

KNOWLEDGE, PRACTICES, AND ATTITUDES OF SELF-MEDICATION AMONG HEALTH CARE STUDENTS: A CROSS-SECTIONAL STUDY IN VIETNAM

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Received 19 March 2018 ▪ Revised 09 April 2018 ▪ Accepted 22 May 2018

ABSTRACT: *The primary purpose of this cross-sectional study was to determine the knowledge, practices, and attitudes of health care students towards self-medication. Specific insights were gained from the context of Vietnam. Indeed, the results revealed an increasing trend in self-medication among health care students in Vietnam. Notably, the factor of gender did not play a statistically significant role in shaping these trends, but major parameters, such as the age of the participants, year of study, and socioeconomic status, were found to play a moderating role in predicting the likelihood of health care students engaging in self-medication. Regarding the aspect of the socioeconomic status, most of the students were employed, but the perceived high cost of health care was observed to cause the majority of them to resort to self-medication as a cost- and time-saving measure. With self-medication perceived by most of the health care students to promote self-care, the study established that the practice is a worrying trend in Vietnam. In future, there is a need for health care organisations and practitioners to engage in awareness programs that might enable citizens to understand some of the adverse effects that are likely to arise from the improper use of medications. Some of the topics that are worth addressing or presenting include increased side effects due to self-medication, the danger of toxicity, and the risk of drug resistance. Regarding future research, a major issue requiring further investigation involves the efficacy of specific interventions seeking to minimise the practice of self-medication among youths in Vietnam.*

Key words: *Knowledge, attitude, practice, student, self-medication, Vietnam.*

INTRODUCTION

Self-medication refers to decisions by individuals to use exogenous influences or substances to self-administer treatments. According to Abay and Amelo (2010), cases of self-medication are common among individuals experiencing psychological or physical ailments (Abay and Amelo, 2010). Examples of substances used in self-medication, in accordance with Alshogran, Alzoubi, and Farah (2017), include dietary supplements and over-the-counter drugs (Alshogran et al., 2017). Furthermore, it can be inferred that self-medication occurs without medical approval or supervision. From the current literature, many studies indicate that a significant number of medical students engage in self-medication practice (Angamo, 2012). Ansam and Sawalha (2010) observed that the students' self-medication forms a vital and integral component of self-care. The study highlighted that the practice constitutes the use and selection of medicinal products or medicines, including traditional and herbal products, for treating recognised symptoms or illnesses (Ansam and Sawalha, 2010). As confirmed by Asiyeh and Firoozeh (2016), self-medication is also evident in situations where there is continued use of medications that have been prescribed by physicians relative to recurring or chronic symptoms or

diseases (Asiyeh and Firoozeh, 2016). While the practice of self-medication has been documented as increasing globally, most of the previous scholarly investigations have suggested that the situation is worse among developing countries (Ayalew, 2017).

A variety of studies have documented some of the major factors affecting or contributing to self-medication. One of these factors involves reforms in the health sector. Others include access to health care facilities, medical factors, socioeconomic factors, such as awareness about health, access to medical information, and educational level (Badiger, 2010). Globally, the increase in cases of self-medication has been attributed to issues such as new technological developments (including the dominance of the Internet and online interactions), improvements in the socioeconomic status of individuals, level of education, and the people's general knowledge (Banerjee, 2012). Regarding the risks and benefits with which the process of self-medication is associated, mixed outcomes have been documented. According to Belachew and Diriba (2011), responsible self-medication, which has been advocated by the World Health Organization (WHO), aids in saving medical resources, which are already scarce (Belachew, 2011). Beyene, Getachew, and Dobocho et al. (2017) stated that self-medication also yields reductions in the time and cost that individuals spend visiting health care facilities, aside from reducing the burden that health care facilities face regarding issues like congestion due to minor conditions (Beyene, 2017). However, situations where self-medication has been conducted inappropriately have been documented to carry the risk of abuse and dependence, inappropriate duration of using medicine, risk of harmful interaction or doubled medication, interactions with prescribed medicinal products, failure to self-diagnose or recognise contraindications, and delay in seeking relevant medical advice (Bhatia, 2017).

