



Digital Health Literacy and Self-Medication Practices Among Young Adults: A Cross-Sectional Study

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Abstract

The widespread use of the Internet as a source of health information has changed how young adults make decisions about medicine use, yet little is known about how digital health literacy relates to self-medication behaviour in the Indian context. Objective. This study examined the prevalence of self-medication, the sociodemographic correlates of this behaviour, and its association with digital health literacy and medication-safety practices among young adults in Navi Mumbai, India. Methods. A cross-sectional survey was administered online to 151 consenting respondents aged 18 years and above. The questionnaire captured sociodemographic characteristics, an eight-item digital health literacy scale adapted from the eHealth Literacy Scale (eHEALS), a six-item medication-safety practice scale, and structured items on self-medication behaviour, reasons, sources of information, and outcomes. Data were analysed using descriptive statistics, Pearson correlation, independent-samples t-tests, one-way analysis of variance, and chi-square tests of association. Results. Self-medication in the preceding six months was reported by 122 of 151 respondents (80.8%). Self-medication was significantly more common among participants living in rural and semi-urban areas than urban areas, $\chi^2(2) = 23.51$, $p < .001$, and among those with a chronic illness requiring regular medication, $\chi^2(1) = 11.98$, $p = .001$. Respondents who self-medicated scored lower on the medication-safety practice scale than non-self-medicators ($M = 18.34$ vs 22.76 , $t = -4.09$, $p < .001$, $d = 1.01$). Digital health literacy correlated weakly but significantly with medication-safety practice ($r = .20$, $p = .012$), and lower digital health literacy was associated with a higher likelihood of having experienced side effects after self-medicating, $\chi^2(4) = 9.54$, $p = .049$. Conclusion. Self-medication is highly

prevalent among the young adults surveyed and is patterned by residence and chronic-illness status rather than by digital health literacy alone. Modest but meaningful links between digital health literacy, safety practices, and adverse outcomes suggest that digital health literacy interventions could complement, but should not replace, efforts to improve access to affordable professional care.

Keywords: digital health literacy; self-medication; young adults; health information seeking; medication safety; India

1. Introduction

The Internet has become one of the first places young people turn to when they feel unwell. Search engines, social media platforms, and increasingly artificial-intelligence chatbots now sit alongside pharmacists, family members, and physicians as everyday sources of health information. This shift has made *digital health literacy* the ability to seek, find, understand, and appraise health information from electronic sources and apply that knowledge to a health problem an important determinant of how people manage minor illness (Norman & Skinner, 2006). At the same time, *self-medication*, defined by the World Health Organization as the use of medicines to treat self-recognised symptoms without consulting a registered medical practitioner, remains a common and, within limits, a legitimate form of self-care (World Health Organization, 2000). The two phenomena increasingly intersect: a person who searches online for “fever home remedy” or “safe painkiller for headache” is practising eHealth information seeking and self-medication almost in the same act.

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Whether this intersection is beneficial or harmful depends heavily on the quality of the underlying literacy skills. Adequate digital health literacy can help a person read a medicine label critically, recognise a drug interaction, or decide when a symptom warrants professional attention rather than a home remedy. Conversely, low digital health literacy combined with confidence in online information can result in inappropriate drug selection, incorrect dosing, delayed care-seeking, or unnecessary use of antibiotics an outcome of particular concern in India, where over-the-counter access to a wide range of medicines remains comparatively unregulated (Hughes et al., 2001).

Self-medication among students and young adults has been documented extensively in India and neighbouring countries, with reported prevalence ranging from about two-thirds to over ninety per cent depending on the population and recall period studied (Hussain, 2015; Kumar et al., 2013). Most of this literature, however, has focused on medical, dental, or pharmacy students, whose professional training itself shapes their medicine-related decisions. Comparatively little is known about self-medication and its digital-literacy correlates among a broader, non-clinical population of young adults, or about how the practice varies with everyday factors such as place of residence and the presence of a chronic illness.

