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FACTORS MOTIVATING THE CHOICE OF SELF-MEDICATION OVER PRESCRIBED MEDICATION AMONG THE POPULACE OF INCHABAN, WESTERN REGION-GHANA

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ABSTRACT

Aim *To comprehensively investigate and grasp the diverse determinants that affect individuals' selections of self-medications. Its goal is to offer insights into the broader scope of healthcare provision, concentrating on understanding consumer behaviours and preferences regarding self-medication.*

Study Design *The research will employ a quantitative cross-sectional approach to investigate the determinants of self-medication choices in Inchaban. The data collected through closed-ended questionnaires administered to participants (users) of the biggest Hospital and Pharmacy store in Inchaban using purposive sampling was analyzed using statistical methods including tables, percentages and graphs by SPSS.*

Background *The healthcare landscape rapidly evolves, with an increasing trend towards patient autonomy and consumer participation in healthcare decision-making. One of the most prominent aspects of this transformation is the rise in self-medication, where individuals independently select and use medications without a prescription. This growing trend necessitates a deeper understanding of the factors influencing self-medication, as it holds significant implications for healthcare delivery, patient outcomes and public health strategies.*

Results *The results showed that there is a low willingness to seek self-medication among the populace of Inchaban, with a strong preference for prescribed medication choices. The study also demonstrated that the factors influencing self-medication choices in Ghana are varied and encompass demographic, provider, medicine, and socio-cultural factors. Of particular importance are marital status, access to formal healthcare, ease of administration of medications, trust in over-the-counter (OTC) medicine sellers and past experiences with medications which significantly influence individuals' decisions to self-medicate.*

Conclusion *It is therefore recommended that national healthcare programs include targeted education campaigns that address these specific motivators, particularly focusing on building trust in formal healthcare services and educating the public on the risks of self-medication.*

KEYWORDS: *Self-Medication, Prescribed-Medication, Determinants, Inchaban, Ghana*

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INTRODUCTION

Self-medication is recognised globally as a crucial component of healthcare systems. The World Health Organization (WHO) supports a balanced approach that promotes the accessibility of self-care options while ensuring their safe and responsible use (1). This shift towards patient-centric models empowers individuals to manage minor health concerns with over-the-counter (OTC) and herbal remedies, reflecting a broader movement toward increased healthcare autonomy. However, this trend also raises concerns about the potential misuse of medications, highlighting the need for adequate health literacy and awareness to ensure patient safety (2).

African healthcare systems are unique, facing numerous challenges such as limited infrastructure, economic disparities, and a high prevalence of infectious diseases. Despite these hurdles, self-medication remains vital to healthcare delivery, offering a practical solution for addressing common health issues, especially in resource-constrained settings. The WHO emphasizes the importance of developing regulatory frameworks in African countries to promote the responsible use of self-medications while considering regional healthcare needs (3). In West Africa, nations like Nigeria, Ghana and Senegal experience shared healthcare challenges influenced by socio-economic and cultural factors. Here, self-medication often becomes the first line of defence due to the immediacy and accessibility it offers. The West African Health Organization (WAHO) collaborates with member states to address these challenges, stressing the need to understand local determinants that shape healthcare decisions (4). Ghana has significantly improved healthcare access through initiatives such as the National Health Insurance Scheme (NHIS). However, within this expanding healthcare framework, the role of self-medication remains underexplored. The Ghana Health Service (GHS) and WHO recognize the need for a deeper understanding of community health behaviours to effectively enhance healthcare interventions (5,6).

Self-medication decisions are influenced by a complex interplay of factors, including socio-economic status, cultural beliefs, health literacy, and the influence of healthcare providers. Economic constraints, such as income levels and limited access to healthcare services, often drive individuals to choose OTC medications as a cost-effective alternative (7). Additionally, cultural beliefs shape perceptions of health and preferences for traditional remedies, which are often favoured over conventional medicine (8). Health literacy, defined as the ability to comprehend and utilise health information for informed decision-making, is another critical factor. Limited health literacy can lead to improper self-medication practices, underscoring the need for public health education initiatives to improve health outcomes (9). Furthermore, healthcare providers, particularly pharmacists, play a pivotal role in influencing self-medication behaviours through their recommendations and guidance (10).