In the Vietnamese context, El Ezz and Ez-Elarab (2011) documented that health care service access is expensive and sometimes difficult to obtain (El Ezz and Ez-Elarab, 2011). Gyawali, Shankar, Poudel, and Saha (2015) observed that this barrier accounts for the increasing cases of self-medication as an avenue through which cost-effective and easier health care options are implemented (Gyawali et al., 2015). Similar to other countries in the developing world, Vietnam has witnessed many non-medical personnel dispensing prescription-only medicines without prescriptions, and the majority of these activities have been observed as occurring at medical stores. Some of the factors observed as promoting this trend are related to the process allowing many members of the public to avoid paying consultation and other charges, thereby making their health care less expensive. Additionally, easy access to numerous medical stores from residences accounts for some of the increase in cases of self-medication, along with less waiting time to receive medications at such stores (Lukovic, 2016). As such, these scholarly affirmations lead to an inference that external and internal factors shape Vietnam's public preference for self-medication, constituting both the push and pull factors. With easy access to medicines, including herbal medicines, the need for early interventions aimed at curbing self-medication and the associated risks, especially in the context of Vietnam, is crucial. Henry et al. (2016) observed that the trend is exacerbated by the majority of citizens' perception that herbal medicines are not only devoid of side effects but are also completely safe (Henry, 2016). In their undergraduate years, medical students do not have the legal ability to prescribe medications, even after gaining in-depth knowledge regarding therapeutics and the pathophysiology of diseases. Given this, Henry et al. (2016) observed that most of these students have found themselves in a unique situation, especially relative to the practice of self-medication (Henry et al., 2016). According to recent statistics regarding medical students engaging in self-medication, the prevalence and incidence are high in regions such as Egypt (at 55%) (El Ezz, 2011) and India (at 92%) (Asyyeh, 2010). For these medical students, some of the factors that have been found to compound the situation include their knowledge of diseases, greater access to information and medicine, and empowerment with high educational levels (Michelle, 2011). With self-medication incidence and prevalence documented to be high in developing countries, Vietnam remains unexceptional. However, in-depth examinations about self-medication in such developing zones have yet to be conducted, regardless of the prevalence of the self-medication phenomenon. To address this gap in the literature, this study sought to determine the knowledge, attitudes, and practices of self-medication among health care students, with specific insights gained from a cross-sectional research perspective in Vietnam.

LITERATURE REVIEW

Given the large population in Vietnam, one of the notable problems facing the country is adequate health care. Mohamed, Gunasekaran, Kadirvelu, et al. (2015) stated that Vietnam's public health system is insufficient, which is a problem that has been reported in the wake of a growing demand for health care services (Mohamed, 2015). According to Nithin and Bhaskarn (2013), the health care problem in this developing country can also

be attributed to economic imbalances, whereby most households are resource constrained (Nithin, 2013). The eventuality of citizens' behaviour relative to the choice of treatments for their illnesses have been shaped by the dilemmas mentioned above, paving the way for an increase in self-medication activities (Raj, 2015). Some studies have also examined the contributory role of the legal system and the large market size in terms of how they affect the incidence and prevalence of self-medication, especially in Vietnam (Suleiman, 2015). In such studies, Vietnam's medicine trade is characterised by a relaxed legal status, which has become increasingly worrying in the wake of the large market size for medical products (Syed, 2015). Given these dilemmas, WHO (2015) reported that Vietnamese society has witnessed self-medication evolve into a common phenomenon, especially due to the perception that the less-expensive options are effective in resolving health problems among citizens (WHO, 2015). With a focus on the trends and motivations for self-medication in the context of Vietnam, a study by Abay and Amelo (2010) revealed that aspects of health insurance and income status play a significant role in steering citizens' engagement in self-medication (Abay, 2010). Alshogran, Alzoubi, and Farah (2017) established eight broad categories into which factors accounting for self-medication cases could be classified (Alshograb, 2017) as follows: medicine availability, health sector reforms, epidemiological and demographic characteristics, public health and environmental conditions, illness management, accessibility, lifestyle, and socioeconomic characteristics. It is useful to acknowledge that these scholarly assertions contribute to the literature on self-medication because they sensitise audiences to some of the motivations behind citizens' engagement in self-medication. In addition, these studies are important because they increase the understanding about some of the factors specific to developing countries, upon which the disparity in the rates between developed and developing regions can be discerned. Nevertheless, it is important to highlight that these scholarly observations do not provide insight into aspects of knowledge, practices, and attitudes of health care studies in the context of the developing world. By focusing on and gaining data from health care students in Vietnam, this cross-sectional study is poised to contribute to the literature.