This study addresses that gap by examining self-medication behaviour among a general sample of young adults affiliated with a college in Navi Mumbai, Maharashtra. Specifically, the study aims to: (1) estimate the prevalence, frequency, and common reasons for self-medication; (2) identify the sociodemographic characteristics associated with self-medication; and (3) examine whether digital health literacy and medication-safety practices are related to self-medication behaviour and its outcomes, including experienced side effects. The findings are intended to inform targeted digital health literacy education for young adults rather than a generic “say no to self-medication” message.

II. Literature Review

Digital Health Literacy

Norman and Skinner (2006) introduced digital health literacy as a composite construct spanning traditional, health, information, scientific, media, and computer literacy, and operationalised it through the eight-item eHealth Literacy Scale (eHEALS). The scale has since been used with adolescents, college students, and clinical populations across many countries, generally showing high internal consistency in its original validation, although later work has questioned how strongly self-reported eHEALS scores track actual, observed skill at finding and appraising health information (van der Vaart et al., 2011). A systematic review of digital health literacy among college students found consistently that students consider themselves comfortable using the Internet but are far less confident evaluating the quality of what they find, a gap that has direct implications for medicine-related decisions (Stellefson et al., 2011).

Subsequent research has linked digital health literacy to a range of health behaviours. Among nursing students, higher digital health literacy has been associated with better health-promoting lifestyle behaviour ($r = .245$, $p = .005$), suggesting that the construct extends beyond information use into actual self-care practice. Work with adolescents and young adults in Indonesia similarly found that digital health literacy shaped self-care behaviour during the COVID-19 pandemic through its influence on health information-seeking and perceived behavioural control (Gayatri et al., 2021). In the United Kingdom, digital health literacy has also been shown to buffer some of the emotional and behavioural costs of online health searching, an effect that becomes more pronounced when a person's general sense of control over their own health is otherwise low (Holch & Marwood, 2020; Văjâean & Băban, 2015). Taken together, this literature positions digital health literacy less as a simple technical skill and more as a protective resource that shapes whether online health information seeking translates into safe or unsafe action.

Self-Medication

Self-medication has been studied most extensively among health-professional students. A cross-sectional survey of postgraduate pharmacy students in India reported that 94% had practised self-medication, most commonly citing convenience and time saving (Hussain, 2015). Research among medical students in coastal South India similarly documented widespread self-medication, driven largely by the perceived triviality of the illness and confidence born of medical training (Kumar et al., 2013). Beyond India, a multi-university study reported a self-medication prevalence of about 75%, with analgesics the most commonly used class and “lack of time to consult a physician” the leading reason (Alomoush et al., 2024). These figures are broadly consistent with the WHO's framing of self-medication as a global and largely unavoidable feature of health-seeking behaviour, whose risks incorrect self-diagnosis, drug interactions, and antimicrobial resistance must be managed through consumer education rather than prohibition alone (World Health Organization, 2000; Hughes et al., 2001).

What remains comparatively under-studied is self-medication among young adults outside health-professional training, and how the online information environment specifically shapes that behaviour. A qualitative study of young adults in Surabaya, Indonesia, found that online health information seeking shaped self-medication through perceived credibility of content, social influence, and confidence in self-diagnosis, while also exposing users to misinformation risk (Nugraha



et al., 2026). This is consistent with the broader observation that young adults increasingly regard the Internet as an acceptable, if imperfect, health resource, even when they remain sceptical of specific channels such as social media (Briones, 2015).

Very few studies have directly tested the statistical association between digital health literacy scores and self-medication behaviour or its safety outcomes within a single sample, and fewer still have done so among a general (non-clinical, non-professional) population of Indian young adults. The present study was designed to address this specific gap by combining a validated approach to measuring digital health literacy with structured items on self-medication prevalence, reasons, and outcomes, and by examining these constructs alongside routinely collected demographic variables such as residence type and chronic-illness status.

III. Methodology

Design and Setting

This study used a cross-sectional, questionnaire-based design. Data were collected between mid-July and late August 2026 through a structured, self-administered online questionnaire distributed to young adults.

