ORIGINAL ARTICLE

STUDY OF NON-COMPLIANCE AND ITS REASONS IN OUTDOOR PATIENTS WITH HYPERTENSION: A QUESTIONNAIRE-BASED SURVEY

Fazal Hassan[1], Sohail Akhtar[2], Fazal E Haq[3]

Authors' Affiliation

[1,2] Department of Mathematics and Statistics, The University of Haripur Haripur

[2] Department of Pharmacy, Gomal University Dera Ismail Khan

Corresponding Author

Fazal Hassan

M.Phil. Scholar, Department of Mathematics and Statistics, The University of Haripur Haripur

Email:fazalhassan0349@gmail.com

ABSTRACT

Objective: To determine the factors for non-compliance in patients with hypertension who are treated at a public hospital.

Material & Methods: The study involved individuals with hypertension who were visiting Paharpur THQ Hospital. The study recruited patients who were willing to engage in conversations with pharmacists regarding their concerns about medication. Data was gathered by distributing questionnaires to evaluate adherence. A total of 50 patients, consisting of 32 males and 18 females, were picked at random based on their prescriptions.

Results: Although 18 (36%) of patients reported unfavourable pharmacological effects, 34 (68%) did not inform their doctors. Noncompliance was induced by side effects in 41 cases (82%). 39 (78%) of patients are given drug explanations by their doctors. 43 (86%) of patients were unable to pay for their medications. 39 people (78%) stuck to their usual regimen. 42 (84%) of those polled ignored their prescriptions, and 36 (72%) stopped taking their medications when their symptoms improved**.**

Conclusion: The study revealed that hypertension patients who visit the outpatient department of the public hospital in Paharpur are prone to non-compliance. This is mostly attributed to their economic condition, the side effects of their medicine, the absence of nearby pharmacies, the complexity of their treatment regimen, and their job schedule.

Key Words: Compliance, Hypertension, Medication, Treatment.

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INTRODUCTION

Non-compliance or reluctance to comply in medicine refers to a situation where a patient fails to follow a recommended prescription or sticks to a prescribed course of treatment.[1] A person who demonstrates a lack of conformity is seen as non-compliant. Observance of prescribed drug regimens has been noted since the era of Hippocrates.[2] In recent years, there has been a significant amount of study undertaken on patient medication compliance. Studies have shown that between one-third and one-half of all patients do not comply with medical recommendations. However, there are varied opinions among writers regarding the specific causes of this high non-compliance rate.[3] Throughout history, healthcare experts have been aware that a significant number of patients do not comply with the treatment provided to them. Over the past twenty years, there has been a noticeable increase in non-compliance. The issue of non-compliance in several medical disciplines and healthcare professions has been confirmed via extensive research. Clinical pharmacy is associated with the most significant challenges in patient non-compliance.[4] "Rational non-compliance" pertains to conscientious individuals who intentionally deviate from following their prescribed treatment

regimen. The primary cause of most cases of acceptable non-compliance is basic forgetfulness, even though there are various other explanations. The management of patients with hypertension has become a growing concern in recent years.[5] The estimated worldwide prevalence of hypertension in 2010 was approximately 1.4 billion people, and it is expected to rise to over 1.6 billion by 2025. This increase in cases can result in higher rates of illness and death. Hypertension can lead to many complications such as cardiovascular disease, renal disease, and retinal impairment.[6] Additionally, individuals with hypertension are more likely to experience strokes. Non-compliance is a common, widespread, and essential issue in the management of hypertension. Medication compliance refers to the degree to which a patient adheres to the clinical guidance provided by their physician or pharmacist.[7] Non-compliance, on the other hand, refers to the patient's failure to follow the prescribed treatment regimen. Non-compliance is a prominent concern across all patient age groups, ranging from children to older adults.[8] This is applicable to nearly all chronic medical conditions and environments. Non-compliance is currently regarded as the most significant issue in the healthcare systems of both developed and developing countries.[9] In Pakistan, there is a rather high prevalence of Non-compliance to drug therapy. The alleged factors contributing to non-compliance include insufficient comprehension regarding the advantages of treatment, limited access to healthcare resources, the difficulty to afford medications, and the occurrence of adverse effects. Poor societal infrastructure, patients' limited understanding of mental illness, and insufficient support from caregivers are the main reasons for non-compliance. Additional factors contributing to non-compliance were patients' perceptions of pharmacological inefficacy and the presence of detrimental physical side effects.