Some studies have also focused on developing countries other than Vietnam. For instance, Angamo and Wabe (2012) established that in the context of Nigeria, residents' occupational and age statuses exhibited a significant association with self-medication (Angamo, 2012). As contended by Ansam and Sawalha (2010), the situation is exacerbated by a lack of knowledge about some of the negative outcomes that tend to accrue from self-medication practice (Ansam, 2010). In another study, Asiyeh and Firoozeh (2016) sought to establish some of the factors responsible for the perceived growth in the rate of self-medication with antibiotics, with insights gained from Portugal (Asiyeh, 2016). Indeed, the results demonstrated that self-medication practices, especially with antibiotics, are linked to three major determinants. Similar to the study by Ayalew (2017), the three major determinants that were documented include behavioural variables, health and health system variables, and socio-demographic variables (Ayalew, 2017). Badiger, Kundapur, Jain, et al. (2010) made similar observations, stating that self-medication with antibiotics, especially in Portugal and other countries with similar demographic and socio-cultural characteristics, can be predicted by aspects of gender, age, and non-prescription acquisition (Badiger, 2010).

In the context of Spain, Banerjee and Bhadury (2012) stated that most self-medication decisions depend on socioeconomic factors. Specific and primary variables that were documented included residential location, marriage status, and gender (Banerjee, 2012). Particularly, the study concurred with the observations of Belachew and Diriba (2011), who established that the rate of self-medication was higher among urban residents, individuals or those with single marriage status, and female respondents (Balechew, 2011). It was evident that this literature was relevant to this study insofar as it paved the way for the analysis and determination as to whether similar findings could be obtained relative to the case of health care students in Vietnam, upon which possible parallels could be drawn between the findings. In other parts of the European context, investigations have been conducted regarding the interaction between enabling factors (such as the health care system and wealth of the target countries) and predisposing factors (such as knowledge and attitudes about self-medication and the use of antibiotics), as well as the role of these interactions in shaping the rate of self-medication in society (Beyene, 2017). According to Bhatia, Ripudaman, Akashdeep, and Bhardwaj (2017), most of these results confirmed that when individuals believe strongly in self-medication as a useful treatment mechanism, the behaviour (self-medication) is likely to be experienced (Bhatia, 2017). El Ezz and Ez-Elarab (2011) contended that this variable tends to be complemented by the availability of antibiotics, government failure to supervise and regulate informal markets for drugs and medicines, and knowledge about pharmacy or medical sciences, with health care students being unexceptional (El Ezz, 2011). In relation to this study, the literature was important because it formed a foundation for further examinations

regarding the knowledge and attitudes of health care students, especially in the aim of confirming the assertions in the previous literature.

METHODS

As noted earlier, this study focused on the context of Vietnam, with insights gained from health care students. The study employed a cross-sectional approach in which self-reported questionnaires were administered to the participants. In relation to the attributes of population and sampling, the source population constituted health care students in selected public universities. Some of the specific groups from which the information was gained included pharmacy and nursing students. Notably, the inclusion/exclusion criteria were established in such a way that the students were expected to be between year one and year five of their studies. Prior to the data collection process, the purpose of the study was explained to the participants. Permission was secured from relevant authorities, as well as the participants. Regarding the aspect of ethical conformation, participant anonymity was achieved by avoiding the use of personal information, such as names, addresses, and registration numbers of the students. The main aim of this anonymising was to avoid potential victimisation, as well as fear, among the participants. Furthermore, the step was embraced to improve the honesty of the participants' responses. Relative to the issues of data privacy and confidentiality, both the raw and analysed data were secured by using strong passwords to bar unauthorised access.

The data collection procedure involved the use of a self-administered questionnaire. The questionnaire entailed seven sections, and specific questions linked to the central aim of the study were examined using a five-point Likert scale. Before these sections were completed, the participants' demographic data (such as their gender, age, and marital status) was collected. The main objective of this demographic collection was to predict whether demographic characteristics affected the knowledge, attitude, and practices of the health care students relative to the issue of self-medication. By discerning the possible role of demographic characteristics of the health care students and their knowledge, practices, and attitudes towards self-medication, the study strived to establish whether parallels could be drawn between the findings from the students in Vietnam and those that were documented in previous research studies in other developing countries. One of the initial questions required the participants to indicate whether they had self-medicated (or self-treated). For those who would indicated that they had done so, the questionnaire proceeded to examine some of the symptoms for which self-medication was common, some of the sources of information that they might have consulted, and the attitude they held towards the practice. It was also notable that these participants were required to indicate whether they were aware of any risks or side effects of self-medication, aside from indicating the perceived benefits or factors accounting for their engagement in the self-medication practice.

