

Perceptions and utilisation of complementary and alternative medicine practices among hospital patients in Bangladesh

MD. SHAHJALAL (✉ md.shahjalal3@northsouth.edu)

North South University

Jeffrey Gow

University of Southern Queensland

Md. Ashfikur Rahman

Khulna University

Md. Jakir Hossain

Government Unani & Ayurvedic Medical College

Md. Nafiul Alam Khan

Khulna University

Md. Sazzadul Alam

Government Unani & Ayurvedic Medical College

Ahmed Hossain

North South University

Rashidul Alam Mahumud

University of Sydney

Research Article

Keywords: complementary and alternative medicine, conventional medicine, Bangladesh

Posted Date: November 22nd, 2021

DOI: <https://doi.org/10.21203/rs.3.rs-1030941/v1>

License: © ⓘ This work is licensed under a Creative Commons Attribution 4.0 International License.

[Read Full License](#)

Abstract

Background

Complementary and alternative medicine (CAM) has played an important role in providing universal access to essential health care services globally. Conventional medicine (CM) driven health care practices are well-developed in Bangladesh; however, millions of people utilise CAM-based healthcare services for specific health conditions or health benefits due to high out-of-pocket payment (74%) in Bangladesh, while the global average is only 32%. Lack of evidence exists about the perception and utilisation of CAM in Bangladesh. This study aimed to estimate the prevalence correlates of the perception and utilisation of CAM among patients who received health care at a tertiary hospital, Bangladesh.

Methods

This study comprised a cross-sectional study with 1,183 individuals from the cross-sectional survey among patients who received health care from Government Unani and Ayurvedic Medical College Hospital in Dhaka, Bangladesh. Logistic regression analyses were employed to estimate the adjusted effect of independent factors on CAM health care services utilisation.

Results

Thirty-three percent of patients utilised CAM health care services, while 67% of patients sought conventional treatment before turning to CAM. CAM health care utilisation was significantly associated with young adult patients aged 26 to 45 years (AOR=6.26, 95% CI:3.24-12.07), patients without education (AOR=2.99, 1.81-4.93), and being married (AOR=1.79, 1.08-2.97). The apparent effectiveness, lower side effects, adequate patient satisfaction, and recommendations from others were the most prevalent reasons for using CAM.

Conclusion

CM plays a dominant role in health care provision in Bangladesh, with high-level patient satisfaction and health benefits. These results could be valuable for health policymakers as they explore prospects for integrating CAM and conventional medical services.

Introduction

Complementary and alternative medicine (CAM) has been the traditional method of meeting people's basic healthcare requirements (1). This still holds for one-third of the world's population who lack access to CM. In these circumstances, millions of individuals rely on CAM and its practitioners for their primary healthcare. Often it is their only option due to a lack of access to conventional healthcare, geographic isolation, and high conventional healthcare costs (2). Although conventional medical access has improved rapidly in recent decades the use of CAM is increasing globally in illness prevention, control, and management (2, 3) .

A large percentage of people in developed countries use CAM (4–6), and this trend is also seen in lesser developed countries like Bangladesh (7–10). About 20% of people in the UK (4), 42% in the USA (5), 48% in Australia (6) and 76% of Japanese people (7) use CAM for their primary health care services. In developing countries such as India (70%) (8), Pakistan (70-80%) (9), CAM usage is widespread. A recent study showed that in Southeast Asia 20–97% of people use CAM (11). In Bangladesh, at least 70% of the population uses various forms of CAM for their primary health care (12). Different clinical or medical methods or techniques like Ayurvedic, Unani, Homeopathy, and Naturopathy are widely practised addressing medical needs in Bangladesh (13). Ayurvedic is a Hindu system of medicine and Unani is a traditional Muslim system of medicine originating in India and Greece, respectively (13, 14).

