

Original Research Article

Prevalence and associated factors of self-medication among the Bengali Hindu population of north 24 Parganas, West Bengal, India: an ethnographic study

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ABSTRACT

Background: Self-medication is now a global concern, and self-medication is described as medication practices without knowing the doses and duration by individuals' own concern without any suggestion of a medical practitioner or healer. The main objective of the study is to understand the prevalence and associated factors behind self-medication practice among the Bengali Hindu population of North 24 Parganas. This ethnographic study examines the knowledge, patterns, and implications of self-medication without a doctor.

Methods: From this perspective, a cross-sectional ethnographic study has been conducted among the Bengali Hindu population of north 24 Parganas district, West Bengal, India. Through the purposive sampling method, about 327 individuals have been selected as a sample to complete the study. Some ethnographic research tools and techniques, such as intensive interviews, case studies, participant observation, etc., have been used for data collection.

Results: The prevalence of self-medication is 57.18% among the studied population. Overall, minor illnesses were the main reason for self-medication (27.27%), followed by previous experience or knowledge (25.13%) and money saving (19.79%). The Bengali Hindu population of this area reveals a complex interplay of Western Bio-medicine (WBM) or modern pharmaceuticals, healthcare access challenges, and socio-cultural norms and beliefs.

Conclusions: The prevalence of self-medication is high among the Bengali Hindu population of north 24 Parganas due to easy access to Western bio-medicine and the availability of local medicine shops. Local pharmacists have a great role in the practice of self-medication in the studied area.

Keywords: Cultural factors, Globalization, Healthcare system, Medical pluralism, Self-medication, Western bio-medicine

INTRODUCTION

While medicines play a vital role in disease prevention, their inappropriate use carries considerable health hazards, as accumulating evidence demonstrates that adverse drug reactions remain common, largely preventable contributors to illness and death.^{1,16-18} Self-Medication (SM) is defined as the selection and use of medicines by individuals to treat self-recognized illnesses or symptoms without any consultation with a physician or health care provider.¹⁻³ From Kleinman's perspective,

self-medication can be understood as part of the popular sector of health care, where individuals and families interpret illness, evaluate symptoms, and initiate therapeutic actions based on their own concern and experiential knowledge.¹⁸ The practice of self-medication is relatively high in developing countries like India due to easy access to medicines through over-the-counter (OTC).⁴ The history of self-medication is an age-old practice from ancient times with considerable influence in developing countries like India.^{2,5} There are so many reasons behind this practice, such as education, economic

condition, cultural influences, and previous knowledge about diseases or illnesses, etc. Many studies have been published on the prevalence of self-medication in rural and urban areas in both developing and developed countries globally. A cross-sectional study was conducted by Aqeel et al to evaluate the prevalence and associated factors of SM among the urban and rural population of Islamabad, Pakistan, and it found that around 61.2% of participants practiced SM. Most of the participants (72.8%) trusted allopathic medication for their different illnesses condition.⁶ Another cross-sectional study was done by Limaye et al among the general population of western India to observe the factors behind the practices. In the study, the overall self-medication prevalence was 29.1% and the prevalence of SM was high among urban participants, which was 51.5% and most of the informants reported that they practiced by having old prescriptions (41.6%).⁷ In every corner of the world, people are practicing self-medication. Some developed countries like Switzerland, Germany, Australia and the USA have reported a low prevalence of SM practices and the percentages are 8%, 11%, 11%, and 13%, respectively; whereas some developing countries like India, Pakistan and Nigeria have reported a higher prevalence of Self-medication.⁸ The intermittent or continued use of a certified physician-prescribed medicine for chronic ailments or mild illnesses without existing medical supervision, or the use of medicines recommended by peer sources such as family, friends, or pharmacists who are not qualified prescribers.⁹⁻¹¹ People self-medicate to treat their signs and symptoms, and a large number of anthropological works have looked into the place occupied by symptoms in various cognitive systems. Basically, it has been seen in all categories of societies in the world.¹² The potential dangers linked to the medicinal use of drugs are a key point in the ongoing discussion about self-medication within the public sphere and are frequently brought up by its opponents. When they should seek medical consultation, several doctors and pharmacists address patients' incapacity to recognize. The anthropological approach seeks to understand the logic that underpins it, in contrast to the biomedical or pharmacological view of self-medication.¹³