MATERIAL AND METHODS

The subjects of the study were outside patients from THQ Hospital in Paharpur. The patients were chosen for the study based on their willingness to address drug-related issues with pharmacists freely. This was a cross-sectional study in which patients' behavior and motivation for pharmaceutical therapy were assessed using interviews. Armed with a questionnaire, a pharmacy student interviewed the patients to determine whether they were compliant or non-compliant. A total of 50 patients and prescriptions were chosen randomly, of which there were 32 males and 18 females. The questionnaire captured the patient's personal information, such as name, age, weight, gender, marital status, education, the attendant's relationship, address, and socio-cultural background. The patients were then asked about their medication compliance and non-compliance by the format of the supplied questionnaire.

RESULTS

Although 34 (68%) of individuals were suffering drug side effects, only (18) 36% reported these side effects to their healthcare providers. Noncompliance was attributable to adverse effects in 41 (82%) of patients. 39 (78%) of patients comprehend the medication information provided by their doctor. The patients' economic position was also a factor in their non-compliance. 43 (86%) of patients were unable to purchase the medications. **(Table 1)**

Patients' medication-taking habits are often influenced by their job schedules. 39 (78%) of patients reported that their job routine included adhering to their recommended regimen. Travel was another factor that contributed to noncompliance; 42 (84%) patients indicated they forgot to take their medications when they left the house. When their symptoms improve, 36 (72%) of patients discontinue their prescription. The majority of patients were also pleased with the physician's behaviour, which did not play a significant role in non-compliance. 50 (100%) of the patients preferred the once-daily regimen over taking medications more than once. 50 (100%) patients find it difficult to travel significant distances to refill their medicines. **(Figure 1)**

Table 1: Participant responses to the survey questions

Question	Yes %	No %
Do you understand the information provided by the doctor?	39 (78%)	11 (22%)
Does the pharmacist/storekeeper provide the information about the medicines?	27 (54%)	23 (46%)
Do you experience any side effects after taking your medicines?	34 (68%)	16 (32%)
Have you ever reported the side effects to a pharmacist/physician?	18 (36%)	32 (64%)
Do you have economic constraints in refilling your prescriptions?	43 (86%}	7 (14%)
Do your work routine disturb your medicine-taking routine?	39 (78%)	11 (22%)
Do you think your medicines are not working?	38 (76%)	12 (24%)
Have you quit your medicines due to unusual effects?	41 (82%)	9 (18%)
Are you aware of the severity of your disease?	36 (72%)	14 (28%)
When you travel or leave home, do you forget to take medicines?	42 (84%)	8 (16%)
Do you forget to take medicines when you are working? If yes then	36 (72%)	14 (28%)
Have you ever cut back or stopped taking your medicine without telling your doctor because you felt worse when you took it	42 (84%)	8 (16%)
When you feel like your symptoms are under control, do you sometimes stop taking your medicines	36 (72%)	14 (28%)
Are you satisfied with the behaviour of the physician/pharmacist?	31 (62%)	19 (38%)
Does the behaviour of the pharmacist/physician discourage you?	10 (20%)	40 (80%)
Do you prefer taking medicines once a day instead of taking them more than one time?	50 (100%}	0 (0%)
Do you feel reluctant to refill your prescription due to the long distance from a pharmacy?	41 (82%)	9 (18%)
Do you easily understand information if the consultation and counselling are provided in your native language?	50 (100%)	0 (0%)

