Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

The Pillars of Safety: Unveiling the Impact of Medication Usage on Public and Patient Wellbeing

Zaid Khan[1*], Ramya CV[2], Mekkanti Manasa Rekha[3]

[1,2]Pharm D, Researcher, Department of Pharmacy Practice, Aditya Bangalore Institute of Pharmacy Education and Research, Bengaluru, Karnataka, India.*
[3]Associate Professor, Researcher, Department of Pharmacy Practice, Aditya Bangalore Institute of Pharmacy Education and Research, Bengaluru, Karnataka, India.

Corresponding Email:[1]zaidkhan9515@gmail.com*

Received: 23 October 2023 **Accepted:** 09 January 2024 **Published:** 23 February 2024

Abstract: Background: The comprehensive management of various health conditions within the community is heavily reliant on the crucial role of medications.
Objective: The primary objective of this research is to investigate medication usage patterns, adherence, and associated factors among a diverse participant pool. The study aims to assess the prevalence of prescription medication use, consumption patterns, adherence rates, and the methods employed by participants for managing their medicines. Furthermore, the study explores participants' experiences with side effects and evaluates their satisfaction with prescribed treatments.
Methods: A prospective cross-sectional design was employed for data collection, utilizing a self-administered Medication Usage Survey distributed through Google Forms. Participants were recruited through various channels, and data were collected anonymously.
Results: A total of 103 participants contributed to the study, with a diverse demographic composition. The majority identified as female (60.19%), and participants spanned various age groups, reflecting a comprehensive representation. Geographically, the study included participants from multiple locations, with Bengaluru being the predominant location (80.58%). Participants reported diverse health conditions, with 69 individuals (66.99%) on prescription medications. Consumption patterns revealed that 57.3% took medications daily, while adherence varied, with 36.9% reporting missed doses. Side effects were reported by a small percentage (12.66%) of participants, and various methods were employed for managing medicines. Overall, treatment satisfaction varied among participants.
Conclusion: This research provides valuable insights into medication usage patterns and associated factors among a diverse participant pool.

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

Keywords: Medication, Healthcare, Medication Management.

1. INTRODUCTION

The management of diverse health conditions within the community heavily relies on the pivotal role of medications. This indispensability is underscored by several key aspects:

Systemic Conditions:
Individuals grappling with multiple comorbidities often necessitate pharmacological interventions to effectively address their health concerns, albeit with potential repercussions on oral health.[1]

Role of Informal Caregivers:
Informal caregivers, comprising family members and friends, assume a vital responsibility in overseeing medication regimens and furnishing physical assistance to individuals requiring care.[2]

Osteoporosis Challenges:
Globally pervasive issues such as hormone related and drug induced osteoporosis underscore the significance of medications. Notably, estrogen deficiency and glucocorticoid induced osteoporosis emerge as primary contributors to hormone related and drug induced osteoporosis, respectively.[3]

Mental Health Considerations:
The management of mental health issues among schoolchildren places a distinctive responsibility on school nurses. It is noteworthy that a substantial proportion of these healthcare providers report inadequate training in assessing, recognizing signs and symptoms, and implementing therapeutic interventions for mental health challenges in children during their educational programs.[4]

Movement Disorders and Pharmacological Influences:
Drug induced movement disorders, a frequently underestimated and underdiagnosed phenomenon in clinical practice, significantly impact a considerable segment of the population. Various abnormal movements, including myoclonus, drug induced parkinsonism, tardive dyskinesias, and dyskinesias, are associated with both prescribed medications and illicit drugs.[5]

In essence, medications assume a paramount role in the comprehensive management of diverse health conditions within the community, addressing systemic issues, aiding informal caregivers, and navigating challenges in osteoporosis, mental health, and movement disorders. as outlined in a 2014 research publication, the misuse of prescription medications stands out as a significant healthcare issue, with potential consequences including the development of addiction, escalated healthcare expenses, and severe harm to patients.[67] The integration of mobile health emerges as a pivotal strategy in tackling prescription

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

medication abuse, involving the continuous monitoring of patients' health status, tracking medication usage, and facilitating timely connections with healthcare professionals for appropriate interventions[89]. This underscores the extensive impact of medications in contemporary healthcare and underscores the urgency for inventive approaches to tackle issues related to medication use.[10]

The Significance of Ensuring Medication Safety in the Healthcare Domain is Unequivocal, Underscored by Empirical Findings Elucidating Key Facets:
Educational Imperatives for Healthcare Professionals:
The imperative to impart comprehensive training to healthcare professionals in the domains of medication safety, error mitigation, and adept reporting mechanisms is indispensable for the safeguarding of patient wellbeing.[11]