Self-medication has now become a challenging and global phenomenon that is spread all over the world. Fundamentally, modern medicinal practices have been derived from the early 19th century. According to the World Self-Medication Industry (WSMI) report, 2010, it has flourished all over the world when the WHO gave permission to get some painkiller medicines through over-the-counter (OTC).¹⁴ This question frequently comes to our mind: why do people practice self-medication, even when availability of doctors or a health care centre? When an individual circumvents a doctor to treat themselves, they are usually navigating a complex web of economic, social, and cultural factors. The cost of consultation is a great factor, as well as buying a strip of tablets is more expensive for a lower-class individual. The present study comprehensively studied the factors

associated with self-medication practices by the studied population and how cultural factors influence self-medication practices. Besides modern medical practice, self-medication is also observed in terms of traditional health practices. One of the recent studies has found that the urgent need to incorporate traditional knowledge systems into national healthcare policies and practices. It has been recognized that the traditional healer's contributions towards self-medication can lead to safer applications and broader acceptance in the use of traditional medicinal components.¹⁵ It is worth mentioning that contemporary Western Bio Medicine (WBM), a healing approach based on modern Western medical science, emphasizes technology in diagnosing and treating health problems related to the human body.¹⁶

The present study has been conducted and aimed with three major objectives, which are given below: 1) To document the common patterns of self-medication practices among the Bengali Hindu community of North 24 Parganas, 2) To understand the reasons behind the self-medication practices among the community under study, 3) To examine how social-cultural beliefs age old tradition and domestic norms shape self-medication practices among the same.

METHODS

Research design

We conducted a cross-sectional study among the Bengali Hindu community through face-to-face interviews in rural and urban areas to determine the prevalence and its associated factors of self-medication practices. The study was conducted through a household survey from 7th November 2025 to 6th January 2026. This study adopts both qualitative and quantitative approaches under the purview of medical anthropology. The approach of Ethnography is chosen to gain an in-depth and holistic study of the area as mentioned below in the North 24 Parganas district. The design allows for the exploration of cultural beliefs, lived experiences, local health-seeking behaviours, and socio-economic influences shaping self-medication.

Study area and its people

The present study was conducted in two different Hindu-dominated villages of the North 24 Parganas district of West Bengal, India. One is an urban village, named Hatthuba (Block- Habra, North 24 Parganas, West Bengal, India), and the other one is a rural village, named Shimulpur (Block- Gaighata, North 24 Parganas, West Bengal, India). These two villages were purposively chosen based on religion dominance and the presence of local medicine shops and accessibility to modern healthcare facilities.

Inclusion criteria

Above 18 years individuals were equally included in this study.

Exclusion criteria

Below 18 years individuals were excluded and duff and deaf individuals were also kept aside from this study.

Sampling technique and data collection method

A purposive sampling method was employed to select respondents who were engaged in self-medication. Our study had men and women from villages who were eighteen years old to sixty years old and more. We also talked to pharmacists and people who have used modern medicine without a doctor's help. We made sure to have a mix of people in our study by including 327 people from 327 families, which means we had a good mix of men and women rich and poor people and people, from different religions. Among 327 respondents, 187 respondents have been reported that they are practicing self-medication in their different health seeking conditions. We conducted fieldwork from the 1st week of November, 2025, to the 1st week of January, 2026. Before conducted the fieldwork we did a pilot survey with 30 Schedules to check the Schedule is good or not and after that we modified the Schedule, would give us the right information. All primary data have been collected through a modified Schedule with door to door visit. Some anthropological methods and techniques have been employed to collect the primary data, such as schedules and questionnaires, observation, interviews, case studies, etc. Through the interview and case study methods, the present researchers were able to understand the behaviour and patterns of self-medication. The schedule and questionnaire could help us to understand which common

conditions they are using this practice for along with gathered numerical data. All the numerical data have been analysed through Microsoft Excel 2013 software.

Ethical consideration

The present researchers were clearly informed about the objectives and purpose of the study with the informants and community members for ethical clarifications. Participation was entirely voluntary, and informed verbal consent was obtained from all participants, who agreed to share their knowledge and real-life experiences without any coercion. In addition, attention was given to the sensitive nature of certain personal case studies and the identities of the participants were kept strictly confidential.

