

## Utilization of Alternative Medicines among Patients Attending Alternative Hospitals

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### Abstract

Use of Alternative Medicine (AM) is increasing equally in both developed and developing countries. Alternative medicine is a popular method of treatment because it is perceived as natural, safe, and a holistic approach of healing that promotes wellness rather than just a treatment.

A descriptive cross-sectional study was conducted to find out utilization of alternative medicine among patients attending hospitals providing AM in Kathmandu. The sample size was 210 and purposive sampling technique was used for data collection. Data was collected by interview method from 29<sup>th</sup> February to 29<sup>th</sup> March 7, 2016. Ethical permission was obtained from the Institution Review Board of Institute of Medicine, alternative service providing hospitals and respondents prior to data collection. The mean age of respondents was 45.36± 15.49 years. Respondents with chronic health problem (74.76%), married (85.2%), female (63.3%), from urban areas (75.2%), with higher education (31.6%) and patient with neuromuscular problem (40.5%) were more likely to utilize alternative medicine. More than half (51.3 %) of respondents utilized the treatment because of family tradition. Among them (who used prescribed medicine), 39.4% were using alternative medicine at first and 75.2% of the respondents were satisfied with Alternative Medicine. There was a statistical significance between age of patients (p=0.004), back pain (p= 0.003), digestive problems (p=0.006), life style modification (p=0.007), skin problems (p=0.034), and paralysis (p=0.046) with utilization of alternative medicine.

In conclusion, respondents used to practice alternative medicine due to family tradition for a long time. They have strong belief that the action of alternative medicine is slow.

**Key Word:** Adult Patients, Alternative Hospitals, Alternative Medicine, Utilization

### Introduction

Complementary and alternative medicine (CAM) is defined as a group of diverse medical and health care system, practices and products that are not presently considered to be the part of conventional medicine {National Center for Complementary and Alternative Medicine. (NCCAM). 2006}. The terms complementary/alternative/non-conventional medicine are used interchangeably with traditional medicine in some countries {World Health Organization (WHO). 2007}.

CAM is a growing area of health care within developed and developing countries and is increasingly popular with consumers and professionals (Onyia et al. 2011).

CAM is an approach of holistic health. It is actually an approach to life rather than focusing on illness or specific parts of the body. This ancient approach to health considers the whole person and how he or she interacts with his or her environment. It emphasizes the connection of mind, body, and spirit. With 'holistic health' people accept responsibility for

their own level of well-being, and everyday choices are used to take charge of one's own health (Colling. 2009).

In Nepal, Ayurveda, Homeopathy and Unani fall under national medical system (Shankar et al. 2002). In Nepal, more than 75 percent of the population is estimated to use traditional medicine. Ayurveda is the oldest and most popular traditional health care system in Nepal (Kharel. 2009). So it is important to assess utilization of alternative medicine among patients to achieve maximum well-being.

### Methodology

Descriptive cross-sectional research design was used to find out the utilization of alternative medicine (AM) among adult patients. The study was carried out in three different alternative hospitals in Kathmandu Valley: Ayurved Chikitshalaya, Nardevi, Pashupti Homeopathic Hospital, Harihar Bhawan and Spark Health Home Hospital, Kalimati. The population for study was the adult patients (>18 years) attending the out-patient department of selected hospitals. The sample size of the study was estimated on the basis of the prevalence method at 95% confident limit and 5% allowable error.

Sample size was 210. Stratified, non-probability quota sampling technique was used to calculate sample from each hospital. Systemic random sampling technique and semi-structured interview schedule was used for data collection. Ethical permission was obtained from Institutional Review Board TUIOM, related organizations and respondents. Data was collected by interview method from 29<sup>th</sup> February to 29<sup>th</sup> March 7, 2016 by using semi structured questionnaire. Data was analyzed and interpreted according to the objectives of the study. Descriptive statistics such as frequency, percentage, mean and standard deviation were used for numerical data.

