A Study on the use of Complementary and Alternative Medicine Therapies in and around Pokhara Sub-metropolitan City, Western Nepal

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Abstract

Introduction	More and more people the world over prefer complementary and alternative medicines. Previous studies in the Kathmandu valley have shown that more than 50% of the population uses complementary medicines. Studies in the Pokhara valley on complementary medicine use are lacking. Therefore this study has been designed with the following objectives.
Objective	a) the use of complementary remedies in and around Pokhara city b) factors governing preference for these remedies and c) differences in the proportion of respondents using these remedies among different subgroups of the population.
Methods	Seventh semester medical students who were briefed beforehand regarding complementary medicine interviewed study participants about drug use indicators. Altogether 242 respondents were interviewed using a semi-structured questionnaire in the month of February 2002. The study was carried out in three wards of Pokhara city and three surrounding villages. The pattern of complementary medicine use in the preceding two-month period was noted.
Results	Altogether, 62 % of the respondents had used complementary remedies. Ayurveda was the most popular system. Abdominal pain was the commonest complaint and the commonest reason for preferring complementary medicine was faith in the practitioner. The lack of side effects with complementary medicine and difficulty in accessing doctor/health post were other commonly cited reasons. More rural respondents had used complementary remedies compared to urban respondents but the difference was not statistically significant.
Conclusions	Complementary medicine remains very popular. Greater integration of complementary medicine into the primary health care system should be attempted.
Key words	Alternative medicine; Health care surveys; Integrated organization and administration

Introduction

More than 50 % of the population in Nepal use Complementary and alternative medicines (CAM) due to cultural and historical reasons, lack of access to conventional health facilities and the expensiveness of modern allopathic medicines[1]. However, the previous studies were mainly concentrated in the Kathmandu valley. Studies in western Nepal and the Pokhara valley are lacking.

CAM is becoming increasingly popular globally. In the United States in 1997 over 40 % of the population visited a CAM practitioner.[2] In the developed world patients who prefer CAM are well-educated females of a high socioeconomic class[3,4]. They have a holistic orientation towards life and a commitment to the environment and spirituality.[5]

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In the developed world CAM therapies are judged to be more helpful for treating chronic conditions[6]. In developing countries the situation is not so clear cut and information on CAM practices are incomplete.

Hence, the present study was carried out in the month of February 2002 to obtain information on:

1) the use of CAM remedies in and around Pokhara city, western Nepal,

2) the factors governing preference for CAM remedies and

3) to note any significant difference in the proportion of individuals using CAM among different subgroups of the population.

The information collected will give us an idea about the use of CAM remedies in and around Pokhara city and can be combined with data from other regions of Nepal to create a National database on the use of CAM remedies. This database will be useful for planning and if needed, modifying strategies for health care delivery to the population.

Materials and Methods

The study was carried out on 242 respondents residing in three wards of Pokhara city, and three surrounding villages. The total population was 12432. Seventh semester medical students interviewed the respondents. The list of individuals residing in the wards and the villages was obtained and simple random sampling was done to choose the study sample. A semi-structured questionnaire was administered orally in Nepalese. The questionnaire was validated by a pilot study on a group of 10 respondents. Data from this group was not taken up for analysis.

The students were briefed on CAM and drug use indicators before the study. The age and sex of the respondent, the distance from the nearest road head and from the nearest health post/ medical store were noted. The respondents were classified as urban or rural. The pattern of use of CAM in the preceding two-month period was studied. Recall bias was one of the problems encountered in the study. We have not quantitatively evaluated this bias. The level of education of the respondents was not noted. The sample size was calculated to provide a 95 % power of detecting a difference in proportion of 0.15 between users and non-users of CAM remedies in the different subgroups of the sample population.

Differences in the proportion of respondents who had used CAM were compared between different subgroups using the z test of proportions. A P value of < 0.05 was taken as statistically significant.

A monthly family income of less than 1000 Nepalese rupees was taken as the respondent belonging to the lower socioeconomic strata,

between 1000-3000 was taken as middle strata and greater than 3000 were taken as belonging to high strata. Informed written consent was obtained from all the study participants. The English translation of the information consent form and the questionnaire used are available on request.