Participants and Sampling

Respondents were recruited through convenience sampling via the college network and social messaging groups. Eligibility required that respondents be 18 years of age or older and provide informed consent before proceeding to the questionnaire. A total of 151 responses were received; all 151 respondents (100%) affirmatively recorded consent, and no response was excluded for missing consent. Participation was voluntary and anonymous, and respondents could withdraw at any point before submission without penalty.

Instrument

The questionnaire comprised five sections. The first collected sociodemographic information: age band, gender, place of residence (urban, semi-urban, or rural), and presence of a chronic illness requiring regular medication. The second section contained an eight-item digital health literacy scale adapted from the eHEALS (Norman & Skinner, 2006), asking respondents to rate their agreement with statements such as “I know how to find helpful health resources on the Internet” and “I can tell high-quality from low-quality health resources on the Internet” on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Item scores were summed to yield a composite digital health literacy score ranging from 8 to 40, with higher scores indicating greater self-reported digital health literacy.

The third section asked about self-medication in the preceding six months (yes/no), frequency of self-medication among those who answered yes, the health conditions for which medicines were used without prescription, the classes of medicine used, the reasons for self-medicating, and the primary sources of information consulted before taking the medicine; these five items permitted multiple responses. The fourth section contained a six-item medication-safety practice scale asking respondents to rate, again on a five-point agreement scale, statements about reading the medicine label, checking dosage, checking possible side effects, completing the recommended course, consulting online information, and comparing information across sources before taking a medicine; item scores were summed to a composite ranging from 6 to 30. The fifth section asked about experienced side effects after self-medicating, whether the respondent had ever stopped a prescribed medicine because of information found online, perceived safety of self-medication for minor illness, and interest in further education on identifying reliable online health information.

Data Analysis

Data were analysed in Python (pandas 2.x and SciPy 1.17). Descriptive statistics (frequencies, percentages, means, and standard deviations) characterised the sample and the study variables. Internal consistency of the two composite scales was assessed using Cronbach's alpha. Associations between categorical variables (e.g., residence and self-medication status) were tested using Pearson chi-square tests, with Cramér's V reported as a measure of effect size. Differences in composite scale scores between self-medicating and non-self-medicating respondents were tested using Welch's independent-samples t-test (unequal variances assumed), with Cohen's d reported as the effect size. The relationship between digital health literacy and medication-safety practice scores was examined using Pearson's product-moment correlation. A one-way analysis of variance (ANOVA) tested whether digital health literacy scores differed across age bands. For analyses involving digital health literacy as a categorical predictor, scores were divided into approximate tertiles (low, moderate, high) using sample quantiles. An alpha level of .05 was used for all significance tests.

Ethical Considerations

The study was conducted in accordance with the ethical principles of the Declaration of Helsinki. Participation was voluntary, and electronic informed consent was obtained from all respondents prior to data collection; only fully



consenting responses (151 of 151, 100%) were retained for analysis. No personally identifying information was collected, and all responses were anonymised prior to analysis. Given the anonymous, minimal-risk, questionnaire-based nature of the study, it was conducted under the applicable institutional research-conduct guidelines for student survey research; a full institutional ethics committee protocol number is not applicable and none is claimed here.

IV. Results

Sample Characteristics

Of the 151 respondents, the largest age band was 18–20 years ($n = 55$, 36.4%), followed by 21–23 years ($n = 36$, 23.8%), Above 26 years ($n = 31$, 20.5%), and 24–26 years ($n = 29$, 19.2%). Sixty-six respondents (43.7%) identified as female, 53 (35.1%) as male, and 32 (21.2%) preferred not to disclose gender. Most respondents lived in urban areas ($n = 80$, 53.0%), with the remainder in semi-urban ($n = 38$, 25.2%) and rural ($n = 33$, 21.9%) areas. Fifty-five respondents (36.4%) reported a chronic illness requiring regular medication. Table 1 summarises these characteristics.