Regarding the data analysis procedure, this study relied on the descriptive statistics approach, using Microsoft Excel for Windows® and SPSS® version 20.0. The motivation behind this data analysis approach arose from the study's focus on the frequency of the variables that were being investigated, especially the specific parameters through which issues such as the knowledge, practices, and attitudes of the students towards self-medication were examined. The study relied on the convenience sampling approach. According to Punch (2013) and Denzin and Lincoln (2011), convenience sampling is a non-probability approach whereby the researcher selects part of a given population based on the criterion that the given section of the population is proximally close (Punch, 2013; Denzin, 2011). Furthermore, Saunders, Lewis, and Thornhill (2012) and Creswell (2014) state that the choice of convenience sampling implies that the researcher selects individuals who can be easily reached or contacted (Saunders, 2012; Creswell, 2014). In this study, the availability of health care students informed the decision to employ the convenience sampling approach.

However, mixed outcomes have been documented regarding the merits and demerits of convenience sampling. Regarding the demerits, Savin-Baden and Major (2013) stated that the approach might not be representative of the entire population. For example, the current study focused on health care students in the context of public universities in Vietnam, with the majority responding to questionnaires online. As such, the sampling technique excluded individuals outside this demographic population, suggesting that the views of the students were unlikely to reflect those of community members outside the institutions of higher learning, a factor that threatened the validity and reliability of the findings. Despite this demerit, Merriam and Tisdell (2015) and Carter, Bryant-Lukosius, DiCenso, et al. (2014) state that the advantages of convenience sampling outweigh the perceived demerits (Merriam, 2015; Carter, 2014). Particularly, the study confirmed that convenience sampling is economical, saves time and financial resources, and is easy to implement.

Furthermore, Hesse-Biber and Leavy (2011) and Creswell (2013) state that this sampling technique supports pilot studies by ensuring that initial primary data is collected to inform further lines of action (Hesse-Biber, 2011; Creswell, 2013). Thus, convenience sampling is seen to pave the way for the researcher to determine the need for more in-depth research. Given that one of the factors motivating this study was contributing to the previous literature by determining whether the views held by health care students in Vietnam were likely to concur with the results documented in the existing literature, convenience sampling was deemed timely and appropriate. Overall, a drawback of convenience sampling is the danger of selection bias (hence possible social desirability bias), but this study employed the technique because its merits outweighed the demerits in terms of cost-effectiveness, timeliness, helpfulness in conducting hypothesis generation and pilot studies, and the ease of implementation with which the sampling procedure is associated.

To assess the knowledge, attitudes, and practices of self-medication among health care students in Vietnam, a descriptive statistical technique was employed before allowing for the presentation of the results through statistical tables, graphs, and charts. Imperative to note is that the study's objectives were achieved based on the investigation of the interactions between the dependent and independent variables. The dependent variables included knowledge about the perceived benefits and risks of self-medication, the practice of self-medication, and the health care students' attitude towards the process of self-medication. The independent variables included the types of drugs self-administered, diseases and their severity, medication costs, drug availability, peer and family pressure, and the participants' demographic characteristics (such as marital status, gender, and age). Ethical adherence to the principles governing the research practice was achieved by assuring the participants that the decision to participate was voluntary and that they were free to withdraw at any stage. In addition, the participants were informed that the withdrawal would not result in any penalty. A major issue that would make the participants withdraw was specified to involve psychological torture or trauma (due to the nature of the subject that was being investigated).

RESULTS AND DISCUSSION

As indicated in section 1, the main aim of the study was to determine the knowledge, practices, and attitudes of health care students towards self-medication in Vietnam. The study utilised primary and secondary data. Secondary data was obtained from the previous scholarly sources, and primary data was obtained from students in public universities in Vietnam. The goal of using primary and secondary data (largely presented in section 2) was to determine whether parallels could be drawn between the information obtained from the study's participants and the findings reported by previous scholars who had focused on a similar subject and upon which valid and reliable inferences could be made. This section provides descriptive statistical outcomes obtained from the results, as well as the demographic data of the participants. The section also provides graphical presentations and statistical tables illustrating views provided by the participants regarding the central subject that was investigated. These tables and graphs were developed after organising the raw data obtained from the information provided by the semi-structured questionnaires that were received. The questionnaires had open-ended and closed-ended questions (see Appendix A).