Understanding the socio-cultural and economic factors driving self-medication can guide the development of targeted healthcare strategies. This research contributes to a refinery understanding of healthcare behaviours in Ghana, ultimately aiming to enhance patient safety and improve healthcare delivery in the region. By promoting responsible self-medication practices, stakeholders can better align healthcare services with community needs, thus supporting broader public health objectives. This study aims to explore the determinants of self-medication in the Inchaban community within the Western Region of Ghana, focusing on socio-economic, cultural and healthcare provider-related factors. By examining these determinants, the research seeks to fill a critical gap in the literature, offering insights that can inform healthcare policies, public health interventions and educational campaigns to promote responsible self-medication.

The Western Region of Ghana, particularly the Inchaban community, presents a unique case study due to its diverse socio-cultural, economic, and environmental context, including its proximity to mining activities. These factors

significantly influence healthcare-seeking behaviours, making it crucial to investigate the determinants of self-medication in this area. The WHO's Global Patient Safety Challenge emphasizes the importance of promoting safe medication practices, aligning with the current study's focus on responsible self-medication (11).

Factors Influencing Self-Medication

Self-medication is the practice of using over-the-counter (OTC) medications by individuals for self-care without professional consultation. It is often seen as a way to manage minor health conditions and is driven by factors related to consumer behaviour and accessibility. This review identifies various determinants of self-medication, including demographic characteristics, healthcare accessibility, social influences and cultural contexts.

Demographic Characteristics such as age, gender, marital status, and religion significantly impact self-medication practices, though findings are inconsistent across studies. Research indicates mixed results regarding age as a determinant. In Nigeria, individuals aged 30-39 are more prone to self-medicate due to increased financial autonomy (12). However, studies in Kenya found no significant age-related differences when controlling for socioeconomic factors (13). Women have been found to self-medicate more frequently than men in certain contexts, likely due to higher health-seeking behavior (14). However, other studies suggest that gender differences may not be as pronounced, with factors like healthcare access playing a more critical role (15). Similarly, marital status and religious status are found to influence self-medication. Single or widowed individuals may self-medicate more due to reduced social support (16), though findings from other studies show no significant link (17). Similarly, while some research suggests that strong religious beliefs may lead to a preference for professional medical consultation, others find no impact of religion on self-medication behaviours (18).

Access to healthcare services, particularly in rural areas, significantly influences self-medication. Limited access to healthcare in rural regions often leads to higher self-medication rates due to barriers like distance and cost (19). Urban settings, with better healthcare infrastructure, tend to report lower self-medication rates. Trust in OTC Vendors: Trust in the expertise of OTC medicine sellers can also drive self-medication, with studies showing a higher likelihood of self-medicating among those who trust non-professional sellers (20). Social Influences such as friends and family can influence healthcare decisions, but their impact on self-medication varies. Research in urban Canada found no significant influence from social recommendations, suggesting a preference for professional advice or self-research (21). Medication accessibility is linked to higher self-medication rates, as seen in a national survey in the United States (22). However, in some countries like South Korea, factors like healthcare costs and insurance coverage are more influential than mere accessibility (23).

Affordability constraints can drive self-medication. Higher medication costs in Canada were associated with reduced self-medication, whereas in India, barriers to formal healthcare were more influential than affordability (24,25). Perceived effectiveness is believed to increase self-medication, as individuals prefer drugs, they believe to be effective without consulting healthcare professionals (26). In contrast, factors like medication availability and past health experiences were found to be more significant in China (27). Convenience and Packaging can influence initial purchases, but they do not necessarily affect long-term self-medication behaviours.(28) Additionally, ease of administration, such as single-dose medications, can promote self-medication, but its impact varies with other factors like cost (19). Perceived Safety and Advertising of medication safety can drive self-medication in some contexts, but in others, sociocultural factors may override these concerns (29,30). Advertising plays a role in increasing product awareness but is less influential than accessibility and personal health beliefs (31).

