey. Bangladesh Journal of Medical Science 2016 ; 15(1) 33-38 .
17. World Health Organization. Global Strategy for Containment of Antimicrobial Resistance: World Health Organization. Communicable Diseases Surveillance and Response (CRS).WHO/CDS/CRS/DRS/2001.2.2001.
18. Fadara JO, Tamuno I. Antibiotic Self-medication among university medical undergraduates in Northern Nigeria. J. Pub Health Epidemiol. 2011; 3(5): 217-220.
19. Ganguly NK, Arora NK, Chandy SJ, Fairoze MN, Gill JP, Gupta U, et al. Global antibiotic resistance partnership (GARP): India Working Group. Rationalizing antibiotic use to limit antibiotic resistance in India. Indian J Med Res 2011;134:281-94.

20. Sawalha AF. Self-medication with antibiotics: A study in Palestine. International Journal of Risk and Safety in Medicine 2008; 20(4): 213-222.
21. Shehnaz SI , Agarwal AK , Khan N. A systematic review of self-medication practices among adolescents. J Adolesc Health. 2014 ;55(4):467-83.
22. Philip PT, Senan A, Reji S, Ashok kumar TR. Assessment of self medication practices among undergraduate medical and paramedical students: a case of rural medical schools of TAMIL NADU, INDIA. World journal of pharmacy and pharmaceutical sciences 2015; 4(10): 1587-1604.

View publication stats