Demographic information

One of the questions regarding participants' demographic data concerned gender. Eighty-six questionnaires were returned for purposes of analysis and interpretation. Given that 150 participants had been initially selected for participation, it was evident that 57.33% of the participants returned their responses, which was a relatively high response rate. The number of male participants (61) was higher than that of the female participants (25). These groups represented 70.93% and 29.07% of the responses (questionnaires received), respectively. Given the validity and reliability of the study's data due to the adequate number of questionnaires returned and different social, economic, and cultural backgrounds from which the participants hailed, it could be inferred that the interpretations regarding the specific objectives that were tested were worth relating to

the rest of Vietnam and other developing countries. The figure below illustrates the demographic nature of the participants.

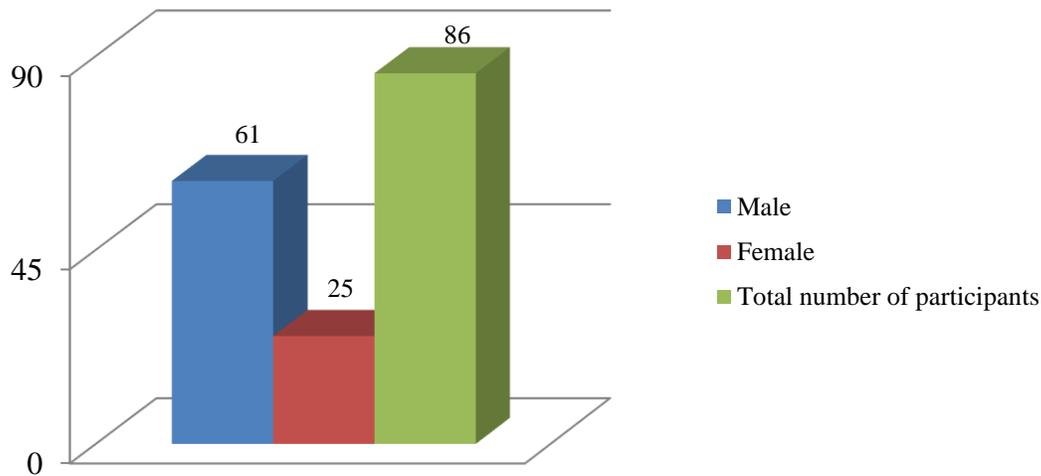


Fig 1: Gender of the respondents

The participants' ages were recorded with the aim of determining whether this factor was likely to affect the patterns of responses. Notably, the study strived to collect data from individuals aged 20 to 39 years, implying that the majority were likely to be youths, with the inclusion/exclusion criteria targeting health care students from year 1 to year 5 of study. Mixed outcomes were obtained regarding this variable. From the four broad age categories, most of the respondents were aged between 30 and 34. These 32 participants accounted for 37.21% of the responses that were received. This group was followed by those aged 35 to 39 years, which included 27 participants, accounting for 31.40% of the students who completed and returned the questionnaires. There were 15 participants aged 20 to 24 years, and 12 participants aged 25 to 29. Members belonging to these age categories represented 17.44% and 13.95% of the responses, respectively. As will be illustrated in the sub-section that follows, the number of participants belonging to these broad age categories was similar to the percentages obtained regarding their duration of stay in Vietnam. The implication is that most of the participants belonging to the first age brackets were likely to have stayed in the country for a longer period, meaning that they were likely capable of speaking to issues of self-medication in Vietnam, hence generalisability to the rest of the country. The figure below represents the age brackets in which the participants who returned the questionnaires belonged.

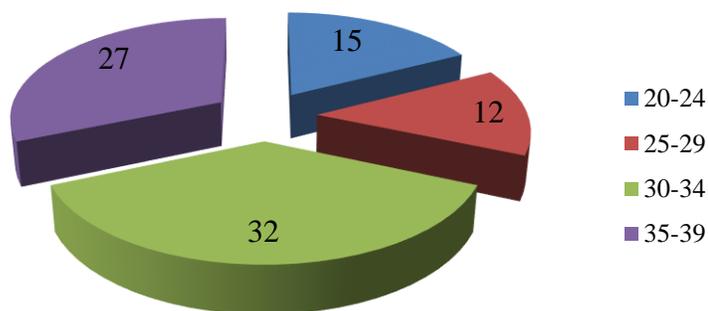


Fig 2: Age of the participants

Another aspect of the participants' demographic or background data involved the length of the study. Forty-six participants stated that they were in year 2, representing 53.49%. Twenty participants were in year 2, representing 23.26% of the responses received. There were 11 participants who were in year 3, and 9 in year 4. The latter two categories of respondents represented 12.79% and 10.47% of the participants, respectively. As highlighted in the sub-section above, most of the individuals who had stayed in Vietnam for a longer period belonged to the age bracket of 30 to 34 years. Therefore, it could be inferred that the study's results were obtained from an experienced population that had stayed in the country for a significant period, contributing to possible reliability and validity of the data obtained. The figure below shows these demographic features.