Critical Role of Medication Error Reporting:
The ramifications of medication errors on patient safety are profound. The establishment of robust reporting systems, coupled with bespoke preventive strategies, is imperative to ameliorate patient safety and mitigate the incidence of medication errors.[12]

Crucial Role of Medication Reconciliation:
Hospitals are susceptible to medication discrepancies, posing inherent risks to patients and escalating healthcare expenditures. The meticulous process of medication reconciliation assumes paramount importance in mitigating these errors, with pharmacists assuming a pivotal role in this endeavor.[13]

Intersectionality of Patient Safety and Physical Therapy:
The integration of pharmacological knowledge into the education of physical therapists is integral. These healthcare professionals play a pivotal role in advancing medication safety by vigilant monitoring of the effects of medications on physical functionality, thereby contributing to holistic patient care.[14] medication safety emerges as an overarching priority in healthcare, encapsulating multifaceted dimensions such as professional training, error reporting, reconciliation processes, and its profound implications for patient safety and the domain of physical therapy.[15]

2. RELATED WORKS

The Prevailing Landscape of Medication Utilization and Safety Can Be Succinctly Encapsulated through the Following Observations:
Prevalence of Medication Discrepancies in Hospital Settings:
Noteworthy apprehensions persist regarding medication discrepancies within hospital environments, constituting a substantial hazard to patient wellbeing and contributing to escalated healthcare expenditures. A comprehensive investigation conducted in Brazil revealed that 98.5% of patients maintained a regimen of continuous use medications at home, averaging 5.5 medications per patient. A staggering 80.2% of these cases exhibited discrepancies, with factors such as systemic arterial hypertension, hypercholesterolemia,

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

vascular disease, the quantity of medications at home, and inadequate documentation in medical records correlating significantly with such disparities.[16]

Public Awareness Imperatives in Pakistan:
A meticulous inquiry into the awareness levels of the general public regarding medication information, safety, and adverse drug reactions in Pakistan underscored the pivotal role of prescription adherence and educational attainment. Notably, patients procuring medications with prescriptions demonstrated heightened knowledge, while educational attainment emerged as a determinant factor. The study posited that fostering public awareness concerning medication information and safety, along with comprehensive information dissemination by manufacturers, assumes paramount significance in empowering patients to make informed health decisions.[17]

Comprehensive Examination of Medication Error Dynamics in Indonesia:
A dedicated investigation in Indonesia sought to delineate the contributory factors to medication errors within pharmaceutical installations in research hospitals. The discerned factors encompassed prescribing errors, transcribing errors, dispensing errors, and administration errors. The study underscored the imperative of establishing robust safety guidelines to preclude the occurrence of medication errors, thereby enhancing patient safety.[18]

Integral Role of Healthcare Professional Training in Medication Safety:
Essential to the overarching theme is the imperative of imparting specialized training to healthcare professionals in the realms of medication safety, error prevention, and reporting. Of particular note is the pivotal role of pharmacological education in the professional training of physical therapists. The latter, integral to the optimization of medication safety, assumes a vigilant stance in monitoring patient medication profiles, assessing for potential adverse effects on physical functionality, and discerning any deleterious impact on physical wellbeing.[19][20] the prevailing milieu of medication utilization and safety is characterized by the pervasive issue of discrepancies, imperatives of public awareness, intricate dynamics of medication errors, and the foundational significance of healthcare professional training. Addressing these facets emerges as an imperative for the amelioration of patient safety and the mitigation of medication related errors and complications.
A compendium of pertinent research studies provides insightful perspectives into the ramifications of medication on public health. The salient findings from these studies are elucidated as follows:

Enhancing Public Awareness in Pakistan:
In Quetta, Pakistan, an investigation elucidated the pivotal role of public awareness in disseminating information about medicines, ensuring safety, and comprehending details provided by manufacturers. The study revealed that individuals obtaining medications through prescriptions and those possessing higher educational qualifications demonstrated a heightened level of knowledge, emphasizing the centrality of informed patient awareness for medication related information.[21]

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

Medication Discrepancies in Southern Brazil:
A study conducted in Southern Brazil illuminated the prevalent misuse of prescription medications and the substantial occurrence of medication discrepancies within hospital settings. Emphasis was placed on the imperative of medication reconciliation as a pivotal strategy for mitigating errors, with a particular spotlight on the indispensable role of pharmacists in fortifying medication safety standards.[22]

Pharmacists' Perspectives in the United States:
In the United States, an inquiry scrutinized pharmacists' viewpoints concerning the viability and appropriateness of leveraging medication therapy management (MTM) services to address public health priorities. The majority of pharmacists acknowledged the significance of various public health imperatives, including smoking cessation and immunizations, signaling the potential of pharmacists to contribute substantively to these priorities and enhance overall patient health outcomes.[23]