RESULTS

The Table 1 presents the distribution of 327 respondents by age group and gender. Of the total sample, 157 (48.01%) were male, and 170 (51.99%) were female, indicating a slightly higher representation of females. The majority of respondents fall within the 18-30 years age group (40.06%), making it the most dominant category in the study. This is followed by the 46-65+ years group (30.28%) and the 31-45 years group (29.66%), which show relatively similar levels of representation. Among males, 39.49% are aged 18-30 years, 31.21% are 31-45 years, and 29.30% are 46-65+ years, reflecting a gradual decrease in participation with increasing age. Similarly, among females, the highest proportion (40.59%) is in the 18-30 age group, followed by 31.18% in the 46-65+ category and 28.24% in the 31-45 group. Overall, the data indicate that the study sample is predominantly composed of young adults, with a fairly balanced gender distribution across all age categories, suggesting adequate representation for comparative analysis.

Table 1: Age and gender distribution of the study population (n=327).

Age groups (years)	Male	Percentage	Female	Percentage	Total	Percentage
18-30	62	39.49	69	40.59	131	40.06
31-45	49	31.21	48	28.24	97	29.66
46-65+	46	29.30	53	31.18	99	30.28
Total	157	100.00	170	100.00	327	100.00

The Table 2 presents the distribution of respondents (n=327) by age, gender, and educational attainment, revealing important socio-cultural patterns. Overall, the largest proportions of respondents fall within the secondary (n=88) and higher secondary (n=88) categories, followed by primary education (n=82) and graduate and above (n=61), while only a small fraction (n=8) are illiterate. Notably, illiteracy is confined to the 46-65+ age group, with females (62.50%) outnumbering males (37.50%), suggesting generational and gender-based disparities in access to formal education in earlier decades. Among younger respondents (18-30 years),

there is no reported illiteracy, and a substantial proportion has attained Secondary and Higher Secondary education, indicating improved educational access over time. Gender differences are evident but not extreme in younger and middle age groups; however, older females show relatively lower representation in higher educational categories compared to males, reflecting traditional gender norms and historical inequalities in educational opportunities. From an anthropological perspective, the data suggest a transition in educational attainment across generations, highlighting the influence of social change,

modernization, and shifting gender roles on access to formal education within the community.

Table 2: Age and gender wise distribution of educational status of the study participants (n=327).

Age groups (years)	Gender	Total (n)	Illiterate		Primary		Secondary		Higher secondary		Graduate and above	
			N	%	N	%	N	%	N	%	N	%
18-30	Male	62	0	0.00	11	13.41	15	17.05	23	26.14	13	21.31
	Female	69	0	0.00	17	20.73	18	20.45	21	23.86	13	21.31
31-45	Male	49	0	0.00	11	13.41	14	15.91	11	12.50	13	21.31
	Female	48	0	0.00	12	14.63	15	17.05	13	14.77	8	13.11
46-65+	Male	46	3	37.50	13	15.85	11	12.50	10	11.36	9	14.75
	Female	53	5	62.50	18	21.95	15	17.05	10	11.36	5	8.20
Total		327	8	100.00	82	100.00	88	100.00	88	100.00	61	100.00

The Table 3 presents the age- and gender-wise distribution of respondents (n=327) in relation to occupation and monthly family income, offering important anthropological insights into livelihood patterns and socio-economic stratification. Among the 18-30 age group, males are predominantly students (53.57%) and day labourers (32.31%), while females are largely students (37.50%) and homemakers (35.37%), reflecting early gendered role formation and the persistence of domestic expectations for young women. In the 31-45 age group, occupational differentiation becomes more pronounced: males are mainly engaged in service (24.66%) and self-employment (33.33%), whereas a significant proportion of females identify as homemakers (25.61%) alongside participation in service (16.44%), indicating a dual burden of productive and reproductive

roles. Among respondents aged 46-65+, males are concentrated in day labour and service, while females are overwhelmingly homemakers (39.02%), highlighting traditional gender divisions of labour in older generations. Income distribution further reflects structural inequalities, with the majority of respondents clustered in the low-income category (n=165), followed by middle income (n=123), and a relatively small proportion in the high-income group (n=39). Older and female respondents are more represented in lower income brackets, suggesting the cumulative effects of limited educational and occupational opportunities over the life course. From an anthropological perspective, the data illustrate intergenerational shifts in occupation, persistent gendered division of labour, and the embeddedness of economic roles within broader cultural norms and social stratification systems.

Table 3: Age and gender wise distribution of occupation and monthly family income.