A number of studies have documented some potential predictors of CAM usage such as age (1, 4, 6, 15), gender (1, 4, 13, 16), religion (1, 8), education (4, 13, 16, 17), marital status (1, 6, 8, 13), residency (12, 13), occupation (6, 13), and household income (1, 4, 6, 17) in both developed and developing countries. Other possible reasons include that there are less-side effects (7, 18), better efficacy (7, 13, 18), dissatisfaction with conventional medicines (7, 16, 17), and the low cost of CAM (7, 13, 18). A recent study found many people are using CAM due to a lack of access and affordability of CM in Bangladesh (19). However, in Bangladesh, the use and perception of CAM healthcare services, have been rarely studied, despite their widespread use. This is important for policymakers to improve alternative healthcare services.

The present study aims to examine the use and perception of CAM among patients receiving treatment in a tertiary care CAM health facility in Dhaka, Bangladesh. To address the objective following the research questions (RQs) were formulated.

1. To what extent do Bangladeshi patients use CAM?
2. How do patients perceive the effectiveness and satisfaction of the use of CAM?
3. What variables influence the use of CAM in Bangladesh?

Methods

Study design and setting

This study design was a cross-sectional survey in Bangladesh. Patients who utilised outpatient healthcare services in the Government Unani and Ayurvedic Medical College Hospital between December 2019 and May 2020 in Dhaka, Bangladesh were recruited. Dhaka is the capital of Bangladesh, which has a large and high-density population (≈21m. people).

Sample size determination and procedure

The ideal sample size was calculated using the standard formula for a cross-sectional study.

$$n = \frac{Z^2 PQ}{d^2}$$

Where n is the appropriate sample size, P is the approximate proportion of CAM use (0.615); taken from a related study conducted in Nepal (15). $Q = 1 - P$ is the likelihood of those that do not use CAM, i.e. $(1 - 0.615)$, Z = the value of the test statistics corresponding to the 95% confidence interval (1.96), and d = the degree of accuracy/standard error (0.05). This results in approximately 364 participants required as a minimum sample size. The final recruitment of 1,183 participants greatly reduced the risk of sampling error.

Data collection tools and techniques

A structured questionnaire was used to gather information about demographic characteristics, socioeconomic characteristics, and preferences of consumers/patients for CAM usage. Patients were surveyed after completing their CAM healthcare visit. Before conducting the survey, the study objectives, aims, and benefits were explained to patients. Patients attending the hospital were first told about the intent of the research and asked to participate by responding to the questionnaire (S1).

Data were obtained either via a face-to-face interview with undereducated or through the self-administration of a questionnaire for those who were literate. Two skilled medical students at the hospital administered the questionnaires to patients.

Data analysis

Data from the completed questionnaires were coded and analysed using the Statistical Package for Social Sciences (SPSS) for Windows, Version 26. Categorical and continuous variables were expressed in frequency, percentage, mean and standard deviations, respectively. Frequency tabulation was used to summarise basic details such as demographic and socioeconomic characteristics and their relation to CAM use. The obtained data were analysed descriptively. Also, socio-demographic data were inferentially analysed. Usage of CAM was checked by comparing CAM users' socio-demographic data with non-users, using chi-square at 0.05 levels of significance. To find potential socio-demographic predictors of CAM use, a logistic regression model was used. Unadjusted odds ratios (ORs) with 95% confidence intervals were calculated using independent variables from the bivariate analysis with a p-value less than 0.05 in the initial univariate analysis. In the multivariable analysis, demographic characteristics with p-values less than 0.05 in the univariate analysis were entered to obtain adjusted ORs with a 95% confidence interval. All the data were entered into Microsoft Excel, used to generate descriptive statistics, and transferred into SPSS (version 26) for further statistical analysis.