Analyzing Medication Error Dynamics in Indonesia:
Research undertaken in Indonesia delved into the intricate factors precipitating medication errors and proposed solutions for pharmaceutical establishments within research hospitals. The study identified prescribing, transcribing, dispensing, and administration errors as prominent contributors to medication errors. It underscored the critical need for establishing comprehensive safety guidelines to forestall the occurrence of such errors.[24]

Medication Errors Reporting Imperatives:
A dedicated investigation focused on the pivotal role of medication error reporting in augmenting the quality of clinical care services. The research underscored the profound repercussions of medication errors on patient safety and accentuated the efficacy of error detection and reporting systems in discerning and mitigating medication errors. The study advocated for tailored interventions and targeted training initiatives as instrumental in diminishing error rates.[25] Collectively, these research endeavors underscore the pivotal role of public awareness, medication reconciliation strategies, the engagement of pharmacists, and robust error reporting systems in grappling with medication related challenges and advancing public health outcomes.

3. METHADOLOGY

Study Design
The study utilized a Prospective cross-sectional design, collecting data at a single point in time. A self-administered Medication Usage Survey was designed and distributed through Google Forms to gather information on medication usage patterns and related factors for over a period of 20 days in the month of January 2024.

Participants and Recruitment
Participants were recruited through various channels, including social media platforms, email lists, and healthcare-related forums. Informed consent was presented at the beginning of the

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

survey, clearly stating the purpose of the study, the voluntary nature of participation, and the intended use of collected data.

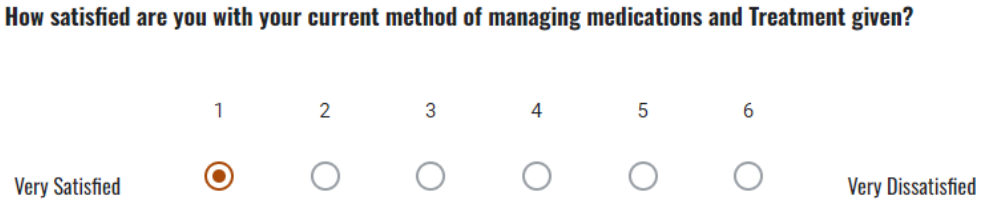
Survey Instrument

The survey was divided into five sections, covering demographics, general health information, medication usage, medication management, and additional comments. Questions were designed to elicit information on age, gender, location, chronic or acute health conditions, prescription medication use, medication adherence, side effects, and satisfaction with medication management. Survey questioner is summarized in Table 1.

Table 1. Questioner used in Medication usage survey

Q No	Section 1: Demographics
1.	Age
2.	Gender
3.	Location {City, Country}
	Section 2: General Health Information
4.	Do you have any chronic or acute health conditions? (Select all that apply) ▪ Diabetes ▪ Hypertension ▪ Heart disease ▪ Respiratory conditions (e.g., asthma, COPD) ▪ Mental health conditions (e.g., depression, anxiety) ▪ Thyroid
5.	If any other health condition you have Please specify?
	Section 3: Medication Usage
6.	Are you currently taking any prescription medications? ○ Yes ○ No
7.	If yes, please list the names of the prescription medications you are currently taking
8.	How often do you take your prescribed medications? ▪ Daily ▪ Weekly ▪ Monthly ▪ As needed
9	Have you ever missed a dose of your prescribed medication? If yes, please briefly explain why?
10.	Have you ever experienced any side effects from your medications? If yes, please describe?
	Section 4: Medication Management
11	How do you manage your medications? (Select all that apply) ▪ Pill organizer ▪ Medication reminder apps ▪ Written schedule ▪ None, I don't have a specific method

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

12	How satisfied are you with your current method of managing medications and Treatment given? 
	Section 5: Additional Comments
13	Is there anything else you would like to share about your experience with medication usage?

Multilingual Approach
The survey was presented in two languages, English and Kannada, to cater to a diverse participant pool and ensure inclusivity.

Data Collection
Participants were guided through the survey with clear instructions for each section. Responses were collected anonymously to ensure participant privacy. The survey included a section for participants to provide additional comments, allowing for qualitative insights.

Data Analysis
Quantitative data, such as age distribution and medication adherence, were analyzed using statistical methods.
Qualitative data from open-ended questions were subjected to thematic and statistical analysis to identify common themes and patterns.