Age groups (years)	Gender	Total (N)	Occupation										Monthly family income					
			Student		Day labour		Home-maker		Service		Self-employed		Low income (<Rs. 15000)		Middle income (Rs. 15000-30000)		High income (above Rs. 30000)	
			N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
18-30	Male	68	30	53.57	21	32.31	0	0.00	10	13.70	7	13.73	18	10.91	20	16.26	6	15.38
	Female	76	21	37.50	12	18.46	29	35.37	8	10.96	6	11.76	20	12.12	16	13.01	4	10.26
31-45	Male	50	3	5.36	12	18.46	0	0.00	18	24.66	17	33.33	25	15.15	25	20.33	10	25.64
	Female	44	2	3.57	1	1.54	21	25.61	12	16.44	8	15.69	30	18.18	25	20.33	8	20.51
46- 65+	Male	39	0	0.00	15	23.08	0	0.00	15	20.55	9	17.65	30	18.18	22	17.89	8	20.51
	Female	50	0	0.00	4	6.15	32	39.02	10	13.70	4	7.84	42	25.45	15	12.20	3	7.69
Grand total		327	56	100	65	100	82	100	73	100	51	100	165	100	123	100	39	100

The Table 4 presents the gender-wise distribution of self-medication practices among respondents (n=327), highlighting patterns of health-seeking behaviour within the community. Out of the total sample, 187 (57.18%) respondents reported practicing self-medication, while 140 (42.82%) reported not engaging in the practice. Among those who practiced self-medication, females (50.80%) slightly outnumber males (49.20%), whereas among those who did not practice self-medication, females again constitute a marginally higher proportion

(53.57%) compared to males (46.43%). Overall gender representation in the study is relatively balanced, with 48.01% males and 51.99% females. Anthropologically, the findings suggest that self-medication is a common health behaviour cutting across gender lines, with no substantial gender disparity in prevalence. The slightly higher participation of females in both practicing and not practicing categories may reflect their overall greater representation in the sample as well as their central role in household health management. The data indicate that

self-medication is a socially embedded practice influenced not solely by gender but potentially by broader factors such as access to healthcare, cultural norms

regarding illness management, economic constraints, and experiential knowledge within the community.

Table 4: Prevalence of self-medication practices of the study population (n=327).

Gender	Practices self-medication	Percentage	Did not practices	Percentage	Total	Percentage
Male	92	49.20	65	46.43	157	48.01
Female	95	50.80	75	53.57	170	51.99
Total	187	100.00	140	100.00	327	100.00

Table 5 shows that medication taken with the guidance of pharmacists was the most common type of self-medication. It was reported by 21.4% of males and 22.5% of females. The highest use was found among females aged 31-45 years (31.1%). The use of over-the-counter allopathic medicines without a prescription was more common among males (16.6%) than females (8.0%), especially in the 18–30 years age group where 27.1% of

males reported this practice. Medicines recommended by family members, neighbours, and friends were more commonly used by females (13.9%) compared to males (4.3%). This practice was highest among females aged 46-65 years and above (18.5%). Re-using old prescriptions was relatively less common, reported by 7.0% of males and 6.4% of females. Overall, the results show clear differences in self-medication practices based on age and gender.

Table 5: Age and gender wise distribution of sources and patterns of self-medication practices (n=187).

Sources and patterns of self-medication	Age group wise gender division							
	18-30 years (n=48)		31-45 years (n=74)		46-65+ years (n=65)		Total (n=187)	
	Male N (%)	Female N (%)	Male N (%)	Female N (%)	Male N (%)	Female N (%)	Male N (%)	Female N (%)
Allopathic OTC medicines without prescription	13 (27.1)	7 (14.6)	11 (14.9)	4 (5.4)	7 (10.8)	4 (6.2)	31 (16.6)	15 (8.0)
Medication recommended by family, neighbours and friends	3 (6.3)	6 (12.5)	2 (2.7)	8 (10.8)	3 (4.6)	12 (18.5)	8 (4.3)	26 (13.9)
Pharmacy guided medication	5 (10.4)	9 (18.8)	18 (24.3)	23 (31.1)	17 (26.2)	10 (15.4)	40 (21.4)	42 (22.5)
Re-use of old prescriptions	3 (6.3)	2 (4.2)	5 (6.8)	3 (4.1)	5 (7.7)	7 (10.8)	13 (7.0)	12 (6.4)
Total	24 (50.0)	24 (50.0)	36 (48.6)	38 (51.4)	32 (49.2)	33 (50.8)	92 (49.2)	95 (50.8)

The Table 6 shows the age- and gender-wise distribution of reasons for self-medication among the respondents (n=187). Overall, minor illnesses were the main reason for self-medication (27.27%), followed by previous

experience (25.13%) and saving money (19.79%). Other reasons included easy access to medicines (11.23%), trust in advice from family members, neighbours and friends (9.09%), and lack of time to visit a doctor (7.49%).

