



RESEARCH ARTICLE

Pharmacophobia: Occurrence and Underlying Factors in Our Community

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ABSTRACT

Pharmacophobia is the unreasonable fear of taking medications. The present study aims to determine the prevalence of this phobia in local community of Karachi and establish reason for fear and classes of drugs generally avoided. For this purpose, a survey comprising 100 participants was conducted. The participants were classified into pharmacophobic (62%) and non-pharmacophobic (38%) groups. The pharmacophobic group was further categorized according socio-demographic variables such as age, gender and level of education. Retrospective statistical appraisal of the results shows that 92.5% males and 40.32% females were found to be pharmacophobic. Adults were found to be most pharmacophobic (80%), as compared to teenagers (51.42%) and geriatrics (26.67%). It was seen that 81.39% of graduates were pharmacophobic while 75% of intermediates and 20.68% of matriculates displayed the same tendency. Fear of addiction was cited by the majority (54.8%) as being the reason for their fear while 45.1% stated fear of side effects as the cause of their condition. Antibiotics were found to be the class of drug avoided by most pharmacophobic individuals (72.17%). Sedatives and relaxants were particularly avoided by 27.27% and analgesics by 20.81% of the pharmacophobic individuals. The authors recommend drug safety awareness programs for the laypersons to alleviate their pharmacophobia.

KEYWORDS

Pharmacophobia, Sociodemographic Variables, Antibiotics, Fear of addiction, Fear of side effects

INTRODUCTION

Pharmacophobia, also known as Pharmaceutical phobia¹, is trepidation of the utilization of medications. While the absence of mindfulness by patient or specialist of harmful medication responses can have genuine outcomes, having a fear of medications can additionally have indisputable negative impacts on patient wellbeing. For instance, refusal of fundamental pharmacological interventions.²⁻⁴ Medication fear can likewise prompt issues with pharmaceutical compliance.⁵ Medication fear can be found in parents who are worried about offering medicines to their children,⁶

expecting that the pharmaceuticals will accomplish more harm than good.⁷ Medication fear can be activated by offensive antagonistic responses to drugs which are in some cases recommended improperly or irrationally. Absence of attention to the patient's inclination to unfavorable impacts (e.g. restless patients and the elderly) and blaming the adverse reactions on the medication serves to exacerbate the phobia.^{8,9} Starting at a low dose and gradually increasing it can help a pharmacophobic patient stick to the prescribed regimen.⁹ Apprehensions of medicine use is additionally predominant in individuals who have encountered offensive withdrawal impacts from psychotropic drugs.¹⁰ Sometimes patients wrongly associate manifestations of an intense malady or sickness with solutions used to treat the illness or

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disease. This manifestation of pharmacophobia could be dealt with by endeavoring to persuade the patient to take test doses of the medication or an alternate drug in the same class to demonstrate to the patient that the side effects were not because of the drug but because of the sickness.¹¹ Fear may also be developed by external and internal events such as trauma and genetic recombination respectively.

Dalibor Karlovic et al in 2008 comprised a study on patient compliance to pharmacotherapy and reported that most of the patients avoided their medications as advised because of complicated way method of administration,, discomfort or shame, inadequate confidence in the physician or health care professional or inappropriate family support as well as the expenses of therapy.¹²

Sir Professor W. St. C. Symmers in 1973 quoted that drugs causing side effects of high intensity such as amphotericin B cause nephrotoxicity of reversible type if the given dose is less than 5g. On the other hand, Winn in 1962 reported the occurrence of irreversible nephrotoxicity in patients who have taken greater amount of that drug. Such inconclusive and confusing claims by health care professionals also increase the tendency towards pharmacophobia.¹³

The purpose of present study is to identify the trend in our community not to take medicine because of pharmacophobia. The research will also reveal if socioeconomic and demographic differences have any effect on the incidence of tendency towards pharmacophobia. Additionally, the underlying reason for this phobia as well as classes of drugs most commonly feared will be identified. The information obtained from this study can help health care professionals to ensure that drug protocols are followed correctly by the patients by identifying key factors governing patients' phobia.