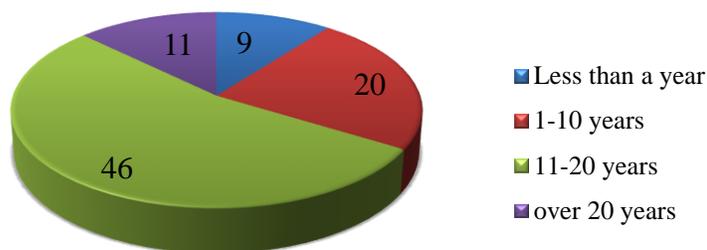


Fig 3: Participants' duration of stay or time living in Vietnam

An additional demographic feature that was investigated involved the participants' sources of livelihood. Indeed, the objective of this investigation was to predict whether the socioeconomic status and lifestyle of the participants had a significant impact on their practices and attitudes towards self-medication. For the majority of the participants (75 out of 86), the dominant source of livelihood was self-employment. This group represented 87.21% of the participants whose responses were received. The rest of the group relied on business for livelihood (5), those who were in the public sector (4), and those who were unemployed (2). These figures are summarised below.

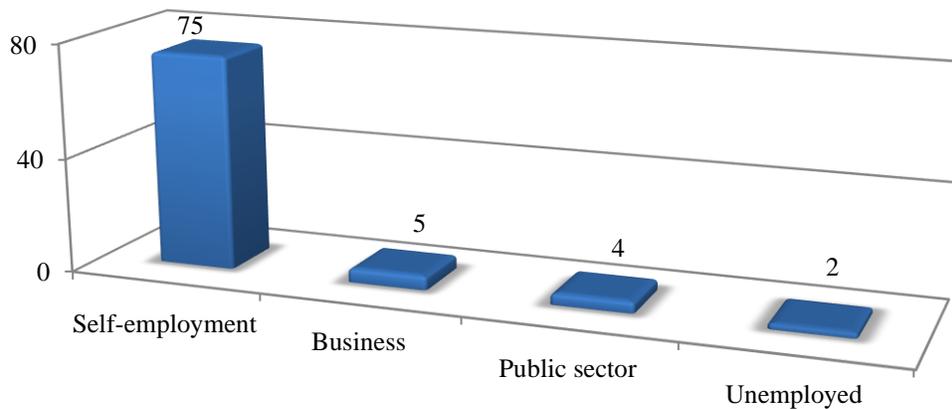


Fig 4: Participants' sources of livelihood

The next question sought to determine the number of students who had engaged in self-medication. The aim of this question was to establish whether there was an increasing trend in self-medication among health care students in Vietnam. The question also sought to pave the way for a further investigation regarding self-medication and the participants' knowledge, attitudes, and practices regarding self-medication. Whereas the types of drugs used, forms of advice received, nature of external influences towards self-medication, and target symptoms varied significantly from one participant to another, all 86 participants admitted having engaged in self-medication. This worrying trend led to further inquiry regarding what had motivated the students to engage in the practice.

Out of the 86 responses that were received, 49 participants stated that they had been influenced by traditional healers. These participants accounted for 56.98% of the responses. Seventeen participants stated that they had engaged in self-medication due to their friends' advice, while 14 participants relied on advertisements and the Internet. These groups represented 19.77% and 16.28% of the responses, respectively. Four participants (4.65%) stated that they had engaged in self-medication motivated by personal experience, and two respondents (2.33%) stated that they had relied on pharmaceutical advice. These results are summarised as follows:

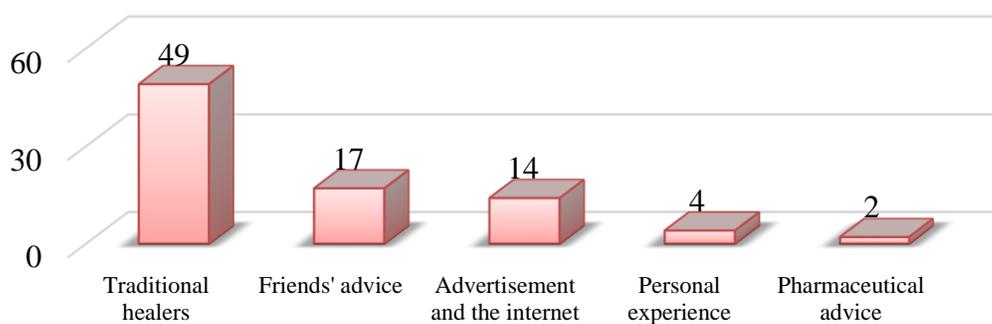


Fig 5: Sources of information for self-medication

The figure below highlights the participants' responses regarding their attitudes and perceptions towards self-medication.

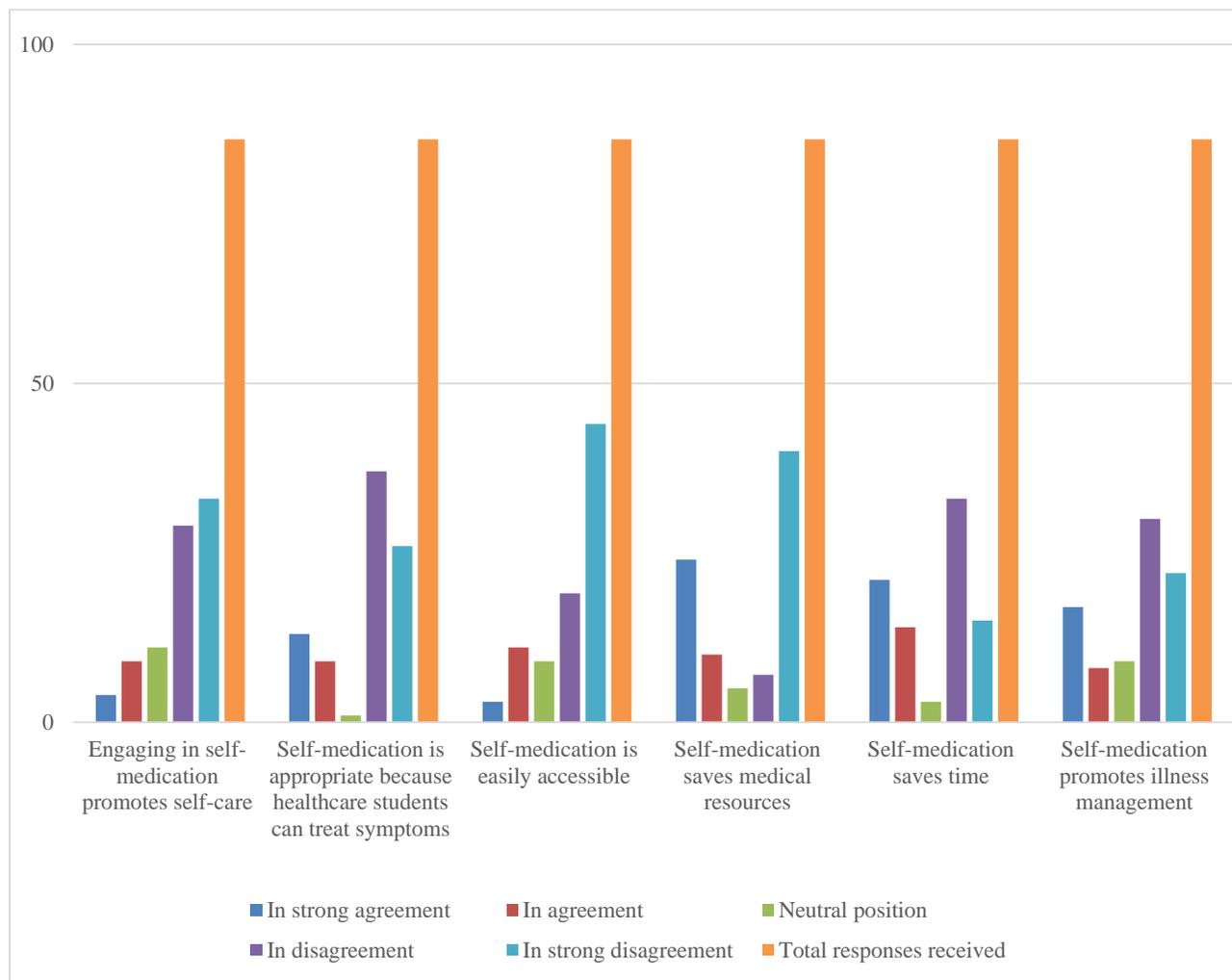


Fig 6: Participants' responses regarding their attitudes and perceptions of self-medication