Table 1. Sociodemographic characteristics of respondents (N = 151)

Characteristic	Category	n	%
Age	18–20 years	55	36.4
	21–23 years	36	23.8
	24–26 years	29	19.2
	Above 26 years	31	20.5
Gender	Female	66	43.7
	Male	53	35.1
	Prefer not to say	32	21.2
Place of residence	Urban	80	53.0
	Semi-urban	38	25.2
	Rural	33	21.9
Chronic illness requiring regular medication	Yes	55	36.4
	No	96	63.6

Note. Percentages are column percentages within each characteristic and may not sum exactly to 100 due to rounding.

Digital Health Literacy and Medication-Safety Practice

The composite digital health literacy score (range 8–40) had a mean of 25.04 ($SD = 4.68$, median = 24), with individual scores ranging from 13 to 40. Internal consistency of the eight-item scale in this sample was low (Cronbach's $\alpha = .40$), well below the high reliability typically reported for the original eHEALS in other populations (van der Vaart et al., 2011); this is discussed further below as a limitation of the present data rather than evidence against the underlying construct. The composite medication-safety practice score (range 6–30) had a mean of 19.19 ($SD = 4.68$, median = 19) and somewhat higher, though still moderate, internal consistency (Cronbach's $\alpha = .57$). Table 2 summarises both scales.

Table 2. Descriptive statistics for the digital health literacy and medication-safety practice scales

Scale	Items	Possible range	M	SD	Cronbach's α
Digital health literacy	8	8–40	25.04	4.68	.40
Medication-safety practice	6	6–30	19.19	4.68	.57

Prevalence and Pattern of Self-Medication

Overall, 122 of 151 respondents (80.8%) reported having taken medicine without consulting a registered medical practitioner in the preceding six months. Among these, self-medication frequency was distributed across sometimes ($n = 40$, 32.8%), rarely ($n = 36$, 29.5%), often ($n = 35$, 28.7%), and very often ($n = 19$, 15.6%). The health conditions most commonly self-medicated were fever ($n = 76$), headache ($n = 73$), cough ($n = 70$), menstrual pain ($n = 65$), sore throat



(n = 64), and common cold (n = 64). Paracetamol (n = 75), cough syrup (n = 64), antibiotics (n = 63), herbal preparations (n = 62), and vitamins (n = 61) were the most frequently used medicine classes; notably, self-reported antibiotic use without prescription was common, which carries implications for antimicrobial resistance beyond the individual respondent.

The most frequently cited reasons for self-medicating were that the illness was perceived as minor (n = 70), pharmacist recommendation (n = 62), information found online (n = 59), saving money (n = 58), and saving time (n = 56), as shown in Figure 1. Pharmacists (n = 78), a previous doctor's prescription (n = 67), and family or friends (n = 64) were the most common sources of information consulted before taking a medicine, though digital sources Google (n = 58), the medicine packet insert (n = 58), Instagram/Facebook (n = 56), AI chatbots (n = 56), and YouTube (n = 52) collectively accounted for a substantial share of information seeking, underscoring the relevance of digital health literacy to this population's medicine-related decisions.