Previous Healthcare Experiences with healthcare systems can increase the likelihood of self-medication, as individuals rely on their experiences rather than professional advice. However, socioeconomic factors like healthcare accessibility are more critical in some regions (32). Education and self-reliance are also significant predictors of self-medication. Higher education levels generally correlate with lower self-medication rates due to improved health literacy (26). However, in some contexts, other factors, such as healthcare access and costs, may outweigh the influence of education (33). Cultural Beliefs toward traditional remedies can influence self-medication. For instance, strong cultural beliefs in India promote self-medication with traditional remedies (34), whereas in Ghana, modern factors like accessibility play a more significant role (35).

STUDY DESIGN

Study Setting

The data used is primary data collected using structured questionnaires among the users of the biggest pharmacy and hospital of the Inchaban community within the Shama District. This community serves as an ideal setting for studying self-medication choices due to its diverse demographic and socioeconomic characteristics.

Target Population

The target population includes individuals aged 18 and above who have purchased or used self-medications in the Inchaban community within the past six months. Purposive sampling was used to select participants or users (patients) attending the biggest hospital and pharmacy Store to ensure representation across different sociocultural backgrounds and healthcare settings. It is essential to include individuals seeking medications from both hospital and OTC store settings to capture a comprehensive understanding of medication choices within the community.

Sample Size

Using Epi Info software version 7.2.6.0, a sample size of 360 was estimated based on the total population of Inchaban, which is approximately 15,637, with a 40% expected frequency, 5% acceptable margin of error, 1.0 design effect, 95% confidence level and no clustering. The choice of 40% for the expected frequency in the sample size estimation was based on existing literature and empirical evidence regarding the prevalence of over-the-counter (OTC) medication usage among the population of interest. Research conducted by Jones et al. (2020) in culturally diverse populations, including Indigenous communities in Australia, underscored the significant influence of cultural beliefs on individuals' healthcare-seeking behaviours and treatment preferences. The study revealed that approximately 40% of the population regularly utilizes OTC medications for self-care purposes, indicating a substantial prevalence of self-medication practices within the target population. Consequently, the selection of 40% as the expected frequency aligns with prior research findings and provides a realistic estimate of the proportion of individuals expected to choose OTC medications in healthcare decision-making processes (Jones et al., 2020). This empirical evidence informed the rationale behind selecting 40% as the expected frequency for the sample size estimation.

Study Outcome Variables

The outcome variables were grouped into three subgroups namely; provider correlate (access to formal healthcare, trust in OTC medicine sellers, recommendations from friends and family), medicine correlate (accessibility, affordability, perceived effectiveness of medicine, packaging and branding, ease of administration, purchasing and promotion and safety) and socio-cultural correlates (perceived severity of illness, previous experiences, symptoms familiarity, level of education, self-reliance, cultural beliefs and social media influence).

Predictor Variables

The predictor variable of this current study is preferred self-medication which is grouped as Yes and No

Statistical Analysis

The data collected through closed-ended questionnaires administered to participants (users) of the biggest Hospital and Pharmacy store in Inchaban using purposive sampling was analyzed using statistical methods including tables, percentages and graphs by SPSS. Univariate, bivariate and binary logistic regression analysis techniques will be employed to further explore the relationships between self-medication choices and the identified determinants within the study population

