

Pakistani Population Factors Impacting The Self-Medication Pattern

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Abstract

Despite the increased scientific interest in self-medication, little is known about the key factors that influence it, particularly in developing nations. This study was conducted to identify the key variables affecting the self-medication trend in the population of Karachi, Pakistan. 350 individuals from all over Karachi, Pakistan, were sampled for this cross-sectional survey. With their verbal consent, the self-administered, closed-ended, pretested questionnaire was used to collect the data. The questionnaire was divided into three sections: demographic information, self-medication habits, and variables influencing self-medication. Statistical analysis of the data was performed using Microsoft Office Excel 2016. Trade and generic names (57.82%) were frequently used to identify drugs, especially by educated respondents. Education was the main factor impacting the practice of self-medication. Ailment cures account for (63.77%) of the practice's advantages, followed by time and money savings (23.97%) and care independence (12.26%). The main factors determining the pattern of self-medication among the population of Karachi, Pakistan, were literacy and public health education. There were suggestions made regarding the value of community pharmacies and the role of education.

Keywords: Self-medication, Factors, Karachi, Pattern, Pakistan.

Introduction

Globally, life expectancies are increasing as a result of improved healthcare systems and access to medications [1]. As a result of this improved accessibility to medications, more people in the general community are now able to self-medicate. The act of purchasing a drug to treat one's own ailments without seeking medical advice is known as self-medication [2]. Self-medication is a sort of self-care in which people use readily available medications to alleviate their symptoms as soon as they arise [3]. Typically, this involves utilizing over-the-counter (OTC) medications, which can be acquired without a prescription from a physician. Self-medication has a number of advantages, foremost among them the ability to obtain prompt

treatment at potentially lower costs and the empowerment of patients to make their own healthcare decisions. OTC medications used to treat minor ailments are typically affordable and their purchase from pharmacies does not involve consultation fees [2–4]. Self-medication for minor illnesses also reduces consultation charges and waiting periods.

On the other side, the literature has documented instances of incorrect self-medication. Due to overuse, concurrent use of many medications, or the use of over-the-counter treatments to treat potentially serious illnesses, OTC items have been misused [5], leading to incorrect diagnoses [6, 7] or masking of serious medical disorders [8].

Through drug identification, people occasionally self-administer medication. Trade names were often used as means of identification, while generic names, actions, colors, shapes, and common usage names were used less frequently [9], Print media, family and friends [10], chemists, general and private medical practitioners [11], and people who frequently interact with the public are all potential sources of drug information. Among the young, family members, particularly the mother (for therapeutic purposes) [12], are sources of drug information.

Public health professionals should be interested in studies on factors influencing the pattern of this practice due to its potentially harmful repercussions, especially in communities with high levels of illiteracy. This guided the conduct of the study to identify the key variables that affect the self-medication pattern in the population of Karachi, Pakistan, and to formulate sensible suggestions.

Material and Method

Cross-sectional questionnaire research was used in this study. Three elements made up the designed questionnaire: demographic information; self-medication practices for minor ailments and factors impacting self-medication. Responses were

collected from the general population of Karachi, Pakistan. The inclusion criteria for this study required that participants be at least 18 years old, have experienced one or more minor illnesses within the previous year, reside in the aforementioned region, be independent in their day-to-day activities, and be able to make healthcare decisions. There were 350 respondents in the sample. Sampling was done in a variety of public places, including shopping centers, parks, restaurants, bus stops, and railway stations. Respondents who decided to participate provided verbal consent. After that, respondents completed the self-medication questionnaire. Microsoft Excel 2016 was used to compile and evaluate the data. Response frequencies and percentages were computed.

Results

The respondents' median age was 29–38 years, which made up 33.42% of the sample. 34.57% of the respondents had at least a graduation, compared to 18.57% with only primary education, or secondary education 29.42%, and 7.72% with no formal education. The majority of respondents (59.14%) were married, followed by singles (29.14%), divorced (7.14%), and widowed (4.58%) (Table: 1).

Table: 1 Demographic Data of Respondents

Characteristics		Frequency of the Respondents	Percentage
Age	18 – 28 years	72	20.57
	29 – 38 years	117	33.42
	39 – 48 years	96	27.42
	49 – 58 years	53	15.14
	58 above	13	3.45
Education	No Formal Education	27	7.72
	Primary	65	18.57
	Secondary	103	29.42
	Graduate	121	34.57
	Postgraduate	34	9.72
Marital Status	Single	102	29.14
	Married	207	59.14
	Divorced	25	7.14
	Widowed	16	4.58

Medical professionals and other medical staff were the most common sources of knowledge about the medications they used (38.42%), followed by

advertisements, family members, and prior disease experiences (41.67%). The source of information from the patient’s medicine dealer (Pharmacy) was (19.91%) (Figure: 1).