Results

Participant's characteristics

This study included a total of 1,183 patients (Table 1). The majority of the participants were between the ages of 18 and 25, female (64.9%), married (70.5%), Muslim (93.7%), and 33.3% had completed university education. A significant proportion of patients (34.7%) were from the highest income quintile. The

majority of participants (89.4%) were from nuclear families and resided in urban areas (71.3%). Of patients aged 65 and up, 76.5% had never used CAM similarly for most female patients (60.2%). Approximately -thirds of Muslim patients sought CAM treatment, but 80.7% of people with a university education had never tried it, and 80.5% of high-income people never used CAM.

Table 1
Participant's characteristics, including sociodemographic characteristics

Distribution of patient's characteristics (N = 1,183)

Characteristics	Number of patients, n (%)	Utilisation of CAM, n (%)		p-value
		no	yes	
Patient's age in year				
<18	249(21.0)	195(78.3)	54(21.7)	<0.001
18-25	283(23.9)	182(64.3)	101(35.7)	
26-45	218(18.4)	86(39.4)	132(60.6)	
46-65	169(14.3)	112(66.3)	57(33.7)	
65+	264(22.3)	202(76.5)	62(23.5)	
Sex of the patients				
Male	415(35.1)	315(75.9)	100(24.1)	<0.001
Female	768(64.9)	462(60.2)	306(39.8)	
Religion status				
Muslim	1108(93.7)	733(66.2)	375(33.8)	0.186
Others	75(6.3)	44(58.7)	31(41.3)	
Level of education				
No education	314(26.5)	168(53.5)	146(46.5)	<0.001
Primary	270(22.8)	170(63.0)	100(37.0)	
Secondary	205(17.3)	121(59.0)	84(41.0)	
Tertiary	394(33.3)	318(80.7)	76(19.3)	
Marital status				
Single	349(29.5)	267(76.5)	82(23.5)	<0.001
Married	834(70.5)	510(61.2)	324(38.8)	
Place of residence				
Urban	1058(89.4)	703(66.4)	355(33.6)	0.107
Rural	125(10.6)	74(59.2)	51(40.8)	

Note: CAM = Complementary and Alternative Medicine, p-value = probability value, p-value was derived from the chi-square test.

Characteristics	Number of patients, n (%)	Utilisation of CAM, n (%)		p-value
		no	yes	
Types of family				
Nuclear	844(71.3)	584(69.2)	260(30.8)	<0.001
Joint	339(28.7)	193(56.9)	146(43.1)	
Employment status				
Unemployed	165(13.9)	101(61.2)	64(38.8)	<0.001
Informal workers	522(44.1)	295(56.5)	227(43.5)	
Formal employee	173(14.6)	137(79.2)	36(20.8)	
Business	81(6.8)	70(86.4)	11(13.6)	
Students	209(17.7)	155(74.2)	54(25.8)	
Others	33(2.8)	19(57.6)	14(42.4)	
Income quintiles				
Q ₁ (Lowest 20%)	158(13.4)	126(79.7)	32(20.3)	<0.001
Q ₂	251(21.2)	136(54.2)	115(45.8)	
Q ₃	204(17.2)	100(49.0)	104(51.0)	
Q ₄	160(13.5)	85(53.1)	75(46.9)	
Q ₅ (Highest 20%)	410(34.7)	330(80.5)	80(19.5)	
Note: CAM = Complementary and Alternative Medicine, p-value = probability value, p-value was derived from the chi-square test.				

Seventeen different types of health problems were identified. Gastrointestinal problems, skin problems, respiratory diseases, and menstrual disorders were the four most common illnesses for which CAM was utilised (Figure 1). Of the total 67% of the patients said they had tried CM before trying CAM to solve their problem.