RESULTS

Descriptive

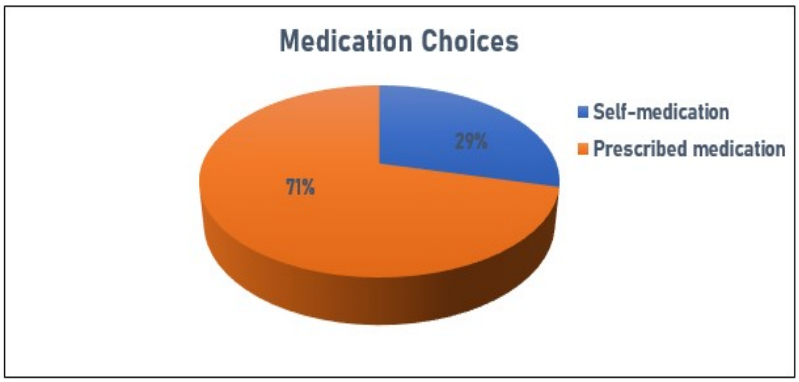

Figure 1: Univariate Analysis of Respondents with Medication Choices

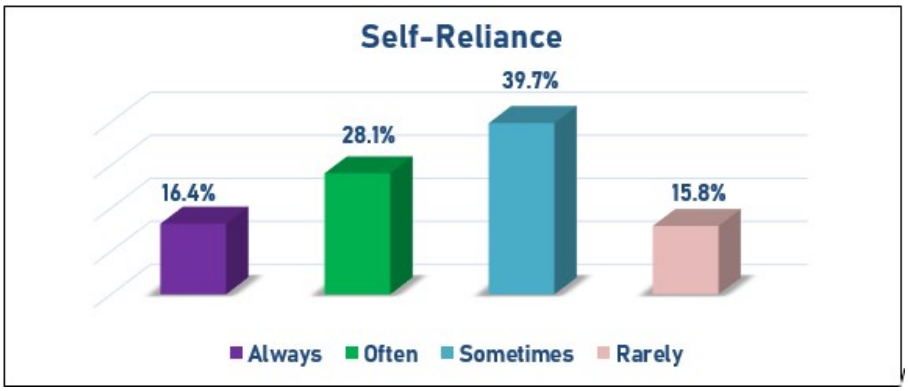

Figure 2: Univariate Analysis of Respondents of Self-Reliance.

Table 1: Univariate Analysis on Ease of Administration

EASE OF ADMINISTRATION	FREQUENCY	PERCENTAGES (%)
Self-medications	113	31.4
Prescribed medications	146	40.6
Equally easier	56	15.6
Equally difficult	25	6.9
Depends on the specific medicine	20	5.6
Total	360	100.0

From the 360 respondents, 104 (29%) reported preferring self-medication and 256 (71%) opted for prescribed medication as shown in Figure 1. The study revealed that most respondents were aged 30–39 (27.5%), predominantly female (54%), and married (47.5%), with Christians forming the majority (64.2%). Educational attainment varied, with the

highest being secondary (31.9%) and tertiary (30.3%), while 52% were unemployed. Access to healthcare was diverse: 38.3% reported good access, and 24.4% had full access. Trust in healthcare providers showed 46.4% favouring OTC sellers and 63% relied on recommendations from health practitioners for medication choices. Self-medications were considered affordable by 65% and preferred by 25% for mild illnesses. However, prescribed medications were viewed as safer (59.2%) and more effective by 45.3%. Factors influencing medication choices included education (55%), cultural beliefs (33.6%), and social media (21.4% highly influenced). From Table 1, confidence in symptom recognition was low, with 53.1% relying on prescribed medications. Advertising and packaging were less impactful, with only 30% and 44% of respondents, respectively, considering them significant. Positive experiences were higher with prescribed medications (45%) compared to self-medications (15.8%). Figure 2 shows that 67.8% of respondents either often or sometimes rely on themselves for medication choices, 16.4% always do and 15.8% do not.

Binary Logistic Regression of Factors of Medication Choices

Results of the Binary Logistic Regression analysis for the data collected in the field are presented in Table 2. The analysis presented explores the factors influencing self-medication choices among respondents, focusing on demographics, socio-economic variables, and perceptions. The results indicate mixed associations between these factors and the likelihood of choosing self-medication.

Table 2: Estimated Odds Ratios (QR) And 95% Confidence Intervals (CI) From Binary Logistic Regression Of Medication Choices