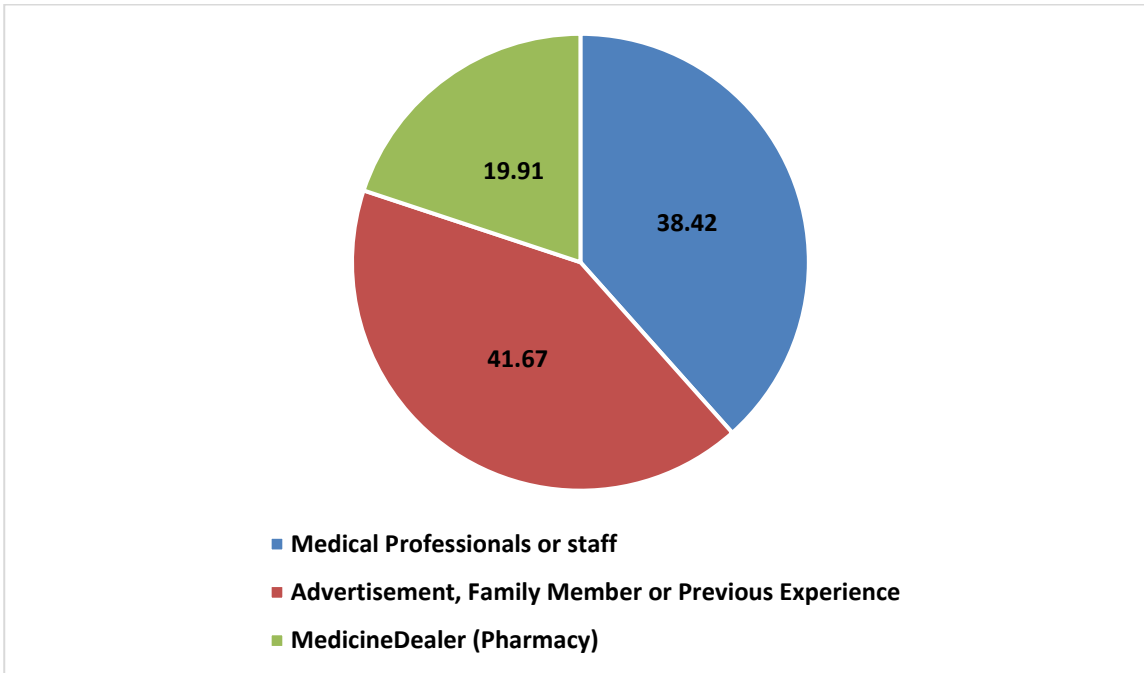


Figure: 1. Source of Information.

Trade and generic names were the most popular method of recognition (57.82%), followed by names often used (28.53%) and colour (13.65%) (Figure: 2). The respondents' educational level and recognition by trade or generic name were

positively correlated. It was (27.34%) for those with no formal education (illiterates), and (72.66%) for those with any formal education. On the other hand, the majority of illiterates (62.83%) and those with only an elementary education (37.17%) recognized their prescriptions by colour.