4. RESULTS AND DISCUSSION

Total Number of Participants and Gender Distribution among Subjects
A total of 103 responses from the participants/ subjects were recorded and opted for data analysis. in the gender distribution of the participants, it is observed that among the total respondents, 39 individuals identify as male, constituting one segment of the sample. A larger proportion of the participants, numbering 62, identify as female, reflecting a notable presence of women in the study. Additionally, 2 participants chose not to disclose their gender preference, emphasizing the importance of respecting individual privacy and providing an inclusive environment for participants to engage in the study without divulging personal information. This gender-diverse composition contributes to a comprehensive representation, acknowledging the varied perspectives that may arise based on gender identity or preference within the research context. Summary of total number of subjects /participants and gender distribution are shown in Table2.

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

Total number of participants	*n* =103	**Percentages**
Gender		
Male	39	37.86 %
Female	62	60.19 %
Preferred not to say	2	1.94 %

Table 2. Total number of participants and gender distribution

Age Distribution Analysis

The age distribution of the participants is diverse, covering a broad spectrum of age groups. Among the total participants, the largest cohort consists of 44 individuals aged between 18 to 24(42.71%), reflecting a significant portion of the sample. Following closely, there are 13 candidates in the 25 to 34 age range (12.62), showcasing a substantial representation in the early adulthood phase. The age group of 35 to 44 is represented by 9 participants (8.73%), and the subsequent age brackets of 45 to 54 and 55 to 64 include 13(12.91%) and 10 (9.70%) candidates, respectively. Additionally, there are 7(6.79%) participants who fall into the 65 and older category, indicating a presence of older individuals in the sample. Furthermore, there are 6(5.82%) participants under the age of 18, demonstrating the inclusion of younger individuals. This diverse age distribution highlights the inclusion of participants spanning across different life stages, enriching the overall demographic representation in the study. Summarization of age of subjects are shown in Table 3.

Age Range	**Number of subjects**	**Percentage %**
Under 18	6	5.82%
18 to 24	44	42.71%
25 to 34	13	12.62
35 to 44	9	8.73%
45 to 54	13	12.91%
55 to 64	10	9.70%
65 and older	7	6.79%
n	**103**	**100%**

Table 3. Distribution of age range of subjects

Central Tendency Analysis for Age of Subjects

The central tendency values calculated for the age distribution offer valuable insights into the central characteristics of the dataset. The mean, with a value of 42.09, serves as an average representation of the ages, indicating that, on average, participants are around 42 years old. The median, at 44, represents the middle point when the ages are arranged in ascending order, offering a robust measure that is less influenced by extreme values. The range, calculated as 47, denotes the span between the youngest and oldest ages, providing a measure of the dataset's variability. Finally, the geometric mean, at 38.96, provides a perspective on the average rate of change in ages. Together, these central tendency metrics offer a

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

comprehensive understanding of the age distribution, considering both the central location and the spread of ages within the dataset. Central tendency analysis summarized in Table 4.

Table 4. Central tendency analysis for age distribution

Central Tendency	Interpreted Values
Mean (Average)	42.09
Median	44
Range	47
Geometric Mean	38.96

Geographical Location of Subjects Involved in the Study.

The participants in the study are geographically diverse, representing various locations. The majority of the participants, comprising 83 individuals, are from Bengaluru, constituting 80.58% of the total sample. Maharashtra constitutes of 4.85% with 5 participants.

Table 5. Distribution of geolocation of the subjects**.**

Location	Number of Participants From Each Location	Percentage
Bengaluru	83	80.58
	5	4.85%
Georgia	4	3.88
	3	2.91%
Bidar	1	0.97%
Bijapur	1	
Gurugram	1	
	1	
	1	
	1	
	1	
Andra Pradesh	1	

Georgia follows with 4 participants, contributing 3.88%, and from Mandya 3 participants response was recorded constituting 2.91% to the overall distribution. Bidar, Bijapur, Gurugram, Andra Pradesh, and other locations each have a single participant, collectively forming the remaining 7.76% of the study population. This distribution underscores the multicultural and multi-regional nature of the participants, offering a comprehensive perspective on the study's findings that may be influenced by the varied backgrounds and experiences of individuals from different locations. Shown in table 5.