### Results

The mean age of respondents was 45.36 years ( $\pm 15.49$  years). Nearly one fourth (23.80%) respondent's were 35-44 years. Among them the majority were

from municipality (75.2%), female (63.3%), and joint family (53.8%) and nearly half (48.1%) were Brahmin/Chhetri. Majority of the respondent were married (85.2%) and literate (81.4%). Nearly one third (31.6%) of the respondents' educational level was graduate and above. Nearly half (48.1%) respondents belonged to medium class family and occupation was homemakers (36.2%). Majority (82.9%) of the respondents received information about alternative medicine from family members/friends followed by own interest (21.4%) and rest of them from mass media.

**Table 1 : Respondents Health Problems and Duration of Illness**

| n=210                        |        |         |
|------------------------------|--------|---------|
| Characteristics              | Number | Percent |
| <b>Duration of Illness</b>   |        |         |
| Acute illness                | 53     | 25.23   |
| Chronic illness              | 157    | 74.76   |
| <b>Health Problems *</b>     |        |         |
| Back/ Neuromuscular pain     | 85     | 40.5    |
| Digestive problems           | 59     | 28.1    |
| Life style disease (HTN, DM) | 37     | 17.6    |
| Skin problems                | 34     | 16.2    |
| Joint pain /Arthritis        | 23     | 11      |
| Paralysis                    | 15     | 7.1     |
| Respiratory problems         | 14     | 6.7     |
| Thyroid disorder             | 11     | 5.3     |
| Gynecological problems       | 11     | 5.2     |
| Kidney stone                 | 7      | 3.3     |
| Mental problems              | 5      | 2.4     |
| Headache                     | 5      | 2.4     |

\*Multiple Responses

Table 1 shows that the majority of the respondent with chronic illness (74.76%) used alternative therapy. Among them 40.5 % of the respondents had back/neuromuscular pain.

**Table 2 : Priority Treatment ( Use of Medicine) of the Respondents**

| Characteristics                                 | Number | Percent |
|---|--------|---------|
| <b>Priorities of Treatment (n=210)</b>          |        |         |
| Prescribed medicines from physician             | 203    | 96.7    |
| Non- prescribed medicine (self medication)      | 7      | 3.3     |
| <b>Non-prescribed (n=7)*</b>                    |        |         |
| Home remedie/ Self medication                   | 7      | 100     |
| Dhami/Jhankri                                   | 2      | 28.6    |
| Jyotishi  | 1      | 14.3    |
| <b>Choice of Prescription at first ( n=203)</b> |        |         |
| Alternative medicine                            | 80     | 39.4    |
| Modern medicine                                 | 123    | 60.6    |

\* *Multiple Responses*

Table 2 illustrates that the majority (96.7%) of the respondents were using prescribed medicine. Among non-prescribed medicine users (3.3%) all respondents' used home remedies or self medication. 60.6% of the respondents' first choice was allopathic medicine.

**Table 3 : Respondents' Influencing Factors for Utilization of Alternative Medicine**

| Characteristics*   | Number | Percent |
|--|--------|---------|
| <b>Alternative medicine as the 1<sup>st</sup> priority (n=80)*</b> |        |         |
| Family tradition   | 40     | 51.3    |
| Just to try  | 36     | 46.2    |
| Avoidance of side effects  | 26     | 33.33   |
| Easy access  | 19     | 24.4    |
| Non-invasive procedure   | 23     | 18.4    |
| Previous good experience   | 14     | 17.9    |
| Fear of surgery  | 13     | 16.5    |
| Free of cost (medicine/service)                                    | 31     | 14.8    |
| Less costly  | 14     | 6.7     |
| <b>Alternative medicine as 2<sup>nd</sup> priority (n=123)*</b>    |        |         |
| Dissatisfaction with modern medicine                               | 74     | 59.2    |
| Faith on holistic approach of healing                              | 95     | 45.2    |
| For complete cure of disease                                       | 52     | 41.6    |
| As a last resort   | 46     | 36.8    |
| Family advice  | 32     | 25.6    |

\**Multiple Responses*

Table 3 demonstrates that more than half (51.3%) of the respondents used alternative medicine as ‘family tradition’ followed by ‘just to try’ (46.2%), and ‘avoidance of side effect’ (33.33%) respectively. Among the respondents who used alternative medicine after modern medicine, 59.2% of them used alternative medicine due to dissatisfaction with modern medicine.