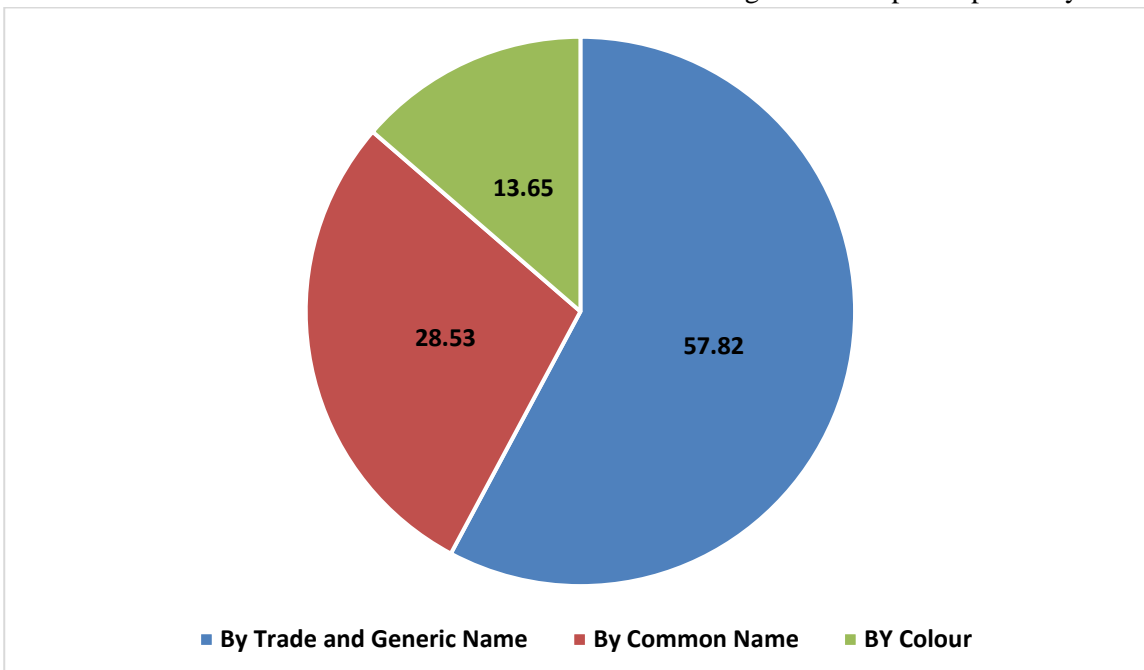


Figure: 2. Recognition of Medicine.

(63.77%) of the respondents believed it had cured their illness, while (23.97%) and (12.26%) claimed

it had saved them time and money and given them a sense of independence to take care of themselves.

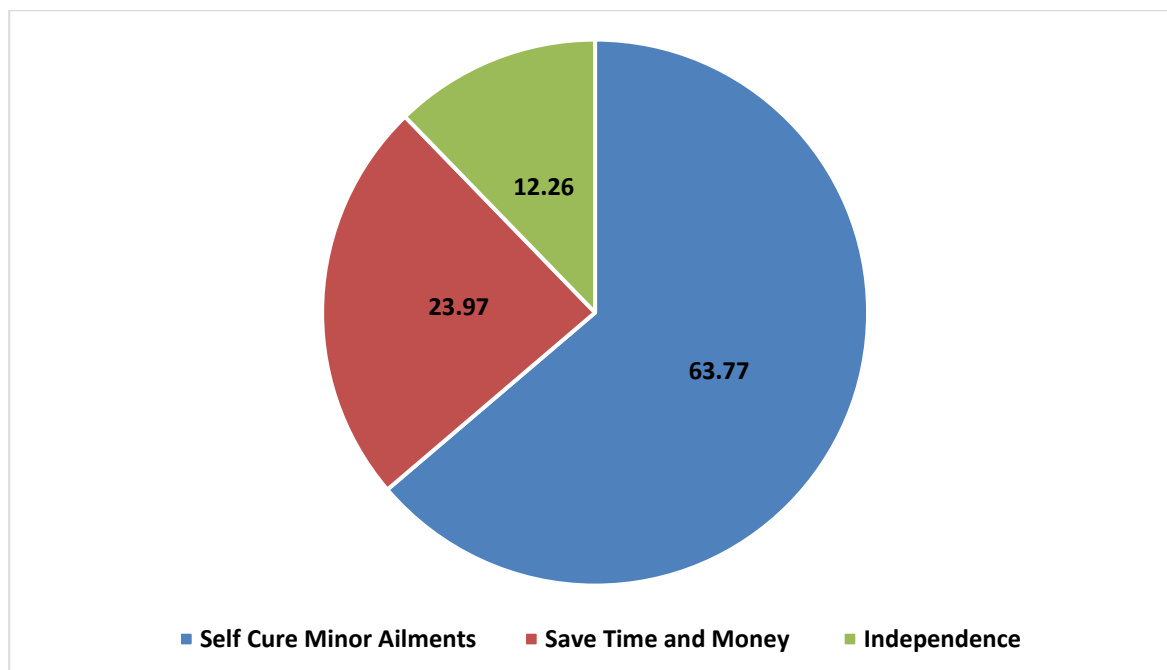


Figure: 3. Self-Medication Usage Reasons.

Discussion

The observation of the study was that the majority of respondents knew the brand- or generic name of their drugs. The ability of more educated respondents to clearly read the label on the medications they consume may account for the positive correlation between the education of the respondents and recognition of medications by trade or generic name. This may not be possible for those with little to no formal education. A previous study showed the usage of self-medication among medical students due to the same high levels of education and literacy [13].