Methodology

Survey was conducted on 100 people living in central Dist. of Karachi from different age groups and education levels. The participants

consisted of 40 males and 60 females. As per W.H.O. the age limit of geriatrics was set to 60 years and above; adults, 20-59 years; and teenagers, 13-19 years. The participants were divided based on their education level as being graduates (minimum 16 years of education), intermediates (minimum 12 years of education) and matriculates (minimum 10 years of education). The questionnaire focused on what types of medications are generally avoided and why, and whether socio-demographics variations have any effect on these answers.

RESULTS AND DISCUSSION

The overall trend of the population tested seems to favor pharmacophobia. Out of the 100 people surveyed, 62 answered positive for pharmacophobia while 38 were non-pharmacophobic.

When the data was analyzed with respect to gender, males tended to be more pharmacophobic (92.5%) than females (40.33%) (Figure 1).

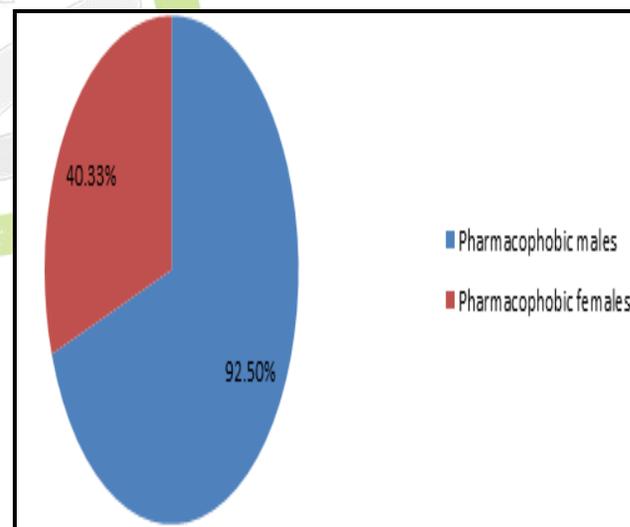


Figure 1: Inclination toward pharmacophobia according to Gender

When we consider age groups, 4 (26.67%) out of 15 geriatrics answered positively for pharmacophobia; 40 (80%) out of 50 adults declared themselves as being pharmacophobic, and of the 35 teenagers tested, 18 (51.42%) claimed to be pharmacophobic.

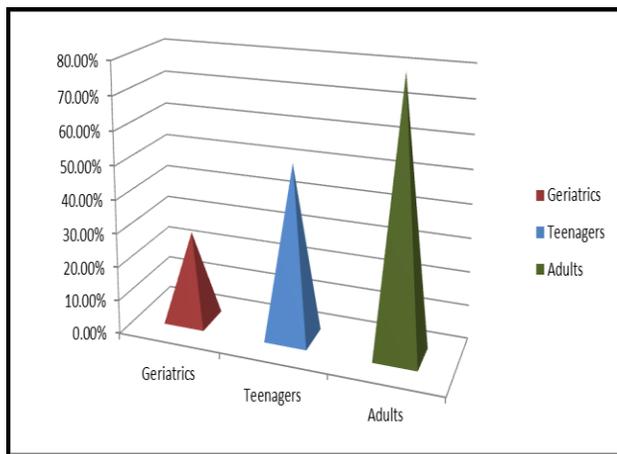


Figure 2: Pharmacophobic behavior shown in different age groups

35 out of 43 graduates (81.39%) were pharmacophobic. As the level of education declined, the number of people answering positively to pharmacophobia was seen to decrease with 75% (21 out of 28) intermediate-pass and 20.68% (6 out of 29) of matriculation-pass participants being pharmacophobic (Figure 3).