Subjects' Health Conditions

The table 6 and figure 1 presents information on the health conditions of the subjects, indicating the number of cases for each disease condition. There were 6 cases of thyroid conditions, 3 cases of diabetes, 4 cases of hypertension, and 9 cases of respiratory conditions such as asthma and COPD. Additionally, there were 9 cases where individuals had a

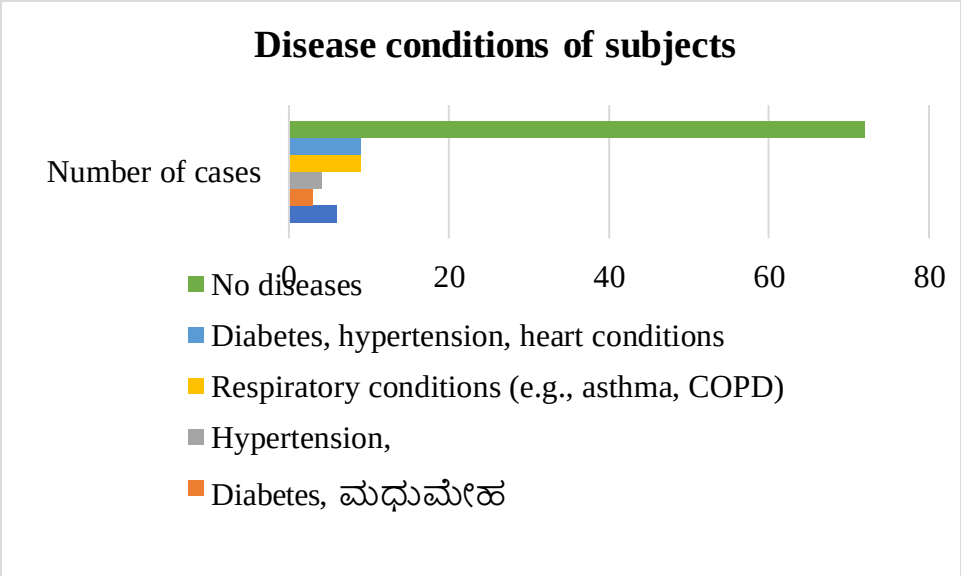
Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

combination of diabetes, hypertension, and heart conditions. A majority of the subjects, accounting for 72 cases, reported having no diseases.

Table 6. Dispersion of disease conditions

Desease Condition	Number of Cases	Percentage
Thyroid,	6	5.83%
Diabetes, □□□□□□	3	2.91%
Hypertension,	4	3.88%
Respiratory conditions (e.g., asthma, COPD)	9	8.74%
Diabetes, hypertension, heart conditions	9	8.74%
No diseases	72	69.09%

Figure1. Dispersion of disease conditions in the population



No of Subjects on Prescription

Out of the total sample population, 69 individuals were found to be taking prescription medications, while 34 individuals reported not taking any prescription medicines as stated in Figure 2. This information sheds light on the prevalence of prescription medication uses within the surveyed group. The group of 69 individuals taking prescription medications have diverse health needs and medical conditions that necessitate pharmaceutical intervention.

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

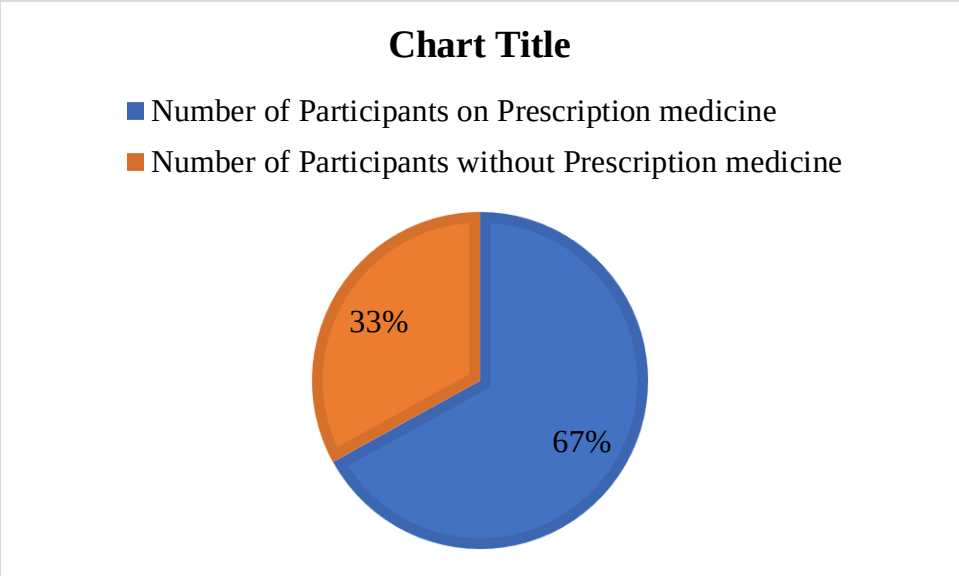


Figure 2. Differentiation of participants based on prescription medication therapy use and without medication prescription usage.