Characteristics	Exp. (β)	[95% CI]		P-value
		Lower	Upper	
Age				
Below 20 years (RC)	1.000	1.000	1.000	1.000
20 – 29 years	0.917	0.262	3.211	0.892
30 – 39 years	1.381	0.404	4.726	0.607
40 – 49 years	0.870	0.247	3.065	0.828
50 years and above	0.677	0.163	2.801	0.590
Gender				
Male (RC)	1.000	1.000	1.000	1.000
Female	1.152	0.576	2.304	0.689
Marital Status				
Single (RC)	1.000	1.000	1.000	1.000
Married	1.225	0.516	2.905	0.646
Divorced	0.262	0.072	0.952	0.042
Widowed	0.550	0.085	3.575	0.531
Religion				
Christianity (RC)	1.000	1.000	1.000	1.000
Islam	1.184	0.544	2.578	0.670
Traditional	0.550	0.091	3.311	0.514
Others	0.596	0.053	6.657	0.674
Level of Education				
Primary (RC)	1.000	1.000	1.000	1.000
J.H.S	0.817	0.812	4.742	0.817
S.H.S	0.741	0.141	3.891	0.723
Tertiary	0.419	0.079	2.214	0.306
Non-formal	0.460	0.086	2.462	0.364
Occupational Status				
Unemployed (RC)	1.000	1.000	1.000	1.000
Employed	1.880	0.891	3.994	0.097

Table 2: Contd.,

Access to Formal Healthcare				
No access at all (RC)	1.000	1.000	1.000	1.000
Limited Access	1.256	0.363	4.348	0.719
Good access	4.093	1.063	15.769	0.041
Full access	5.054	1.153	22.150	0.032
Trust in OTC sellers				
Trust OTC more (RC)	1.000	1.000	1.000	1.000
Trust Prescribers more	12.069	4.232	34.414	0.000
Trust both equally	5.428	1.896	15.769	0.002
Trust neither	14.958	2.736	81.762	0.002
Recommendations				
Friends (RC)	1.000	1.000	1.000	1.000
Family	0.774	0.244	2.450	0.662
Health Practitioner	1.913	0.698	5.242	0.207
Accessibility				
Easy access to OTC (RC)	1.000	1.000	1.000	1.000
Limited access to OTC medication	2.336	0.839	6.505	0.104
Easy access to prescribed medication	1.439	0.543	3.812	0.464
Limited access to prescribed medication	0.720	0.274	1.891	0.505
Affordability				
Very affordable (RC)	1.000	1.000	1.000	1.000
Equally affordable	0.818	0.328	2.041	0.668
Unaffordable	1.013	0.309	3.802	0.983
Packaging and Branding				
Yes (RC)	1.000	1.000	1.000	1.000
No	0.659	0.317	1.369	0.263
Ease of Administration				
Self-medication (RC)	1.000	1.000	1.000	1.000
Prescribed medications	2.354	1.027	5.397	0.043
Equally easier	4.483	1.504	16.503	0.009
Equally difficult	1.887	0.431	8.272	0.399
Depends on specific medication	0.377	0.090	1.575	0.181
Advertising and Promotion				
Highly Impactful (RC)	1.000	1.000	1.000	1.000
Moderately Impactful	1.175	0.476	2.903	0.726
Not Impactful	1.614	0.637	4.091	0.323
Safety				
Safer (RC)	1.000	1.000	1.000	1.000
Equally safer	0.531	0.164	1.717	0.290
Less safe	0.895	0.319	2.514	0.833
Perceived Severity of Illness				
More severe (RC)	1.000	1.000	1.000	1.000
Moderately severe	9.796	0.331	1.732	0.510
Mildly severe	0.425	0.156	1.164	0.096
Past Experiences				
Positive experience (OTC) (RC)	1.000	1.000	1.000	1.000
Positive experience (Prescribed)	3.273	1.094	9.796	0.034
Negative experience (OTC)	2.854	0.900	8.962	0.073
Negative experience (Prescribed)	2.465	0.607	10.011	0.207
Level of Education				
Yes (RC)	1.000	1.000	1.000	1.000
No	0.638	0.314	1.296	0.214
Self-Reliance				
Always (RC)	1.000	1.000	1.000	1.000
Often	1.171	0.384	3.573	0.781
Sometimes	1.341	0.473	3.802	0.581
Rarely	2.125	0.587	7.696	0.251