Table 6: Age and gender wise distribution of reason for self-medication (n=187).

Age group (years)	Gender	Total (N)	Minor ailments	Prior experience	Cost saving	Easy access to drugs	Time constraints	Trust in family, neighbours and friends
18-30	Male	24	7 (29.17)	5 (20.83)	4 (16.67)	3 (12.50)	3 (12.50)	2 (8.33)
	Female	24	8 (33.33)	6 (25.00)	5 (20.83)	2 (8.33)	1 (4.17)	2 (8.34)
31-45	Male	36	9 (25.00)	8 (22.22)	7 (19.44)	5 (13.89)	4 (11.11)	3 (8.34)
	Female	38	10 (26.32)	9 (23.68)	8 (21.05)	4 (10.53)	3 (7.89)	4 (10.53)
46-65 and above	Male	32	8 (25.00)	9 (28.13)	6 (18.75)	4 (12.50)	2 (6.25)	3 (9.37)
	Female	33	9 (27.27)	10 (30.30)	7 (21.21)	3 (9.09)	1 (3.03)	3 (9.10)
Grand total		187	51 (27.27)	47 (25.13)	37 (19.79)	21 (11.23)	14 (7.49)	17 (9.09)

Across the age groups, respondents aged 31-45 years showed relatively higher proportions reporting minor

illnesses and previous experience as reasons for self-medication, indicating greater reliance on their own

knowledge and past experience. In the 18-30 years age group, minor illnesses were also the main reason, especially among female respondents (33.33%). Among respondents aged 46-65 years and above, previous experience and saving money remained important motivations for self-medication.

A gender-wise comparison shows that both males and females commonly practiced self-medication for minor illnesses. However, females reported minor illnesses and previous experience slightly more often as reasons in most age groups. On the other hand, males reported

slightly higher proportions for reasons such as lack of time and easy access to medicines in some categories.

The Table 7 presents disease-wise self-medication practices across different age and gender groups (n=187). The results show some gender differences. Females reported a higher rate of self-medication for fever (29.5%), while males more frequently practiced self-medication for pain-related conditions (25.0%) and gastrointestinal problems (19.6%). Diarrhoeal diseases and skin problems were almost equally reported by both males and females.

Table 7: Age and gender wise distribution of medication used for self-medication among study participants (n=187).

Disease/illnesses condition	Commonly used medicine type	18-30 years (n=48)		31-45 years (n=74)		46-65+ years (n=65)		Total (n=187)	
		Male N (%)	Female N (%)	Male N (%)	Female N (%)	Male N (%)	Female N (%)	Male N (%)	Female N (%)
Fever	Antipyretics, analgesics, antibiotics	6 (25.0)	7 (29.2)	7 (19.4)	9 (23.7)	5 (15.6)	12 (36.4)	18 (19.6)	28 (29.5)
Headache/body pain/ joint pain	Analgesics/ painkiller	7 (29.2)	6 (25.0)	10 (27.8)	8 (21.1)	6 (18.8)	4 (12.1)	23 (25.0)	18 (18.9)
Gastrointestinal problems	Antacids/ digestive medicine	5 (20.8)	4 (16.7)	7 (19.4)	8 (21.1)	6 (18.8)	5 (15.2)	18 (19.6)	17 (17.9)
Cold and cough/ respiratory problems	Cough syrups, antihistamines	3 (12.5)	4 (16.7)	6 (16.7)	7 (18.4)	5 (15.6)	2 (6.1)	14 (15.2)	13 (13.7)
Diarrhoea/ stomach problem	ORS, anti-diarrhoeal medicines, antibiotics	2 (8.3)	2 (8.3)	4 (11.1)	3 (7.9)	3 (9.4)	4 (12.1)	9 (9.8)	9 (9.5)
Skin problem/ infection	Topical ointments	1 (4.2)	1 (4.2)	2 (5.6)	3 (7.9)	7 (21.9)	6 (18.2)	10 (10.8)	10 (10.5)
Total		24 (100.0)	24 (100.0)	36 (100.0)	38 (100.0)	32 (100.0)	33 (100.0)	92 (100.0)	95 (100.0)

In terms of age groups, respondents aged 18-30 years showed a higher proportion of self-medication for fever and pain-related problems. In the 31-45 and 46-65+ age groups, the distribution of diseases was more balanced across different conditions, although fever and gastrointestinal problems remained common reasons for self-medication.