However, as younger responders, they have a tendency to rely more on outside information sources including the media, adult family members, peer groups, advertisements, and personal experience with illnesses. Possible explanations include the ease with which these techniques might influence the younger age group [11, 12].

This study found that education, whether formal or informal, plays a significant role in determining patterns of self-medication. Through the media and local government authorities, populations must have access to accurate and understandable information about the intended use of each drug as well as the benefits and risks of using them,

including for self-medication. This information must be provided in a language that Pakistani populations can easily understand. The management of common pathologies, when a patient should see a doctor, and potential issues caused by using the wrong medications or buying prescription drugs from untrained individuals like neighbourhood drug hawkers, and drug dealers might all be highlighted in this material. Regular education could have an effect on large sectors of the population, who, in turn, may directly influence their family and friends. Reading prescription labels clearly allows a person to get familiar with the dosage, duration, risks, and side effects of the drugs they are taking. This is made possible by literacy instruction.

These findings thus highlight the need for public education on the value of using accessible healthcare experts, such as general practitioners and community pharmacists, as a first step in promoting appropriate self-medication behaviour. It is equally important to acknowledge that initiatives to support responsible self-medication should go beyond general public education. In order to foster a healthcare system that prohibits unchecked self-medication, increased involvement by regulatory authorities and professional bodies with the relevant healthcare practitioners should be promoted.

Conclusion

One crucial aspect of the investigation into reasonable drug use is the evaluation of self-medication. Future interventional programs should be built on the research's findings in order to maximize benefits and reduce risks. In order to accomplish enhancing current public education initiatives supported by the Ministry of Health in order to encourage individuals to make informed drug decisions. The health authorities must also put into effect their rules banning the sale of medicines without a prescription. Implementing mandated continuing education programs for Pharmacists and their assistants so that pharmacy staff can assist customers in making informed decisions about their health.

Reference

1. Department of Economic and Social Affairs, United Nations Population Division (2017). World Population Prospects: The 2017 Revision.
2. Hughes, C. M., McElnay, J. C., & Fleming, G. F. (2001). Benefits and risks of self medication. *Drug safety*, 24, 1027-1037.
3. Bennadi, D. (2013). Self-medication: A current challenge. *Journal of basic and clinical pharmacy*, 5(1), 19.
4. Porteous, T., Bond, C., Hannaford, P., & Sinclair, H. (2005). How and why are non-prescription analgesics used in Scotland?. *Family Practice*, 22(1), 78-85.
5. Yousef, A. M. M., Al-Bakri, A. G., Bustanji, Y., & Wazaify, M. (2008). Self-medication patterns in Amman, Jordan. *Pharmacy World & Science*, 30, 24-30.
6. Bradley, C. P., & Bond, C. (1995). Increasing the number of drugs available over the counter: arguments for and against. *British Journal of General Practice*, 45(399), 553-556.
7. Kennedy, J. G. (1996). Over the counter drugs. *BMJ*, 312(7031), 593-594.
8. Ferris, D. G., Dekle, C., & Litaker, M. S. (1996). Women's use of over-the-counter antifungal medications for gynecologic symptoms. *J Fam Pract*, 42(6), 595-600.
9. Ranno, B. S., Wardlaw, G. M., & Geiger, C. J. (1988). What characterizes elderly women who overuse vitamin and mineral supplements?. *Journal of the American Dietetic Association*, 88(3), 347-348.
10. Pedersen, W. (1989). Young people's use of psychopharmaceuticals--self medication and intoxication. *Tidsskrift for den Norske Laegeforening: Tidsskrift for Praktisk Medicin, ny Raekke*, 109(17-18), 1905-1908.
11. Olatunde, A. (1979). Self medication: benefits, precautions and dangers. Macmillan Press Ltd, 4 Little Essex Street, London WC2R 3LF.
12. Okolo, A. O., & Nwankwo, I. U. (2019). Patterns And Effects Self-Medication In Nigeria: A Review Of Literature With Comparative Analysis Of Practices In Selected Nation States. *Zik Journal of Multidisciplinary Research*, 2(1).
13. FAROOQI, U. G., KHAN, F. A., IQBAL, J., KHALID, A. Y., SALEEM, M. A., & MUSTAFA, G. (2023). A Cross-Sectional Survey To Evaluate Self-Medication Among Medical Students In Karachi, Pakistan. *Journal of Positive School Psychology*, 1178-1182.