Table 2: Contd.,

Cultural Beliefs				
Yes (RC)	1.000	1.000	1.000	1.000
No	1.942	0.976	3.864	0.059
Social Media Influence				
Highly Influenced (RC)	1.000	1.000	1.000	1.000
Moderately Influenced	1.042	0.381	2.848	0.937
Not Influenced	0.509	0.190	1.360	0.178
Symptoms Familiarity				
Yes (RC)	1.000	1.000	1.000	1.000
No	1.288	0.631	2.629	0.486
Model P-Value	0.000			
Nagelkerke R^2	54.1%			
Overall Percentages (%)	84.2			

The analysis presented in Table 2 suggests that Age did not show a statistically significant relationship with medication choices, though respondents aged 20-29, 40-49, and 50 years and above were less inclined to self-medicate compared to those aged 30-39 and under 20 years. Gender also lacked a statistically significant association, but female respondents demonstrated a higher tendency to self-medicate than males.

Marital status was significantly related to medication choices ($p<0.050$), with married respondents more likely to opt for self-medication compared to their widowed and divorced counterparts. Conversely, religion did not show a significant correlation, although individuals of the Islamic faith had a greater likelihood of self-medicating compared to those practising traditional or other religions. Similarly, education level did not significantly influence medication choices, yet respondents with higher education levels (J.H.S, S.H.S, tertiary and non-formal) were less likely to self-medicate.

Employment status did not significantly affect medication choices; however, employed individuals were more prone to self-medicate. Access to formal healthcare demonstrated a significant relationship ($p<0.050$ for good access and $p<0.050$ for full access), where better access was associated with increased self-medication. Trust in over-the-counter (OTC) sellers also had a significant impact: respondents who trusted prescribers more ($p<0.001$), or trusted both prescribers and OTC sellers equally ($p<0.002$), were more inclined to self-medicate.

The source of recommendations, such as advice from family versus health practitioners, did not significantly influence medication decisions. Accessibility to medications also lacked statistical significance, although those with easy access to prescribed drugs showed varying self-medication tendencies.

Affordability was not significantly related to medication choices. Respondents who viewed medications as equally affordable were less likely to self-medicate, while those perceiving self-medication as unaffordable were more likely to do so. Packaging and branding did not significantly affect choices either; however, respondents less influenced by these factors were less likely to opt for self-medication.

The perceived effectiveness of medications was not statistically significant, yet those viewing OTC medications as less effective were paradoxically more likely to choose them, particularly for treating minor conditions. Ease of administration had a significant influence ($p<0.050$), with respondents favouring prescribed medications or finding both types equally easy to administer being more inclined toward self-medication.

Advertising did not play a significant role, although those perceiving ads as moderately or non-impactful were more likely to self-medicate. Similarly, safety perceptions were not significant predictors, but respondents who viewed OTC medications as equally safe or less safe were less likely to self-medicate.

The perceived severity of illness did not show a significant impact on medication choices. Nonetheless, respondents who considered their conditions mildly or moderately severe were less likely to opt for self-medication. Past experiences with medications significantly influenced choices ($p<0.050$); negative experiences with prescribed drugs or self-medications led to higher self-medication rates.

Neither higher education levels nor self-reliance showed significant associations with medication choices, although those who were sometimes or rarely self-reliant preferred self-medication more than those who were always self-reliant. Cultural beliefs marginally influenced medication decisions, with respondents less anchored in cultural beliefs tending toward self-medication.

Social media influence did not emerge as a significant predictor, with those not swayed by online content being less likely to self-medicate. Additionally, familiarity with symptoms was not significantly correlated with self-medication choices, yet individuals unfamiliar with symptoms had a higher propensity for self-medicating.

The overall regression model was statistically significant (Model p-value<0.000), with a Nagelkerke R^2 value of 54.1%, indicating that the variables included in the model explain about half (54.1%) of the variability in self-medication behaviours. The remaining 45.9% of the variation is attributed to factors not captured within the current model.

DISCUSSION

The study provides a comprehensive analysis of the factors influencing medication choices among the residents of Inchaban, focusing on self-medication versus prescribed medications. This summary encapsulates the key findings, draws relevant conclusions, and offers recommendations based on statistical analyses and comparisons with existing literature.