Results

Table 1: Age distribution of respondents

Age distribution (in years)	No. of respondents	Male	Female
0-10	0	0	0
10-20	34	18	16
20-30	70	37	33
30-40	59	32	27
40-50	37	20	17
50-60	23	11	12
≥ 60	19	10	9
Total	242	128	114

Table 1 shows the age distribution of the respondents. Out of the total of 242 respondents 150 (62%) resided in Pokhara city. One hundred and twenty-eight respondents were male. Each respondent was interviewed in his/her home and the responses of children above 10 years of age were considered valid. In the case of respondents <20 years the parents helped out with the responses in 3 cases.

Table 2: Age distribution of users and non-users of complementary medicine

Age in years	Users of CAM	Non users of CAM
10-20	20	14
20-30	42	28
30-40	38	21
40-50	22	15
50-60	17	6
60	11	8
Total	150	92

The age distribution of the users and non-users of complementary medicine are shown in table 2. The two groups were broadly comparable as regards the age of the respondents. One hundred and fifty respondents had used CAM remedies. Ninety-two out of the total of 128 males and 58 out of the total of 114 females had used CAM remedies. Seventy out of the total of 150 users of CAM remedies belonged to the middle socioeconomic strata while 80 users belonged to low strata. Of the 150 respondents residing in urban area 90 (60%) had used CAM remedies during the study period. Sixty out of the total of 92 respondents residing in rural areas had used CAM remedies.

The distance of the respondent's houses from the nearest road head was studied. The time taken to walk the particular distance was noted. One

hundred and thirty one respondents (54.1%) stayed within 10 min walking distance from a road head. The distance from the nearest health post/medical store was noted. One hundred and seventy four respondents (71.9%) resided within 30 min walking distance from a health post/medical store.

One hundred and eighteen respondents belonged to the lower socioeconomic strata while 124 respondents belonged to the middle strata. One hundred and fifty respondents (62%) had used CAM remedies. Ayurveda was the most popular used by 114 out of the total of 150 respondents using CAM. We have used a broad definition of Ayurveda to include use of household herbal medicines also. The CAM practitioners were often household elders or extended family members and it is difficult to arrive at a strict breakup of CAM remedies as home or prescribed remedies. Fifty-six respondents used different types of faith healing practices. There was a greater preference for witchcraft in the rural areas, which was not statistically significant.

Table 3: Use of complementary and alternative medicine according to age

Type of medication	Age < 40 years	Age ≥40 years
Ayurveda	66	40
Faith healing and witchcraft	32	24
Naturopathy	5	3
Others	3	3
Allopathy	54	21
Total	160[†]	91[†]

† A single respondent may be using more than one system of complementary medicine

There was no significant difference in the preference for CAM between young individuals (<40 years) and elder ones (40 years) (Table 3). Ayurveda was more commonly used by elder respondents (40 years) but the difference was not statistically significant. The two groups were comparable as regards socioeconomic status and sex distribution. The small sample size in each subgroup may be a factor affecting the validity of our interpretation.

For the purpose of our study we have taken modern, western allopathic medicine as conventional medicine. However, in south Asia the indigenous systems of medicine like Ayurveda are historically the older systems on which modern medicine was superimposed. Fifty-two out of the 164 CAM practitioners were faith healers. Thirty-four patients visited village elders who often practiced a mixture of herbal and ayurvedic treatments. The common illness for which CAM was used is shown in Table 4.

Table 4: Common illness for which complementary medicine was used

Illness	No. of respondents
Abdominal pain	49
Fever	26
Headache	22
Diarrhea	17
Respiratory problems	14
Gastritis	12
Decreased appetite	10
Possession syndromes	9
Backache	9
Others	58
Total	226[π]

π A single respondent may have used complementary medicine for more than one illness

One hundred out of the total of 150 respondents using CAM had also used allopathic medicines. Fifty-six respondents had used CAM in conjunction with allopathic medicine while 44 respondents had used CAM after trying allopathic medicines and not obtaining relief. 37 out of the 150 respondents had used CAM remedies for the first time while 103 were regular users of CAM. Ten had used CAM remedies occasionally (2 or 3 times in their life).