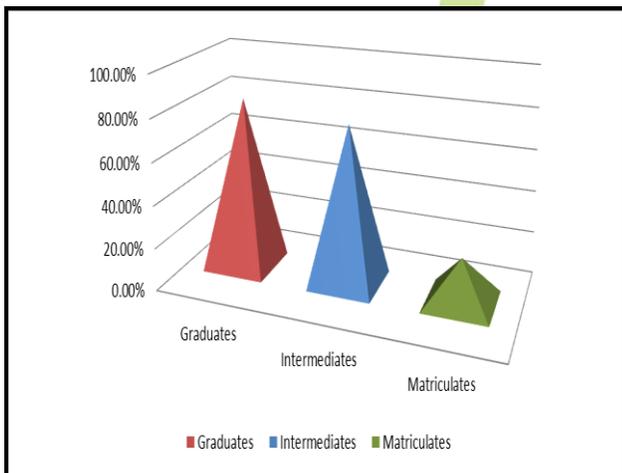


Figure 3: Tendency of pharmacophobia according to level of education

The results suggest that 72.17% pharmacophobic individuals avoided different antibiotics, while 27.27% had fear of taking relaxants or sedatives, and 20.81% were apprehensive about taking analgesics. (Figure 5). Of the people surveyed, 45.1% pharmacophobic individuals cited fear of side effects, while 54.8% claimed fear of

addiction as the main reasons for their pharmacophobic behavior (Figure 4).

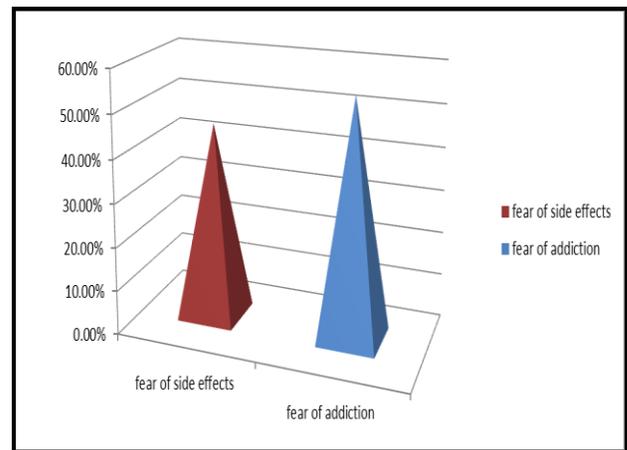


Figure 4: Reason for pharmacophobic behavior

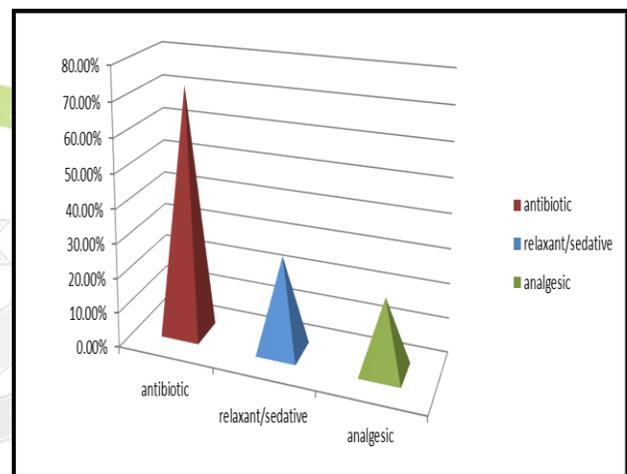


Figure 5: Drugs commonly avoided in pharmacophobic Condition

The overall results showed the higher trend of fear of taking different of drugs in our community (62%). This trend is higher in males than females which may be due to psychological, socio-economical, and demographic factors. The results suggested the great variation in pharmacophobic behavior with respect to age and education level. Most of the people are afraid of antibiotics, relaxants, sedatives, and analgesics, the main reasons of which are fear of side effects and addiction. The major factor behind this may be the lack of adequate information about their medicine and the importance of strictly adhering to the prescribed regimen. Also, patients may not be aware of the fact that not every drug has

potential of addiction and that the more serious of side effects of a drug rarely occur.

CONCLUSION

Present research concludes that the predilection towards pharmacophobia is more in males than females, and steadily increases with the rise in education level, even though the highest percentage of pharmacophobics are adults. Those who are more educated may be more pharmacophobic because they have inappropriate or incomplete knowledge about medicines as a result of which they have fear of side effects and addiction. The authors recommend that proper patient counseling and drug education seminars be conducted for the general population to better their understanding of drug use and significance of adherence to dosage regimen.

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