The research indicates that age does not significantly predict self-medication behaviours in Inchaban. Notably, respondents aged below 20 years were less inclined towards self-medication compared to those aged 30-39, who showed a higher tendency. This finding aligns with (36) but contradicts, (37) suggesting cultural or regional differences in the influence of age on self-medication.

Gender did not show a statistically significant impact on self-medication choices. However, female respondents were more likely to self-medicate compared to males, reflecting similar outcomes in studies by (38). This result contrasts with the findings from (39) in Lagos, Nigeria, where no significant gender differences were observed.

Marital status emerged as a significant factor, with married individuals showing a greater propensity for self-medication, while widowed and divorced respondents were less likely to engage in such practices. This contradicts finding from (40) but contrasts with the findings, (41) where marital status was not a determining factor.

No significant correlation was found between religious affiliation and self-medication. However, Muslims were more likely to self-medicate compared to respondents from other religious backgrounds. This result deviates from, (40) who found that strong religious convictions typically encouraged professional medical consultations over self-medication. Access to healthcare services significantly influenced self-medication choices. Even respondents with good healthcare

access opted for self-medication, which aligns with studies by (26,35). This susts that factors beyond mere access, such as convenience or cost, may drive self-medication practices.

Trust in over-the-counter (OTC) sellers is a significant predictor of self-medication. Respondents showed a higher likelihood of self-medication if they trusted both OTC sellers and prescribers equally, confirming 20 findings. In contrast, (42) highlighted cost and convenience over trust as motivators for self-medication. Recommendations from friends and family were not significant predictors of medication choices. Interestingly, those valuing healthcare practitioner advice were more likely to self-medicate, aligning with the finding of (43) who found urban populations favour professional advice over social recommendations.

Contrary to expectations, ease of access and affordability were not statistically significant predictors of self-medication. Despite this, respondents with easy access to OTC drugs but limited access to prescription medications were more inclined to self-medicate. These findings diverge from (13) who emphasised accessibility as a key factor in self-medication behaviour.

Perceived effectiveness of medications was not a major factor; however, scepticism about OTC drugs increased self-medication. Packaging and branding had minimal influence, supporting (44), who found that branding did not significantly impact long-term self-medication behaviours.

Ease of medication administration significantly influenced self-medication. Those finding prescribed and self-medications equally manageable were more likely to self-medicate, consistent with the outcome of (13), who found ease of use to be a critical factor. Advertising did not significantly impact medication choices in Inchaban. This finding contradicts (45) in Canada, where exposure to advertisements was linked to increased self-medication.

The study finds no statistically significant relationship between the perceived safety of medicine and self-medication practices. However, respondents who view self-medication as equally safe or less safe than prescribed medications are less likely to opt for self-medication. This finding aligns with the study by (46) which reported that perceived Safety was not a statistically significant predictor of self-medication. Their study combined quantitative surveys with qualitative interviews. A possible explanation is the people of Inchaban mostly employ alternative strategies for managing health issues such as lifestyle modification and physiotherapy as far as safety is concerned.

Perceived severity of illness is not a significant predictor of medication choices. The new results suggest that respondents who perceive their illness as mildly severe and treat it with self-medications or as moderately severe and treat it with prescribed medications are less likely to engage in self-medication. The outcome affirms the study of (47) which reported that perceived severity of illness was not a statistically significant predictor of self-medication. The research used a combination of surveys and clinical assessments which found that factors such as previous health experiences and accessibility of healthcare services had a more substantial impact on self-medication behaviors.

The analysis reveals that past experiences with medications significantly predict self-medication choices. Respondents with positive experiences with prescribed medications and those with negative experiences with OTC or prescribed medications are more likely to engage in self-medication. This supports a 2023 Australian study that found a significant association between past experiences and self-medication choices (48). Specifically, individuals who had successful outcomes with self-medication were more likely to self-medicate in similar situations, relying on their prior experiences over professional advice.

The study indicates that education level is not a statistically significant predictor of self-medication choices. Respondents who believe their education level does not influence their use of prescribed medications are less likely to self-medicate. This supports the study documented by (19) in India which found no significant correlation between education level and self-medication choices. However, the current finding contradicts a study by (49) in Ethiopia which showed that individuals with higher education levels were less likely to self-medicate and more inclined to seek professional healthcare advice.