Utilisation of CAM

Table 2 shows the adjusted model outputs. Patients aged 26-45 years had a substantially higher use of CAM (AOR= 6.26, CI: 3.24 -12.07; p<0.001), followed by the age group 18-25 years (AOR=2.62, 95% CI: 1.51 - 4.54; p = 0.001), and for the 46-65 years age group (AOR=2.39, 95% CI: 1.18 - 4.84; p=0.016). Patients with no or little education were 2.99 and 2.30 times more likely to use CAM than those with the

highest level of education, respectively. Married participants were more likely to use CAM (AOR=1.79, CI:1.08 - 2.97, p=0.022) than those who were unmarried. The probabilities were 2.18 and 2.34 times higher in patients in the third- and fourth-income quartiles to use CAM than persons in the highest income quantile. Alternatively, patients who were involved in business were 78% (AOR=0.22; 95% CI: 0.120-0.51; p<0.001) or were formally employed 48% (AOR=0.52, CI:0.29-0.95, p=0.034) were less likely to use CAM. Surprisingly, people from the lowest income quantile were 51% (AOR: 0.49, 95% CI: 0.28-0.88, p=0.016) less likely to utilise CAM than the highest-income patients.

Table 2
Association between CAM utilisation and patent characteristics

Characteristics	Unadjusted model		Adjusted model	
	OR (95% CI)	p-value	OR (95% CI)	p-value
Patient's age in year				
<18 (= ref)				
18-25	2.00(1.36-2.95)	<0.001	2.62(1.51-4.54)	0.001
26-45	5.54(3.69-8.32)	<0.001	6.26(3.24-12.07)	<0.001
46-65	1.84(1.19-2.85)	0.007	2.39(1.18-4.84)	0.016
65+	1.10(0.73-1.68)	0.627	1.61(0.80-3.24)	0.176
Sex of the patients				
Male (= ref)				
Female	2.09(1.59-2.72)	<0.001	1.17(0.83-1.63)	0.361
Religion status				
Muslim	0.73(0.45-1.17)	0.188	0.71(0.41-1.21)	0.213
Others (= ref)				
Level of education				
No education	3.64(2.60-5.08)	<0.001	2.99(1.81-4.93)	<0.001
Primary	2.46(1.73-3.49)	<0.001	2.30(1.40-3.78)	0.001
Secondary	2.91(1.99-4.22)	<0.001	2.26(1.41-3.63)	0.001
Tertiary (= ref)				
Marital status				
Single (= ref)				
Married	2.07(1.55-2.74)	<0.001	1.79(1.08-2.97)	0.022
Place of residence				
Urban (= ref)				
Rural	1.36(0.93-1.99)	0.108	0.78(0.48-1.26)	0.318
Types of family				
Nuclear (= ref)				
Note: OR = Odd ratio, CI = Confidence interval				

Characteristics	Unadjusted model		Adjusted model	
	OR (95% CI)	p-value	OR (95% CI)	p-value
Joint	1.69(1.31-2.20)	<0.001	1.33(0.97-1.83)	0.072
Employment status				
Unemployed (= ref)				
Informal workers	1.21(0.84-1.73)	0.287	0.67(0.42-1.06)	0.094
Formal employee	0.41(0.25-0.67)	<0.001	0.52(0.29-0.95)	0.034
Business	0.24(0.12-0.50)	<0.001	0.22(0.120-0.51)	<0.001
Students	0.55(0.35-0.85)	0.008	1.32(0.73-2.38)	0.353
Others	1.16(0.54-2.48)	0.697	0.58(0.24-1.42)	0.238
Income quintiles				
Q1 (Lowest 20%)	1.04(0.66-1.65)	0.842	0.49(0.28-0.88)	0.016
Q2	3.48(2.46-4.94)	<0.001	1.53(0.96-2.44)	0.072
Q3	4.29(2.97-6.19)	<0.001	2.18(1.38-3.44)	0.001
Q4	3.64(2.4-5.4)	<0.001	2.34(1.45-3.76)	<0.001
Q5 (Highest 20%) (= ref)				
Note: OR = Odd ratio, CI = Confidence interval				

Most patients used more than one type of CAM treatment. The most frequently CAM therapies were Ayurveda (48%), Unani (45%) and Neuropathy (7%).