Self-medication practices among the Bengali Hindus: some case descriptions

Case-1: menstrual pain

A 27-year-old Bengali Hindu married woman residing in the village of Hatthuba of North 24 Parganas. She lives in a joint middle-class family. When we visited her home, we observed that she lay on a bed on their veranda. The informant reported severe dysmenorrhea since adolescence. Despite recurring pain that often interfered

with daily household activities and responsibilities, she never consulted with a gynaecologist. She consumed a painkiller at this time when she was feeling pain in her lower abdomen. She also reported the medicine initially suggested by her mother, and she purchased the medicine from their nearest pharmacy shop over the counter (OTC). When we asked her why she had not discussed this problem with her husband regarding this problem, she replied, menstruation is a private matter (*lojjar bishoy*), and seeking medical help is unnecessary unless life becomes life-threatening. She also told, she avoids consuming medicine during religious fasting days (*Ekadoshi tithi* or other ritualistic days), enduring pain to maintain ritual purity. The above case illustrates how gendered taboos and notions of humility shape self-medication practices of a Bengali Hindu family. Apart from this, it has a great socio-religious significance on self-medication practices.

Case-2: body pain

Another case was derived from a 48-year-old male informant, residing in the same village and working as a helper to a mason. His daily wages are 450/- rupees, and he belongs to a lower-class Bengali Hindu family and is the only earning member of his family. Due to physically demanding labour, he experienced chronic back pain and muscle pain. He consumed painkillers suggested by the local pharmacist. As he stated, visiting a doctor would imply an inability to work or risking social ridicule and economic insecurity. When I asked him, have you shared your knowledge and experiences with your co-workers? He answered confidently that he shared his prior experiences with them rather than giving medical advice. This case highlights how economic vulnerability reinforces self-medication.

Case-3: gastrointestinal problem

This case is derived from a male (37 years) informant, residing in a semi-urban village. He is a school teacher by profession. The informant has suffered from a chronic gastrointestinal problem for three years due to his irregular dietary habits and stress. Often, he frequently consumes antacids, recommended by local pharmacists. He avoided consultation with a physician due to fear of being morally judged for his irregular lifestyle. He also stated that a lack of discipline in his dietary habits resulted in gastric illness, and it is definitely self-created. It is a shame to know that being publicly associated with gastric issues was culturally linked to poor self-control. Here, moral taboos associated with lifestyle-related issues encourage self-medication.

Case-4: chronic joint pain-an informal healthcare

A 61-year-old informant shared his experience of self-medication regarding his knee joint pain. He has been suffering from this pain for approximately four to five years. He reported frequent reliance on a local pharmacy to manage age-related joint pain. Once, he visited a physician, and the doctor prescribed some medicines such as calcium supplements, painkiller tablets, and a pain-removing ointment. These were less effective after a few days of use. Then he consulted their local pharmacist, who recommended that he not use pain medication, only take it when necessary, and gave him another pain-relieving ointment and some higher-quality calcium supplements. Although the pharmacist sometimes advised moderation in analgesic use, he acknowledged continued use during the period of acute discomfort, basically when pain disrupted sleep.

Case-5: ringworm- a chronic skin fungal infection

A male informant (22 years old) residing at Hatthuba village demonstrates his chronic skin fungal infection that is ringworm, and he has suffered from this for five months. He did not seek advice from a physician because

he thought it was a minor skin infection. Primarily, he applied holy basil (*tulsi*) and a salt mixture, but neither worked properly. Then he searched on YouTube and gathered knowledge regarding the fungal infection, and he bought an ointment named Luliconazole Cream from the nearest pharmacy shop. He applied it on his skin three times daily. Now the fungal infection is under control, but when he forgets to apply it, it can become more visible on his skin. Here it is clear that social media has impacted young people and also influenced them to practice self-medication.