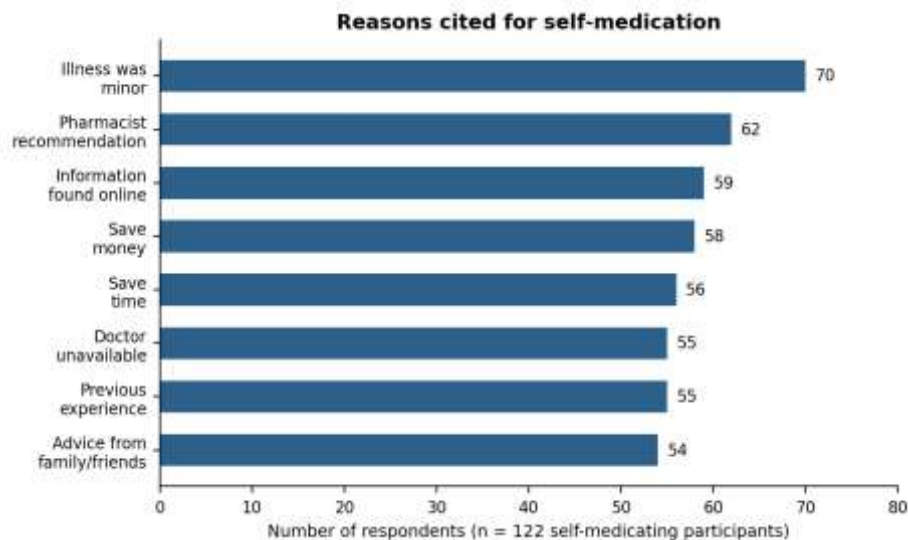


Figure 1. Reasons cited for self-medication among respondents who reported self-medicating (n = 122). Categories are not mutually exclusive.

Sociodemographic Correlates of Self-Medication

Self-medication was significantly associated with place of residence, $\chi^2(2, N = 151) = 23.51, p < .001$, Cramér's $V = .39$. All 33 rural respondents (100%) and 36 of 38 semi-urban respondents (94.7%) reported self-medicating, compared with 53 of 80 urban respondents (66.3%). Self-medication was also significantly associated with chronic-illness status, $\chi^2(1, N = 151) = 11.98, p = .001$, Cramér's $V = .28$: 53 of 55 respondents with a chronic illness (96.4%) reported self-medicating, compared with 69 of 96 respondents without one (71.9%). A weaker but statistically significant association was found with gender, $\chi^2(2, N = 151) = 6.83, p = .033$, Cramér's $V = .21$, driven mainly by a higher self-medication rate among respondents who preferred not to disclose their gender (96.9%) relative to female (77.3%) and male (75.5%) respondents; this subgroup was small (n = 32) and the finding should be interpreted with caution. Table 3 summarises these associations.

Table 3. Self-medication prevalence by sociodemographic characteristic

Characteristic	Self-medicating (%)	χ^2	df	p	Cramér's V
Residence: Rural (n=33)	33 (100.0)	23.51	2	<.001	.39
Residence: Semi-urban (n=38)	36 (94.7)				
Residence: Urban (n=80)	53 (66.3)				
Chronic illness: Yes (n=55)	53 (96.4)	11.98	1	.001	.28
Chronic illness: No (n=96)	69 (71.9)				
Gender: Female (n=66)	51 (77.3)	6.83	2	.033	.21
Gender: Male (n=53)	40 (75.5)				



Characteristic	Self-medicating (%)	χ^2	df	p	Cramér's V
Gender: Prefer not to say (n=32)	31 (96.9)				

Self-Medication, Digital Health Literacy, and Safety Outcomes

Respondents who self-medicated scored significantly lower on the medication-safety practice scale ($M = 18.34$, $SD = 4.06$) than those who did not ($M = 22.76$, $SD = 5.46$), Welch's $t(37.9) = -4.09$, $p < .001$, Cohen's $d = 1.01$ a large effect. Composite digital health literacy scores did not differ significantly between self-medicators ($M = 24.66$, $SD = 4.04$) and non-self-medicators ($M = 26.62$, $SD = 6.59$), Welch's $t(33.7) = -1.53$, $p = .135$. Across the whole sample, digital health literacy correlated positively and significantly, though modestly, with medication-safety practice, $r(149) = .20$, $p = .012$, indicating that respondents who rated themselves as more capable of finding and evaluating online health information also reported somewhat more cautious medicine-taking behaviour. Digital health literacy was not significantly correlated with self-medication frequency among those who self-medicated, $r(128) = -.02$, $p = .831$, nor did it differ significantly across age bands, $F(3, 147) = 2.59$, $p = .055$, although the latter approached conventional significance and warrants replication in a larger sample.