The majority of patients reported multiple reasons for using CAM. The most common reasons were: 20.2% believed that CAM could control their illness/disease, 17.7% believed that CAM had fewer side effects than CM, and 16.5% used CAM because people advised them to do so (Figure 2).

Satisfaction with CAM treatment was very high (78%), and patients were willing to advise others to use CAM (65%). About 19% were willing to combine CAM with conventional treatment.

Discussion

This study aimed to examine the sociodemographic characteristics linked with CAM use in Bangladesh, as well as the relevant indications for CAM usage and patients' perceptions of CAM. The findings showed that socioeconomic characteristics (age, education, marital status, occupation, and income status) were positively connected to the use of CAM. The preference for CAM was highest among middle-aged

patients, which is similar to the findings of previously published studies elsewhere (4–6, 20). This could be due to their health-seeking behaviours or more likely to seek out treatments that will help them improve their health (13).

Patients with no or school education are more likely to use CAM than those with higher levels of education. However, prior studies have shown that those with higher education and more economically affluent are more inclined to use CAM (4, 6, 15, 17). This could be because well-educated and financially secure patients are more motivated to look into alternative remedies and ways to cope with their sickness and medication side effects. However, in Bangladesh, poor and non-educated patients often have insufficient money to purchase advanced medical treatment from well-equipped conventional/modern hospitals or clinics (21, 22). The study findings suggest that married patients are more likely to utilised CAM. However, a prior study indicated that single respondents were more likely to utilise CAM than married participants (13). This disparity in results can be attributed to contextualisation and cultural backgrounds. Another factor could be that married women often rely on their husbands for health-seeking behaviour in a male-dominated and patriarchal society like Bangladesh (23).

Patients who own their business or are formal employees are much less likely to use CAM, contradicting previous findings (6). This might be because the out-of-pocket model of payment is the norm for CAM treatment. This study also found that patients with relatively high-incomes were more likely to use CAM, which is consistent with prior studies conducted in the USA (5), Ethiopia (17), and Nepal (15), in contrast to a study in India (8) and Pakistan (9). This might be because of the tendency of people with high incomes to seek out alternatives for their health care treatments and well-being. Although a recent study reported that along with the income distribution both the lowest and highest socioeconomic groups showed a strong preference for CAM in China (24).

In this study the most common reasons for using CAM were 1. effectiveness of CAM, 2. fewer side effects, 3. easily available and 4. cheaper. These findings are confirmed by previous studies (8, 9, 20). The placebo effect is an essential component of CAM treatment. The development of CAM treatment is predictable on a broad base of quality research. There is momentum now to expand beyond basic clinical and experimental research to a joint public health program alongside CM. Interestingly, most patients (78.3%) were satisfied with CAM, and they want to recommend it to others (65.7%) which is in line with attitudes expressed elsewhere in Ethiopia (17) and Bangladesh (12). This may be because of their positive belief that CAM is less harmful than conventional medicine. Many consumers believe that CAM is equally reliable in terms of its scientific basis with CM which could convince them towards utilising CAM more regularly (13).

Strength and limitations

This is the first-ever study among Bangladeshi healthcare consumers on their attitudes towards CAM. The study does however have several limitations. The major one is that the study population was from an out-patient department of a medical college hospital which specialises in CAM. Moreover, as this study was cross-sectional, so it cannot attribute causality to any of its associated factors. A nationwide

population-based study is required to be undertaken to understand the exact prevalence, patterns, and perception among the general population of CAM use.

Conclusions

This study examined how patients in Bangladesh use CAM and how they perceive it. Ayurveda and Unani are the most common CAM practices in Bangladesh. Overall, there was a strong link between CAM utilisation and socioeconomic position. Common motivations for embracing CAM include belief in its ability to control disease, resulting in fewer adverse effects, a lack of faith in pharmaceutical treatments, and lower cost than CM. Furthermore, most surveyed patients are satisfied with CAM therapies and are prepared to recommend them to others.