Consuming Pattern of Prescribed Medication in Participants

Among the 103 participants surveyed, 37.9% took their prescribed medications as needed, 57.3% took them on a daily basis, 2.9% took them weekly, and 1.9% took them monthly. The distribution is summarized in Table 7 below.

Table 7. Distribution of Consuming Pattern of prescribed medication in participants

Medication Frequency	Number of Participants	Percentage
As Needed	39	37.9%
Daily	59	57.3%
Weekly	3	2.9%
Monthly	2	1.9%

Missed Dose of the Medications by the Subjects

The adherence to medication regimens varied among the participants. A notable 38 individuals, constituting approximately 36.9% of the sample, forgot to take their prescribed medicine. This lapse in adherence highlights the challenges individuals may face in maintaining a consistent medication routine. Additionally, 3 participants, representing around 2.9% of the group, reported being occupied with work, resulting in a missed dose. On a positive note, the majority of the participants, totaling 62 individuals or approximately 60.2%, adhered to their medication schedule without any missed doses. This demonstrates a commendable commitment to their health and the prescribed treatment plan.

Table 8. Medication adherence among subjects

Adherence Status	Number of Participants	Percentage
Forgot to take	38	36.9%

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

Busy with work	3	2.9%
No missed doses	62	60.2%

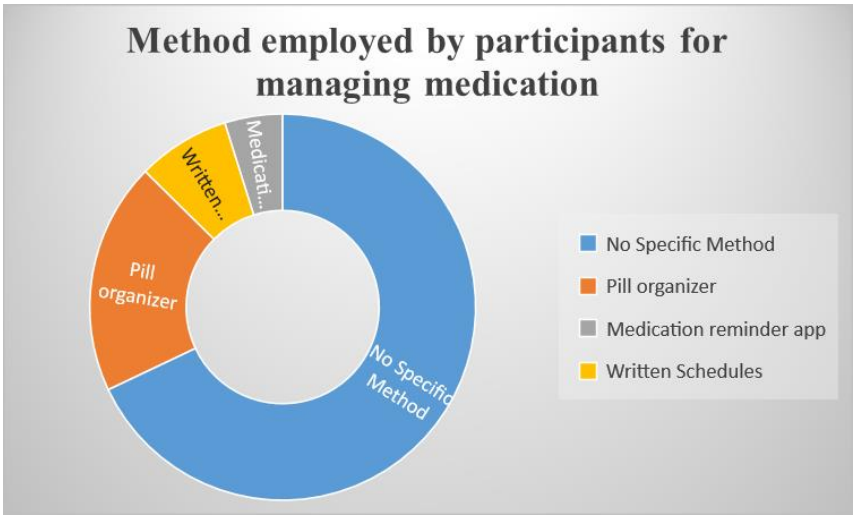
Participants Experience on Side Effects.
Out of 103 individuals surveyed, 2 reported experiencing abdominal pain, 2 reported acidity and 6 were having body aches, and 2 reported drowsiness. The remaining 91 individuals did not report any side effects.

Table 9. Different side effects observed by the participants

Side Effects	Number of Participants	Percentage
Abdominal Pain	2	2.20%
Acidity	2	2.20%
Body Aches	2	2.20%
Drowsiness	6	6.59%
No Side Effects	91	87.34%

Methods Used By Participants for Managing Medicine.
In managing their medicines, participants employed various methods. Notably, 70 individuals reported not utilizing any specific methods for managing their medication which represents 67.96%. On the other hand, 20 participants relied on pill organizers, which represents 19.41% of the total participants. Additionally, 5 individuals, constituting 4.85%, used medication reminder apps to assist them in managing their medicines. A smaller group of 8 participants, accounting for 7.76%, preferred written schedules as their chosen method for medication management.

Figure 3. Various method employed by participants for managing medication



Patients Satisfaction on Treatments

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

Treatment satisfaction was assessed among 103 participants using a rating scale ranging from 1 to 6, where 1 indicated "very satisfied" and 6 indicated "very dissatisfied." The survey elicited responses from 59 participants who reported being very satisfied (rating 1), 13 participants who chose rating 2, another 13 who selected rating 3, 7 participants who indicated moderate satisfaction with a rating of 4, 6 participants who expressed dissatisfaction with a rating of 5, and 5 participants who reported being very dissatisfied with a rating of 6. The results reflect varying degrees of treatment satisfaction among the respondents. The satisfaction scale is shown in Table 1 question number 14.