When digital health literacy was categorised into approximate tertiles (low, moderate, high), a significant association emerged with experienced side effects after self-medicating, $\chi^2(4, N = 151) = 9.54$, $p = .049$, Cramér's $V = .18$. Respondents in the low digital-health-literacy tertile were more likely to report having experienced side effects (28 of 60, 46.7%) than those in the high tertile (11 of 50, 22.0%), while the moderate tertile fell between the two (13 of 41, 31.7%). Table 4 presents the full cross-tabulation. Digital health literacy tertile was not significantly associated with perceived safety of self-medication for minor illness, $\chi^2(4, N = 151) = 2.64$, $p = .619$, or with interest in further education on identifying reliable online health information, $\chi^2(4, N = 151) = 1.12$, $p = .891$.

Table 4. Experienced side effects after self-medication, by digital health literacy tertile

Digital health literacy tertile	No (%)	Not sure (%)	Yes (%)	Row total
Low (score 13–22)	14 (23.3)	18 (30.0)	28 (46.7)	60
Moderate (score 23–26)	13 (31.7)	15 (36.6)	13 (31.7)	41
High (score 27–40)	23 (46.0)	16 (32.0)	11 (22.0)	50

Finally, having ever stopped taking a prescribed medicine because of information found online ($n = 68$, 45.0%) was not significantly associated with having previously experienced side effects from self-medication, $\chi^2(2, N = 151) = 1.59$, $p = .452$, suggesting that these two risk behaviours, while conceptually related, operated somewhat independently in this sample.

V. Discussion

This study found that four in five young adults surveyed had self-medicated in the preceding six months, a figure that sits at the upper end of prevalence rates reported for university and college populations elsewhere (Alomoush et al., 2024; Hussain, 2015; Kumar et al., 2013). The most common reasons perceiving the illness as minor, pharmacist recommendation, and the desire to save time or money mirror findings from earlier studies conducted with health-professional students and reinforce that self-medication for minor, self-limiting ailments is normalised across very different student populations in India, not only among those with clinical training.

The strongest correlates of self-medication in this sample were structural rather than psychological: residence and chronic-illness status. The finding that self-medication was effectively universal among rural and semi-urban respondents, but markedly less common among urban respondents, is consistent with a straightforward access explanation where registered practitioners and pharmacies are less immediately available, self-medicating substitutes for professional consultation out of necessity rather than preference. Likewise, the near-universal self-medication reported by respondents managing a chronic illness plausibly reflects familiarity with, and repeat use of, medicines originally prescribed for their condition, blurring the line between self-management of an established diagnosis and self-medication in the WHO's stricter sense. Both patterns suggest that interventions aimed narrowly at improving individual knowledge are unlikely, on their own, to reduce self-medication in settings where it functions as a practical response to limited healthcare access.



The relationship between digital health literacy and self-medication was more nuanced than a simple “more literacy, less self-medication” hypothesis would predict. Digital health literacy did not differ significantly between self-medicators and non-self-medicators, indicating that self-reported digital health skill did not, by itself, deter respondents from self-medicating consistent with the interpretation, drawn from the residence and chronic-illness findings above, that self-medication is often driven by circumstance rather than by a knowledge deficit. However, digital health literacy was meaningfully related to how safely respondents self-medicated: it correlated positively with the medication-safety practice score, and lower digital health literacy was associated with a higher rate of experienced side effects. This pattern echoes prior work showing that digital health literacy functions less as a gatekeeper to online health information seeking and more as a protective factor shaping what people do with the information they find (Gayatri et al., 2021; Holch & Marwood, 2020). In practical terms, the respondents in this sample who were most at risk were not necessarily those who self-medicated most often, but those who did so with comparatively weaker skills for evaluating the information guiding their choices.