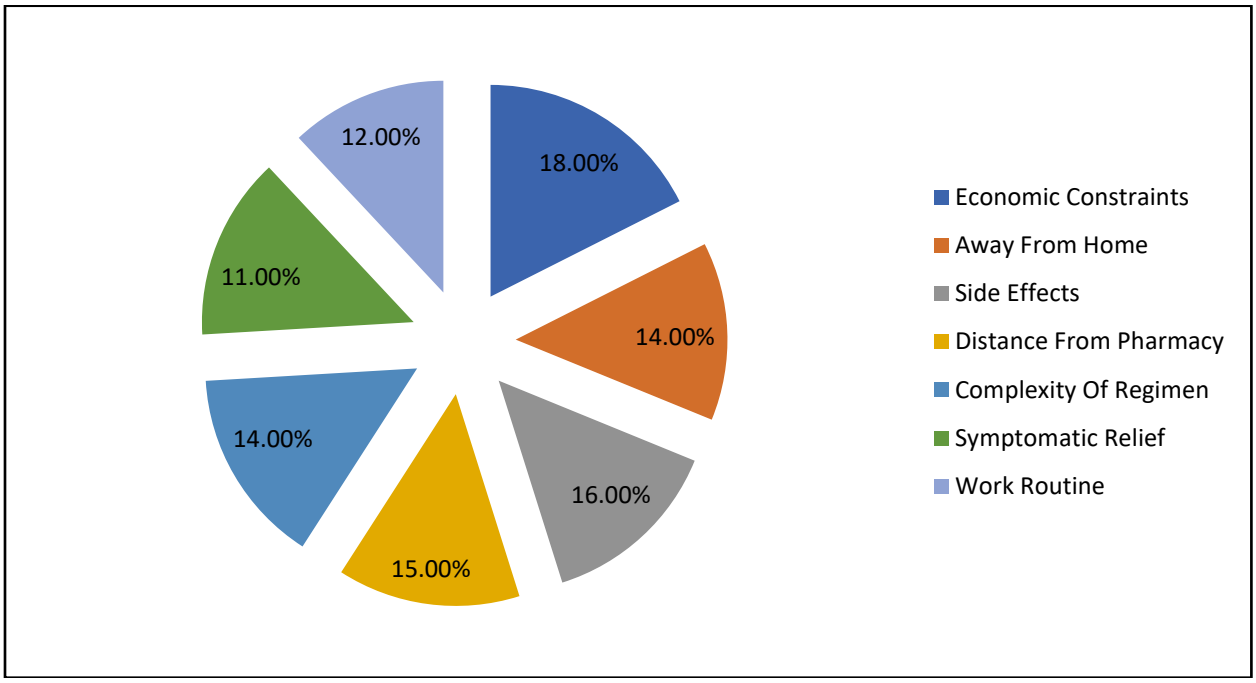

Figure 1: Major factors contributing to non-compliance

DISCUSSION

According to the findings of an analysis of the data collected from hypertension patients who visited the outside patient department of the public hospital in Paharpur, the most significant factor that contributes to non-compliance is the financial constraints that patients face while trying to purchase medications. Financial constraints are reported to be the most common factor for non-adherence with medications in developing countries.[10] In addition to financial constraints, other factors that contribute to non-compliance include long-distance pharmacies from patients' residences, side effects associated with the patient's prescribed medicines, and when patients are away from their homes, the complexity of the dosage regimen, the patient's beliefs about the effectiveness of drugs, their knowledge of the severity of their disease, and the work routine of the patients.' Literature also suggests that non-compliance is more common in rural areas as generally, pharmacies are far away.[11] Similarly, the non-availability of personal transport facilities is also a factor reported in previous studies that hinders patients from showing compliance with their medications.[12] In accordance with the findings of current study, previous research studies also reported that disbelief about the effectiveness of drugs and lack of knowledge regarding the severity of their disease are prominent constraints to comply with prescribed medications.[13,14] The manner in which the dispenser and the physician carried themselves left the patients with a positive impression. These were not the primary causes that led to the non-compliance; rather, other variables contributed more significantly. The vast majority of individuals were not informing their physicians or pharmacists about the adverse reactions that were occurring as a result of the medications they were taking. Evidence suggests that lack of effective communication between patients and healthcare providers compromises the compliance of patients with medications.[15,16]

CONCLUSION

The following conclusion is drawn from the study: the major contributing factor to non-compliance in hypertensive patients visiting the outpatient department of the public hospital in Paharpur is the patients' economic status; other factors contributing to non-compliance include when the patient is away from home, side effects associated with the medications, unavailability of pharmacies in their local territory, the complexity of the regimen, and the work routine of the patients. The behaviour of the dispenser and physician does not significantly differ.

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