5. DISCUSSION

The utilization of medications involves a nuanced examination encompassing patient attributes, drug effectiveness, and potential adverse reactions. A notable instance underscoring the need for meticulous medication usage pertains to bisphosphonates, specifically alendronate, in the management of osteoporosis. Although bisphosphonates exhibit efficacy in diminishing the incidence of conventional osteoporotic fractures, an emerging awareness underscores a potential association between prolonged bisphosphonate therapy and the infrequent manifestation of atypical femoral fractures (AFFs). [26] This underscores the imperative to meticulously weigh the potential drawbacks and advantages associated with medication administration, emphasizing the criticality of vigilant patient monitoring for potential untoward effects. In certain instances, the utilization of decision support tools, including point-of-care viscoelastic haemostatic assays (VHAs) or computerized clinical decision support (CDS) systems, becomes pertinent for guiding medication management, particularly in intricate scenarios like the management of massive transfusions. [27]

6. CONCLUSION

In essence, this research underscores the pivotal role of medications in managing diverse health conditions within the community, addressing challenges ranging from systemic issues to mental health considerations. The study emphasizes the significance of ensuring medication safety through educational imperatives for healthcare professionals, robust error reporting systems, and the integration of pharmacological knowledge into physical therapy education. Insights from related works highlight prevalent issues globally, emphasizing the need for addressing medication discrepancies, enhancing public awareness, and establishing safety guidelines. The methodology employed a cross-sectional design with a medication usage survey, revealing diverse participant backgrounds and varying degrees of treatment satisfaction. Overall, the findings advocate for a comprehensive, multidimensional approach to tackle medication-related challenges and improve patient safety in contemporary healthcare.

7. REFERENCES

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

1. D. Critchlow, "Part 3: Impact of systemic conditions and medications on oral health," British Journal of Community Nursing, vol. 22, no. 4, pp. 181–190, Apr. 2017, doi: 10.12968/bjcn.2017.22.4.181.
2. R. L. Weir and D. L. Hoover, "Providing Physical Assistance for Family or Friends: An Overview for the Home Health Care Professional—Part 2," Home Health Care Management & Practice, vol. 35, no. 1, pp. 64–70, Sep. 2022, doi: 10.1177/10848223221123270.
3. L.-T. Wang, L. Chen, and K.-H. Chen, "Hormone-Related and Drug-Induced Osteoporosis: A cellular and Molecular Overview," International Journal of Molecular Sciences, vol. 24, no. 6, p. 5814, Mar. 2023, doi: 10.3390/ijms24065814.
4. T. Perron, T. L. Jakubowski, C. Razzi, and C. Kartoz, "Mental health assessment of the frequent visitors in the school Setting—Part 1: An overview," NASN School Nurse, vol. 36, no. 4, pp. 197–204, Mar. 2021, doi: 10.1177/1942602x21996442.
5. J. P. Rissardo, N. M. Vora, B. Mathew, V. Kashyap, S. Muhammad, and A. L. F. Caprara, "Overview of Movement Disorders Secondary to Drugs," Clinics and Practice, vol. 13, no. 4, pp. 959–976, Aug. 2023, doi: 10.3390/clinpract13040087.
6. N. A. Livingston, D. S. Berke, J. A. Scholl, M. A. Ruben, and J. C. Shipherd, "Addressing Diversity in PTSD Treatment: Clinical considerations and guidance for the treatment of PTSD in LGBTQ populations," Current Treatment Options in Psychiatry, vol. 7, no. 2, pp. 53–69, Mar. 2020, doi: 10.1007/s40501-020-00204-0.
7. U. Varshney, "Mobile health," Advancing Computing as a Science & Profession, Aug. 2014, doi: 10.1145/2633651.2633656.
8. D. Kalaria, "Complementary and Alternative Medicine: A pharmacist's perspective on patient needs," HealthcarePapers, vol. 3, no. 5, pp. 67–70, Apr. 2003, doi: 10.12927/hcpap..17113.
9. A. A. Sathio and A. M. Brohi, "The imperative role of pervasive data in healthcare," in Springer eBooks, 2021, pp. 17–29. doi: 10.1007/978-3-030-77746-3_2.
10. O. J. Odeyinka, O. A. Ajibola, and M. C. Ndinechi, "The role and trend of information and communications technology towards a pervasive healthcare system," International Journal of Information Communication Technologies and Human Development, vol. 12, no. 3, pp. 59–73, Jul. 2020, doi: 10.4018/ijicthd.20200701.oa1.
11. K. L. Miller, "Importance of medication knowledge in patient safety," Journal of Novel Physiotherapy and Physical Rehabilitation, pp. 060–061, Apr. 2017, doi: 10.17352/2455-5487.000048.
12. M. Saada, "Importance of healthcare professional training on medication safety, medication error prevention, and reporting," Wolverhampton Intellectual Repository and E-Theses, Jul. 2023, [Online]. Available: https://wlv.openrepository.com/handle/2436/625295
13. N. M. K. Elden and A. Ismail, "The importance of medication Errors reporting in improving the quality of clinical care services," Global Journal of Health Science, vol. 8, no. 8, p. 243, Dec. 2015, doi: 10.5539/gjhs.v8n8p243.
14. N. M. K. Elden and A. Ismail, "The importance of medication Errors reporting in improving the quality of clinical care services," Global Journal of Health Science, vol. 8, no. 8, p. 243, Dec. 2015, doi: 10.5539/gjhs.v8n8p243.