Abbreviations

CAM: Complementary and alternative medicine

CM: Conventional medicine

Declarations

Acknowledgements

We thank all patients who participated in this survey. We would also like to thank hospital authority and data collectors for their support.

Funding

No financial support was received for this study.

Declarations

Ethics approval and consent to participate

Institutional Review Board (IRB) approval was received from North South University, Bangladesh, before the survey (2019/OR-NSU/IRB-No.1006). All participants provided informed consent, and hospital officials also gave their permission orally. Moreover, participants were assured that all information would be kept strictly confidential and used only for research purposes. All methods were carried out in accordance with relevant guidelines and regulations.

Consent for publication

Not applicable

Availability of data and materials

The data are available at Mendeley Data. Shahjalal, Md (2021), "Utilisation and perception of complementary and alternative medicine (CAM) among patients in Bangladesh", Mendeley Data, V2, (<http://dx.doi.org/10.17632/jpfj36wyf2.2>).

Authors' contributions

MS conceived and designed this study. MS and MNAK managed and conducted the statistical analyses and interpreted the data under the guidance of RAM. MS, JG, MAR and MJH wrote the first draft and MS, JG, AH, MSA and RAM revised it to make the final manuscript. All authors critically reviewed and approved the final version of the manuscript.

Corresponding author

Correspondence to Md. Shahjalal

Competing interests

The authors declare that they have no competing interests.

References

1. Shorofi SA, Arbon P. Complementary and alternative medicine (CAM) among Australian hospital-based nurses: knowledge, attitude, personal and professional use, reasons for use, CAM referrals, and socio-demographic predictors of CAM users. *Complement Ther Clin Pract*. 2017 May 1;27:37–45.
2. WHO global report on traditional and complementary medicine 2019. *Who.int*. 2019. Available from: <https://www.who.int/traditional-complementary-integrative-medicine/WhoGlobalReportOnTraditionalAndComplementaryMedicine2019.pdf>
3. Erah P. Herbal medicines: challenges. *Trop J Pharm Res*. 2002;1(December):53–4.
4. Ernst E, White A. The BBC survey of complementary medicine use in the UK. *Complement Ther Med*. 2000 Mar 1;8(1):32–6.
5. Eisenberg DM, Davis RB, Ettner SL, Appel S, Wilkey S, Van Rompay M, et al. Trends in alternative medicine use in the United States, 1990-1997: Results of a follow-up national survey. *J Am Med Assoc*. 1998;280(18):1569–75.
6. MacLennan AH, Wilson DH, Taylor AW. Prevalence and cost of alternative medicine in Australia. *Lancet*. 1996 Mar 2;347(9001):569–73.
7. Yamashita H, Tsukayama H, Sugishita C. Popularity of complementary and alternative medicine in Japan: A telephone survey. *Complement Ther Med*. 2002 Jun 1;10(2):84–93.
8. Vaidya ADB, Devasagayam TPA. Current Status of Herbal Drugs in India: An Overview. *J Clin Biochem Nutr*. 2007;41(1):1–11. Available from: https://www.jstage.jst.go.jp/article/jcbtn/41/1/41_1_1/_article