The commonest reason for preferring CAM remedies was faith in the practitioner. The other common reasons were tradition/peer pressure, others got cured, absence of side effects and non-availability or difficulty in accessing allopathic doctors/health personnel at the health post.

Table 5: Proportion of respondents using CAM during the study period according to sex, age, socioeconomic status and place of residence

Respondent characteristics	Proportion using CAM
Male	0.72[*]
Female	0.51
Low socioeconomic status	0.59
Middle socioeconomic status	0.64
Age < 40 years	0.61
Age ≥ 40 years	0.64
Urban	0.6
Rural	0.65

*$Z = 3.5, P < 0.05$

The proportion of respondents using CAM remedies according to demographic factors is shown in table 5. Male respondents more commonly used CAM.

Discussion

Due to the low proportion of individuals aged between 10-20 years as compared to the population of Pokhara valley[7] we should be careful in generalizing our results. The small sample size may also affect the generalizability of our results.

Majority of the respondents stayed within 30 min walking distance from a road head and from a health post/medical store. In 1996 a survey had found that 69% of the households were within an hours walk from a health institution.[8] Lack of satisfaction with the health services, poor facilities, staff inadequacies and difficulties in accessing the services because of the mountainous terrain maybe, some of the reasons for the population turning to traditional practitioners. The distance from a health post/medical store is inversely related to the ease of accessibility to modern health facilities. Lack of access to these facilities maybe one of the reasons for the population turning to traditional practitioners.

In developing countries like Nepal the infrastructure for modern medical treatment is not adequate. The common practitioners of CAM in Nepal are: 1) Faith healers: a) Dhami-Jhankri b) Pandit-Lama-Gubhaju-Pujari (priests of the different ethnic groups residing in Nepal) c) Jyotishi (astrologer) and 2) traditional medical providers: a) Baidhya-Kabiraj (Ayurvedic practitioners) and b) Jadi-Buti walas (herbalists).[1]

Sixty-two percent of the respondents had used some form of CAM therapy in the two-month period preceding the study, which is higher than the reported figures.[2,3] In our study male respondents more frequently used CAM. This is in contrast to western studies where women more frequently used CAM.[9] Further studies on this aspect are required. No significant difference was noted in the preference for CAM between urban and rural respondents. Since the indices of human development in Nepal are lower in the rural areas,[7] this is difficult to explain.

We have taken 40 years as the cut off point between the older and the younger generation as significant changes in education, health care delivery and socioeconomic parameters have taken place in Nepal in the last 40 years during the period, the under 40 generation was born and brought up.

The most popular system of CAM was Ayurveda. The medicines were provided both by trained practitioners and hereditary baidyas. The practitioners are often village elders and their advice is sought after.

Abdominal pain, fever, headache and diarrhoea were the commonest reasons for visit to a CAM practitioner. This is in contrast to the situation in developed countries where CAM is commonly used for chronic conditions and emotional problems[3,6] and in some patients with advanced cancer.[9,10]

The reasons for visiting a CAM practitioner were similar to that cited in previous studies.[6] The pressure of elders and family members was a key reason for preferring CAM. Non availability of doctors and difficult accessibility to health posts were also cited. There was a popular perception that modern allopathic medicines are expensive.

Primary health care services have been identified as the basic need of a community. In developed countries, integration of CAM practitioners in to the health care team is being attempted.[11] In remote areas the CAM practitioners can be trained to provide medical care through the existing health net work and to improve the acceptance of immunization and other modern health care practices among the rural masses. Community health volunteers trained in both complementary and modern medicines can become a major force for change in the village community.[12]

Though a small study the data gives us baseline information on the use of CAM therapies in and around Pokhara City. Further studies with a greater sample size are needed and are being planned in association with the department of community medicine of our institution.

Acknowledgements

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