The investigation culminated in an examination of the participants' understanding of some of the dangers or risks of engaging in self-medication. The results are summarised as follows:

Table 1: The dangers of engaging in self-medication

Engaging in self-medication leads to the following risks	Frequency	Percentage
Abuse and dependence		
In strong agreement	70	81.00
In agreement	11	12.79
Neutral position	5	5.81
Total	86	100.00
Inappropriate use of medicine		
In strong agreement	63	73.26
In agreement	8	9.30
Neutral position	15	17.44
Total	86	100.00
Risk of harmful interactions and double medication		
In strong agreement	72	83.72
In agreement	14	16.28
Neutral position	2	2.33
Total	86	100.00
Interaction with other prescribed medicinal products		
In strong agreement	62	72.09
In agreement	6	6.98
Neutral position	18	20.93
Total	86	100.0
Failure to self-diagnose or recognise contraindications		
In strong agreement	59	68.60
In agreement	21	24.42
Neutral position	6	6.98
Total	86	100.00
Delay in seeking relevant medical advice		
In strong agreement	44	51.16
In agreement	32	37.21
Neutral position	10	11.63
Total	86	100.00

CONCLUSION AND RECOMMENDATIONS

In summary, this study revealed an increasing trend in self-medication among health care students in Vietnam. While the factor of gender did not play a statistically significant role in shaping these trends, major parameters, such as the age of the participants, the year of study, and socioeconomic status, were found to play

a moderate role in predicting the likelihood of health care students to engage in self-medication. Regarding the aspect of the socioeconomic status, most of the students were employed, but the perceived high cost of health care was found to make the majority of the respondents' resort to self-medication as a cost- and time-saving option. Relative to the attitude of the students towards self-medication, this study established that the acknowledgement that self-medication promoted self-care was a major driving force responsible for the worrying trends in the health care students' engagement in self-medication.

This study underscores the need for health care organisations and practitioners to establish awareness programs that might enable citizens to understand some of the adverse effects that are likely to arise from the improper use of medications, including increased side effects due to self-medication, the danger of toxicity, and the risk of drug resistance. It was also noted that most of the participants were youths and that the health care students were knowledgeable and expected to be aware of the dangers of self-medication, yet they had engaged in the self-medication practice. It emerged that in the greater population in Vietnam, especially groups that have not pursued higher education programs (and hence are less knowledgeable), the prevalence of self-medication might be higher and that the perceived adversities might be more serious. This is worth considering when early intervention programs are being developed. Given the findings of the study, self-medication seemed inevitable, but it remains the role of Vietnam's health professionals and drug authorities to ensure that they educate the general population regarding the benefits and risks of self-medication. Given that this study established that the dangers of self-medication outweigh the perceived benefits, the need for Vietnam to apply stronger policies through which invalid medical supplies might be prohibited cannot be overemphasised.

In terms of limitations, this study focused on a convenient sample (health care students in Vietnam's public universities), with the resultant convenience sampling procedure leaving out members of other demographics. As such, the study was limited, whereby it might have presented biased outcomes that were unlikely to be generalised to the entire population in Vietnam regarding the variables under investigation. Despite this limitation, a relatively high response rate from participants from different social backgrounds potentially countered that limitation, making the study valid and reliable. Additionally, the limitation was countered by the affirmation that the participants were knowledgeable and better able to discern issues surrounding the subject of self-medication, hence providing reliable results that could be related to other scholarly findings in the existing literature, as well as in the context of Vietnam.

Regarding future research, this study laid a foundation for understanding the knowledge, attitudes, and practices of self-medication in settings other than those involving health care students. As such, future studies ought to examine these variables based on the views or perceptions of students belonging to other faculties, as well as other members of the community. As well, there is a need for future research to focus on the efficacy of specific interventions seeking to minimise the practice of self-medication among youths in Vietnam. It is projected that this research-practice will inform relevant authorities about trends in self-medication, some of the factors contributing to self-medication, major challenges faced by health care authorities charged with curbing self-medication, and feasible solutions that could be implemented to address this societal problem in Vietnam.

ACKNOWLEDGEMENT

The authors acknowledged the participants who are volunteers to join the interviews.

CONFLICTS OF INTERESTS

The authors have no conflicts of interests to declare.

FUNDING

None.

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