The comparatively low internal consistency observed for the digital health literacy scale in this sample ($\alpha = .40$), against the high reliability typically reported for the eHEALS elsewhere (Norman & Skinner, 2006; van der Vaart et al., 2011), warrants direct comment rather than being set aside. Several explanations are plausible. First, the sample was heterogeneous in age and residence, and digital-health-related self-appraisal may draw on different reference points across these subgroups, attenuating item covariance. Second, online, self-administered Likert items completed rapidly are prone to inconsistent response patterns that lower measured reliability without necessarily reflecting the true unreliability of the underlying construct. Third, the adaptation of the scale for this study, while retaining the original item content, was not independently re-validated in this population prior to use. Whatever the explanation, this limitation means that digital health literacy scores in this study should be interpreted as an approximate, sample-specific ordering of respondents rather than as precise measurements, and it tempers, without negating, the associations reported above; the medication-safety scale showed similarly moderate rather than strong reliability ($\alpha = .57$) and should be read with the same caution.

The finding that a large minority of respondents (45.0%) had stopped a prescribed medicine because of information found online, independent of whether they had experienced side effects themselves, is a notable safety signal. It suggests that online information can override, rather than merely supplement, a clinician's instructions for a meaningful share of this population, a behaviour that is difficult to detect through self-medication prevalence figures alone and that deserves attention in future digital health literacy interventions targeting treatment adherence specifically, not only initial medicine choice.

Limitations

Several limitations should be considered when interpreting these findings. The convenience sample was drawn from a single college network in one city, limiting generalisability to young adults elsewhere in India or beyond. The cross-sectional design precludes causal inference; for example, it is equally plausible that poorer medication-safety practices lead people to experience side effects that they later attribute, in hindsight, to their own choices, as that low digital health literacy causes unsafe practice. Self-reported six-month recall of self-medication and side effects is subject to recall bias. The modest and, for digital health literacy, low internal consistency of the composite scales, discussed above, constrains confidence in the precise magnitude of the associations reported, though the direction and pattern of results were broadly consistent with the wider literature. Finally, gender was reported using a category that included a relatively large “prefer not to say” group, which limited the interpretability of gender-based comparisons and should be refined in future instrument design.

VI. Conclusion

Self-medication was reported by the large majority of the young adults surveyed in this study and was most strongly patterned by residence and chronic-illness status, pointing to access and habitual self-management as primary drivers rather than a simple lack of awareness. Digital health literacy did not predict whether respondents self-medicated, but it was significantly related to how safely they did so, correlating with better medication-safety practices and a lower likelihood of experiencing side effects. These findings suggest that public health messaging aimed at young adults should move beyond discouraging self-medication outright an unrealistic goal where access to professional care is limited toward strengthening the specific skills that make self-medication safer: reading labels and checking dosages, recognising when online information conflicts with a clinician's advice, and knowing when a symptom warrants professional attention rather than a home remedy. Future research with larger, multi-site samples and psychometrically validated instruments is needed to confirm these associations and to test whether targeted digital health literacy interventions measurably reduce self-medication-related harm in this population.



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Declarations

Conflicts of Interest

The author declares no conflict of interest.

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Ethical Approval

This study was conducted anonymously and voluntarily, in accordance with the ethical principles of the Declaration of Helsinki. Informed consent was obtained electronically from all 151 respondents prior to participation, and only fully consenting responses were included in the analysis (100% consent rate). No identifying personal information was collected. As the study involved an anonymous, minimal-risk questionnaire administered to adult volunteers, it was carried out under the applicable institutional guidelines for student survey-based research.

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Appendix A: Overview of Survey Instrument

The self-administered questionnaire comprised 28 items across five sections: (1) consent and sociodemographic characteristics (age, gender, place of residence, chronic-illness status); (2) an eight-item digital health literacy scale adapted from the eHEALS (five-point agreement scale); (3) self-medication behaviour, including six-month prevalence, frequency, health conditions involved, medicine classes used, reasons, and information sources (multiple-response items); (4) a six-item medication-safety practice scale (five-point agreement scale); and (5) four items on side effects experienced, discontinuation of prescribed medicine due to online information, perceived safety of self-medication, and interest in further education. The complete item wording is available from the corresponding author on reasonable request.