DISCUSSION

The Bengali Hindu population in the study area is known for practicing self-medication, as evidenced by 57.18% of respondents following this practice. The current study's prevalence is significantly higher than that reported by Limaye et al, which found 29.1%, and by Aqeel et al, which reported 61.2% in Pakistan, both of which are higher than the present study.^{6,8} These variations may be linked to factors such as socioeconomic conditions, cultural attitudes toward illness, access to pharmacies, healthcare access issues, and pharmaceutical laws. The present study demonstrates that self-medication is more prevalent among the study population in the study area and has now become a normalized component of everyday healthcare practice rather than merely an occasional response to illness. People in the area practice self-medication not only because of inadequate health care infrastructure but also because of deeply embedded social and cultural contexts. The ethnographic case studies demonstrate that many illnesses are ordinary conditions and do not require professional medical consultation. In this regard, Fainzang's anthropological study argues that rather than being irrational drug use, self-medication is a socially and culturally constructed form of therapeutic decision-making.^{12,13} Initially, people try to evaluate bodily signs and symptoms before deciding whether medical consultation is required, drawing on their previous experiences, family knowledge, or sometimes community members. A marginal gender difference has been shown in this study, where females showing the prevalence is quite higher than males. Ahmad et al revealed in their study that males showed a higher prevalence than females. But Basu demonstrates in her study that females frequently assume primary responsibility for household healthcare decisions.³ Here, ethnographic observation further suggests that women often manage illnesses not only for themselves, but also for their family members, and through repeated use of medicines for caregiving, they gain their knowledge over pharmaceutical medicines.

The main reasons for self-medication are previous experience of medicinal knowledge, minor illnesses, extreme doctor's fees, economic constraints, etc. There is a resemblance with the Rathod et al study, and the variables are almost similar to the present study.⁴ The local pharmacists play a great and increasingly crucial

role in the community's local healthcare system. Often, pharmacists function as the primary choice and first contact healthcare providers, particularly where medical consultation fees are expensive or time-consuming. Gupta and Chakraborty showed similar observations in their study.¹⁰ While pharmacist-guided medication is appropriate for minor illnesses, it may also encourage unsupervised antibiotic use and inappropriate drug consumption. The disease-specific pattern of medicine use also reflects local therapeutic culture. Analgesics, antipyretics, gastrointestinal medicines, cough syrups, and topical preparations were the most frequently consumed medicines. Such findings correspond with global evidence that analgesics and antibiotics remain among the most commonly self-administered drugs.^{11,7} The study further demonstrates the influence of globalization and digital technologies on pharmaceutical knowledge. Younger respondents frequently reported obtaining health information through YouTube, internet searches, and social media before purchasing medicines directly from pharmacies. Digital platforms therefore increasingly function as informal sources of medical knowledge, transforming traditional patterns of health information transmission.

There are some limitations of the study worth noting. Data collection was confined to two purposively selected villages of North 24 Parganas district, and the sample was drawn exclusively from the Bengali Hindu community, so the results should not be taken to represent the broader population. Because the research followed a cross-sectional ethnographic approach. The study also depended on information provided directly by participants, which leaves it open to recall inaccuracies and the tendency of respondents to give socially favourable answers. Due to the limited sample size, the study may have lacked sufficient statistical power to establish stronger associations.

CONCLUSION

The present ethnographic study was conducted among the Bengali Hindu community of North 24 Parganas of West Bengal, India, to see the prevalence, reasons for self-medication along with the patterns and behaviour allied to those practices. The data reveal that the prevalence of self-medication is high (57.18%) among the studied population, and females were practiced slightly high in compare to males. In minor ailments, people self-medicate. The young generation often used Western biomedicines (WBM) in several illnesses or health-seeking conditions more than the other age groups. They ignore community-based healing systems because of the availability of local pharmacies or medicine shops and have a vital role in modern medicinal practices in their health care systems in the study population. In minor illness conditions, such as fever, headache, cold and cough, they practiced more. On the other hand, the old age group of informants reported they practiced self-medication with pharmacists' recommended drugs or old

prescribed medicines for their health issues. Here also noticeable that they reported visiting a doctor is costly and time-consuming. Often, they consumed medication recommended by their peer groups such as friends, neighbours, and family members. From the findings, it has been suggested that self-medication is primarily perceived as a practical response to minor health problems, reinforced by experiential knowledge and economic considerations rather than solely accessibility or social influence. This ethnographic study also highlights that self-medication among the Bengali Hindu is not merely a matter of individual choice or biomedical ignorance, but a socially embedded and culturally meaningful health practice. Apart from quantitative analysis, the qualitative case studies further demonstrate that self-medication functions both as an adaptive strategy for managing chronic or minor ailments. Cases also described lifestyle-related illnesses and how health decisions are deeply intertwined with notions of shame, responsibility, and cultural propriety. Lastly, the effect of globalization highly impacted the Bengali Hindu society as well as culture.