Self-reliance is not a significant predictor of self-medication choices. However, respondents who often, rarely and sometimes rely on themselves are more likely to engage in self-medication. This finding aligns with a previous study in Ghana which reported that self-reliance was not a statistically significant predictor of self-medication (36). However, the finding contradicts the study by (50) conducted in Saudi Arabia which demonstrated that self-reliance was a statistically significant predictor of self-medication. Their research indicated that individuals who perceived themselves as more capable of managing their health independently were likelier to use self-medications without consulting healthcare professionals.

Likewise, cultural beliefs are not significant predictors of self-medication choices. Respondents who do not avoid medical treatment due to cultural beliefs are more likely to engage in self-medication. This finding is not in line with research conducted by (19) in India which found that cultural beliefs were a significant predictor of self-medication choices. Their research indicated that individuals who held strong traditional beliefs about the efficacy of certain remedies were statistically significantly more likely to self-medicate with these remedies rather than seek professional healthcare. However, the finding affirms a study by (35) in Ghana which found that cultural beliefs were not a statistically significant predictor of self-medication.

In this study, social media influence does not have a statistically significant impact on self-medication choices. Respondents who report being "not influenced" by social media are less likely to engage in self-medication. Those "highly moderately influenced" by social media are more likely to self-medicate. A possible explanation is the people of Inchaban have a misconception that all information on social media is endorsed and verified by the FDA, leading them to trust and follow recommended medications or advice found on these platforms. This outcome affirms a study conducted by (35) in Ghana which concluded that social media influence was not a statistically significant predictor of self-medication.

Moreover, symptom familiarity is not a statistically significant predictor of self-medication choices. The study reveals that respondents who are "not familiar" with the symptoms of OTC versus prescribed medications are more likely to engage in self-medication. A reasonable explanation is that Inchaban residents often fail to inquire about the potential side effects of symptoms associated with medications they take, prioritising short-term relief over long-term risks. They are likely to repeat medication use without hesitation as long as they experience initial relief. This outcome is in contrast with the study conducted by (13) conducted a study in Ethiopia which found that familiarity with symptoms was statistically significantly associated with self-medication. Their research indicated that individuals who recognized and were familiar with their symptoms were more likely to use self-medications without consulting healthcare professionals.

STRENGTHS AND LIMITATIONS

This study presents notable strengths and some limitations. It comprehensively analyzes factors influencing self-medication, including demographic, provider-related, and sociocultural aspects, offering valuable insights. The findings are

relevant to public health, with practical recommendations on education, healthcare access, and OTC medication regulation. Its focus on Inchaban ensures context-specific data, while the call for further research supports continued exploration. However, its limited geographic scope affects generalizability, and reliance on self-reported data may introduce biases. The cross-sectional design limits causal inference, and excluding direct input from providers restricts the depth of analysis. Moreover, the lack of detailed categorization of self-medicated drugs reduces specificity in risk assessment.

RECOMMENDATION

This study examines self-medication practices in Inchaban, revealing that only 29% of respondents engage in self-medication. The research identifies significant predictors influencing self-medication choices, including demographic (marital status), provider-related (access to formal healthcare and trust in over-the-counter (OTC) sellers), medicine-related (ease of administration), and sociocultural factors (previous experiences with medication). To address these issues, the study recommends targeted public health initiatives focusing on enhancing healthcare access and educating the public on the risks of self-medication, particularly the unsupervised use of OTC medications and herbal remedies. Additionally, stricter regulations for the sale of these products are necessary. Future research should delve deeper into the interplay of these factors to guide more effective local and global health policies.

CONCLUSION

Self-medication remains a global public health concern, driven by factors like accessibility to OTC drugs, healthcare costs and the perceived convenience of self-care. The findings highlight that married individuals are more likely to self-medicate, influenced by their access to healthcare and trust in medical providers and OTC sellers. Notably, the ease of medication administration and past experiences also play a crucial role in self-treatment decisions. The study emphasizes the need for comprehensive public health strategies to mitigate the risks associated with self-medication practices.

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