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

15. F. Rosenow et al., "Relative importance of clinical outcomes and safety risks of antiseizure medication monotherapy for patients and physicians: Discrete choice experiment eliciting preferences in real-world study 'VOTE,'" Epilepsia, vol. 63, no. 2, pp. 451–462, Dec. 2021, doi: 10.1111/epi.17137.
16. A. De Sá Soares, D. J. Trevisol, and F. Schuelter-Trevisol, "Medication discrepancies in a hospital in Southern Brazil: the importance of medication reconciliation for patient safety," Brazilian Journal of Pharmaceutical Sciences, vol. 57, Jan. 2021, doi: 10.1590/s2175-979020200004181064.
17. G. Khan et al., "Public awareness regarding the manufacturer provided information about medicine usage, safety, and adverse drug reactions in Balochistan, Pakistan," Frontiers in Pharmacology, vol. 14, Jul. 2023, doi: 10.3389/fphar.2023.1190741.
18. A. Arundina and K. Widyaningrum, "Numbers and potential causes of medication error in inpatient service of Rumah Sakit Islam Malang," Jurnal Kedokteran Brawijaya, vol. 31, no. 2, pp. 127–130, Oct. 2020, doi: 10.21776/ub.jkb.2020.031.02.11.
19. M. Saada, "Importance of healthcare professional training on medication safety, medication error prevention, and reporting," Jul. 31, 2023. https://wlv.openrepository.com/handle/2436/625295
20. D. Brathwaite, F. Aziz, C. Eakins, A. J. Charles, and A. Cristian, "Safety precautions in the rehabilitation medicine prescription," Physical Medicine and Rehabilitation Clinics of North America, vol. 23, no. 2, pp. 231–239, May 2012, doi: 10.1016/j.pmr.2012.02.002.
21. G. Khan et al., "Public awareness regarding the manufacturer provided information about medicine usage, safety, and adverse drug reactions in Balochistan, Pakistan," Frontiers in Pharmacology, vol. 14, Jul. 2023, doi: 10.3389/fphar.2023.1190741.
22. A. De Sá Soares, D. J. Trevisol, and F. Schuelter-Trevisol, "Medication discrepancies in a hospital in Southern Brazil: the importance of medication reconciliation for patient safety," Brazilian Journal of Pharmaceutical Sciences, vol. 57, Jan. 2021, doi: 10.1590/s2175-979020200004181064.
23. L. M. Casserlie and N. a. D. Mager, "Pharmacists' perceptions of advancing public health priorities through medication therapy management," Pharmacy Practice (Internet), vol. 14, no. 3, p. 792, Sep. 2016, doi: 10.18549/pharmpract.2016.03.792.
24. A. V. Purba, "Kesalahan dalam Pelayanan Obat (Medication Error) dan USAha Pencegahannya," Neliti, Jan. 01, 2007. https://www.neliti.com/publications/21054/kesalahan-dalam-pelayanan-obat-medication-error-dan-usaha-pencegahannya
25. N. M. K. Elden and A. Ismail, "The importance of medication Errors reporting in improving the quality of clinical care services," Global Journal of Health Science, vol. 8, no. 8, p. 243, Dec. 2015, doi: 10.5539/gjhs.v8n8p243.
26. C.-M. Kao, P. Huang, C. Ch, S.-J. Chen, and Y.-M. Cheng, "Atypical femoral fracture after long-term alendronate treatment: Report of a case evidenced with magnetic resonance imaging," Kaohsiung Journal of Medical Sciences, vol. 28, no. 10, pp. 555–558, Aug. 2012, doi: 10.1016/j.kjms.2012.04.019.

Journal of Community Pharmacy Practice
ISSN: 2799-1199
Vol: 04, No. 02, Feb – March 2024
http://journal.hmjournals.com/index.php/JCPP
DOI: https://doi.org/10.55529/jcpp.42.1.15

27. G. Miller, "Comment on: Massive transfusion experience, current practice and decision support: A survey of Australian and New Zealand anaesthetists," Informit. https://search.informit.org/doi/abs/10.3316/informit.536717069528769