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REFERENCES

1. Bekele KM, Abay AM, Mengistu KA, Atsbeha BW, Demeke CA, Belay WS, et al. Knowledge, attitude, and practice on over-the-counter drugs among pharmacy and medical students: a facility-based cross-sectional study. *Integrat Pharm Res Pract*. 2020;9:135-46.
2. Goyal A, Gaur A, Chhabra M, Deepak K. Knowledge, attitude and practices of Over the Counter (OTC) medicines among rural population-A cross sectional study. *Asian J Pharm Pharmacol*. 2018;4(2):227-31.
3. Basu C. 'Self-Care' as healing behaviour: a study from urban slum and surrounding non-slum areas of north 24 Parganas District of West Bengal. *J Arts Humanit Soci Sci*. 2018;6(3):592-598.
4. Rathod P, Sharma S, Ukey U, Sonpimpale B, Ughade S, Narlawar U, et al. Prevalence, pattern, and reasons for self-medication: a community-based cross-sectional study from central India. *Cureus*. 2023;15(1):1-9.
5. Ahmad A, Khan MU, Srikanth AB, Kumar B, Singh NK, Trivedi N, et al. Evaluation of knowledge, attitude and practice about self-medication among rural and urban north Indian population. *Int J Pharm Clin Res*. 2015;7(5):326-32.
6. Aqeel T, Shabbir A, Basharat H, Bukhari M, Mobin S, Shahid H, et al. Prevalence of self-medication among urban and rural population of Islamabad, Pakistan. *Trop J Pharmaceut Res*. 2014;13(4):627.

7. Limaye D, Limaye V, Krause G, Fortwengel G. A systematic review of the literature on survey questionnaires to assess self-medication practices. *Int J Commu Medi Publ Heal*. 2017;2017(4(8)):2620-31.
8. Limaye D, Limaye V, Fortwengel G, Krause G. Self-medication practices in urban and rural areas of western India: a cross sectional study. *Int J Commu Medi Publ Heal*. 2018;2018(5 (7)):2672-85.
9. Prakash GH, Smitha MC, Prakash B, Yadav D, Murthy N. Assessment of self-medication practices among the people residing in the urban field practice area of a medical college, Mysuru: A cross-sectional study. *Int J Pharm Pharmaceut Res*. 2021;22(2):659-69.
10. Gupta S, Chakraborty A. Pattern and practice of self medication among adults in an urban community of West Bengal. *J Fam Medi Prim Care*. 2022;11(5):1858.
11. World Health Organization. Guidelines for the regulatory assessment of medicinal products for use in self-medication, 2000. Available at: <https://iris.who.int/items/468d79f6-9788-4296-9bc9-68014166373d>. Accessed 01 January 2026.
12. Fainzang S. Self-medication and society: mirages of autonomy. Taylor & Francis; 2016.
13. Fainzang S. Managing medicinal risks in self-medication. *Drug Saf*. 2014;37(5):333-42.
14. World Self-Medication Industry. The story of self-care and self-medication: 40 years of progress, 1970-2010. Ferney-Voltaire. 2010.
15. Mondal P, Das A. Health, illness, and healing: an overview in medical anthropology. *Am J Ethnomed*. 2022;9(6):1-3.
16. Mondal P, Das, A. Self-medication practices through traditional knowledge system among the scheduled caste community of north 24 Parganas, West Bengal: an ethnographic study. Delhi: ABS Books. 2025:95-108.
17. Aishwaryalakshmi K, Sasikala B, Sreelalitha N, Vigneshwaran E, Padmanabha YR. Assessment of knowledge perception and attitudes on medication in general population. *Ind J Pharm Pract*. 2012;5(3):75-8.
18. Kleinmann, A. The Illness Narratives: Suffering, Healing, and the Human Condition. New York: Basic Books; 1988.

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