9. Shaikh BT, Hatcher J. Complementary and alternative medicine in Pakistan: Prospects and limitations. *Evidence-based Complement Altern Med.* 2005;2(2):139–42.
10. Bodeker G, Kronenberg F. A public health agenda for traditional, complementary, and alternative medicine. *Am J Public Health.* 2002;92(10):1582–91.
11. Peltzer K, Pengpid S. Utilization and Practice of Traditional/Complementary/Alternative Medicine (T/CAM) in Southeast Asian Nations (ASEAN) Member States. *Stud Ethno-Medicine.* 2015 Aug 2;9(2):209–18. Available from:
<https://www.tandfonline.com/doi/full/10.1080/09735070.2015.11905437>
12. Islam M, Farah S. How Complementary and Alternative Medicine (CAM) is promoted in Bangladesh?: A Critical Evaluation of the Advertisements Published in Local Newspapers. *Internet J Altern Med.* 2012;5(2):1–8.
13. Harun-Or-Rashid M, Yoshida Y, Rashid MA, Nahar S, Sakamoto J. Perceptions of the Muslim religious leaders and their attitudes on herbal medicine in Bangladesh: A cross-sectional study. *BMC Res Notes.* 2011;4.
14. Alternative Medical Care; WHO Extends Support for Modernization. Available from:
https://www.dghs.gov.bd/licts_file/images/Health_Bulletin/HB2012_CH/HB2012_CH20_Alternative-Medical-care.pdf
15. Kadayat TM, Bist G, Parajuli A, Karki R, Kaundinyayana A, Dhami N. Patterns and perception of complementary and alternative medicine use by patients in western Nepal. *J Public Heal.* 2012;20(3):297–303.
16. Barnes PM, Powell-Griner E, McFann K, Nahin RL. Complementary and alternative medicine use among adults: United States, 2002. *Adv Data.* 2004 Jun 1;2(343):1–19.
17. Erku DA. Complementary and Alternative Medicine Use and Its Association with Quality of Life among Cancer Patients Receiving Chemotherapy in Ethiopia: A Cross-Sectional Study. *Evidence-based Complement Altern Med.* 2016;2016.
18. Teo TY, Yap J, Shen T, Yeo KK. Complementary and alternative medicine use amongst patients with cardiovascular disease in Singapore. *BMC Complement Altern Med.* 2016 Nov 8;16(1).
19. Pavel MS, Chakrabarty S, Gow J. Cost of illness for outpatients attending public and private hospitals in Bangladesh. *Int J Equity Health.* 2016 Oct 10;15(1):167.
20. Chen FP, Chen TJ, Kung YY, Chen YC, Chou LF, Chen FJ, et al. Use frequency of traditional Chinese medicine in Taiwan. *BMC Health Serv Res.* 2007;7:1–11.
21. Das S, Mia M, Hanifi S, Hoque S, Bhuiya A. Health literacy in a community with low levels of education: findings from Chakaria, a rural area of Bangladesh. *BMC Public Health.* 2017;17(1).
22. Joarder T, Chaudhury T, Mannan I. Universal Health Coverage in Bangladesh: Activities, Challenges, and Suggestions. *Advances in Public Health.* 2019;2019:1–12.
23. Rahman MA, Rahman MS, Aziz Rahman M, Szymlek-Gay EA, Uddin R, Islam SMS. Prevalence of and factors associated with anaemia in women of reproductive age in Bangladesh, Maldives and Nepal: Evidence from nationally-representative survey data. *PLoS One.* 2021;16(1):e0245335.

24. Xin B, Mu S, Tan T, Yeung A, Gu D, Feng Q. Belief in and use of traditional chinese medicine in shanghai older adults: A crosssectional study. BMC Complement Med Ther. 2020;20(1):1–10.

Figures

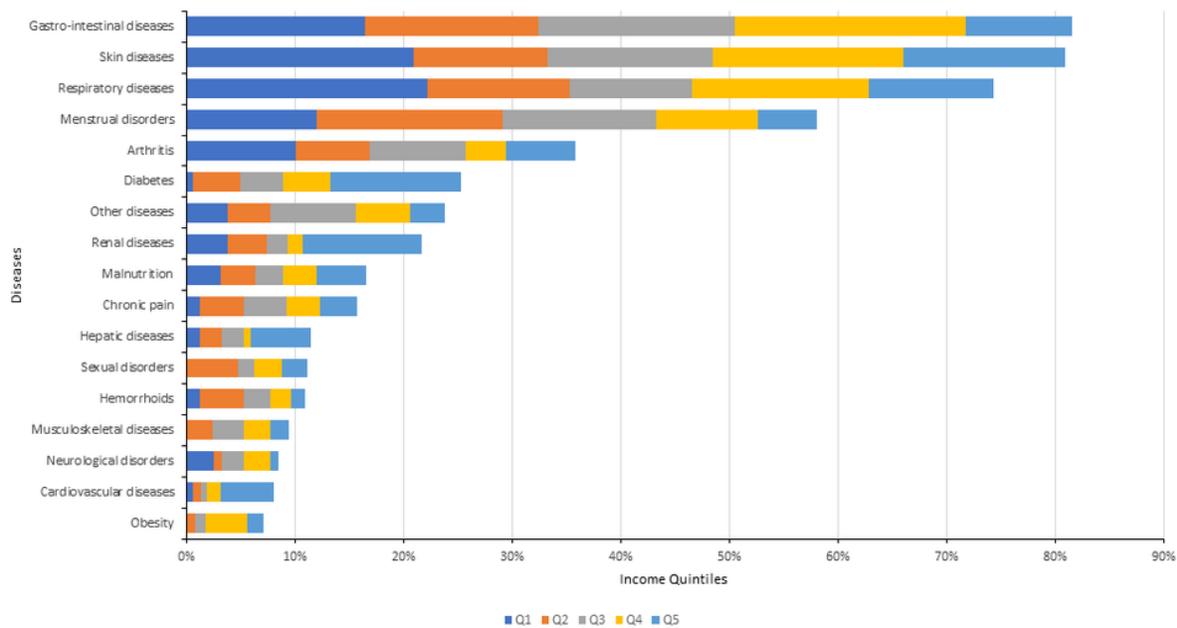


Figure 1

Patients with diseases according to income quintile

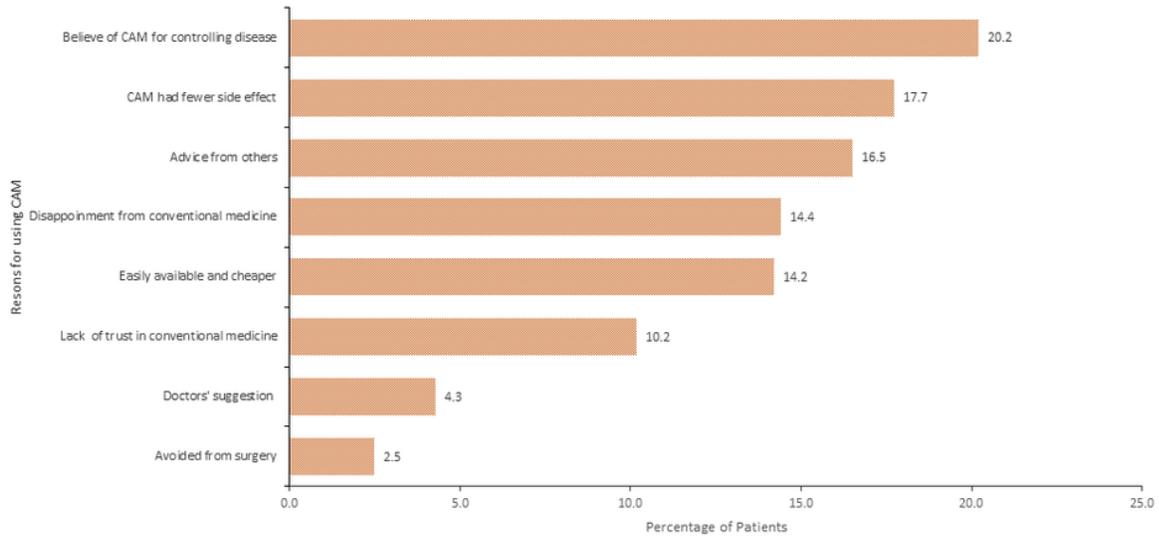


Figure 2

Reasons for using CAM * multiple responses

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [CAMQuestionnaire.docx](#)