**Table 4 : Respondents Perception about Alternative Medicine**

| <b>Variables</b>                         | <b>Number</b> | <b>Percent</b> |
|--|---------------|----------------|
| <b>Benefit (n=210)</b>                   |               |                |
| Yes                                      | 151           | 71.9           |
| No                                       | 6             | 2.9            |
| Do not know                              | 53            | 25.2           |
| <b>If Yes, status of outcome (n=151)</b> |               |                |
| Complete cure of disease                 | 12            | 7.9            |
| Almost cure of disease                   | 66            | 43.7           |
| Only symptomatic relief                  | 73            | 48.3           |
| <b>Side Effects (n=210)</b>              |               |                |
| Yes                                      | 10            | 4.8            |
| No                                       | 200           | 95.2           |
| <b>If Yes (n=10)</b>                     |               |                |
| Increased symptoms of disease            | 4             | 40             |
| New symptoms develop                     | 4             | 40             |
| Allergy and skin reaction                | 2             | 20             |
| <b>Satisfaction (n=210)</b>              |               |                |
| Yes                                      | 158           | 75.2           |
| No                                       | 3             | 1.4            |
| Do not know                              | 49            | 23.3           |
| <b>Level of Satisfaction (n=158)</b>     |               |                |
| Completely satisfied                     | 15            | 9.5            |
| Mostly satisfied                         | 74            | 46.8           |
| Somewhat satisfied                       | 69            | 43.7           |

Table 4 depicts that the majority (71.9%) of the respondents perceived that they benefitted from the alternative medicine and among benefitted group 48.3% perceived symptomatic relief. 95% of the respondents experienced no side effects. 75.2% of the respondents were satisfied with alternative medicine and among them 46.8% reported that they were mostly satisfied.

Table 5 : Recommendation of Alternative Medicine by respondents to Other

| Characteristics  | Number | Percentage |
|--|--------|------------|
| <b>Recommendation (n= 210)</b>                         |        |            |
| Yes  | 139    | 66.2       |
| No   | 13     | 6.2        |
| Undecided  | 58     | 27.6       |
| <b>Reason for Recommendation* (n=139)</b>              |        |            |
| Slow but complete cure of disease if use for long time | 114    | 82.0       |
| Less costly  | 57     | 41.0       |
| For health promotion and maintenance                   | 51     | 36.7       |
| Modern medicine is not always effective                | 40     | 28.8       |

\*Multiple Responses

Table 5 shows that the majority (66.2%) of the respondents reported that they would recommend to use alternative medicine because of slow but complete cure of disease (82.0%), if it is used continuously for long period.

Table 6 : Association between Socio-demographic Characteristics and Utilization of Alternative Medicine

| Socio-demographic Characteristics | Utilization of AM |                       | Total (n) | P Value       | Unadjusted OR<br>(95% CI) |
|-----------------------------------|-------------------|-----------------------|-----------|---------------|---------------------------|
|                                   | AM at First n (%) | AM at not First n (%) |           |               |                           |
| <b>n=210</b>                      |                   |                       |           |               |                           |
| <b>Age</b>                        |                   |                       |           |               |                           |
| ≤45                               | 53(48.6)          | 56(51.4)              | 109       | <b>0.004*</b> | 2.349 (1.310-4.210)       |
| >45                               | 27(28.7)          | 67(71.3)              | 94        |               | Ref.                      |
| <b>Sex</b>                        |                   |                       |           |               |                           |
| Male                              | 28(37.3)          | 47(62.7)              | 75        | 0.643.        | 0.871(0.485-1.564)        |
| Female                            | 52(40.6)          | 76(59.4)              | 128       |               | Ref.                      |
| <b>Marital Status</b>             |                   |                       |           |               |                           |
| Married                           | 67(38.5)          | 107(61.5)             | 174       | 0.519         | 0.771(0.349-1.703)        |
| Unmarried                         | 13(44.8)          | 16(55.2)              | 29        |               | Ref.                      |
| <b>Education</b>                  |                   |                       |           |               |                           |
| Up to school level                | 25(33.8)          | 49(66.2)              | 74        | 0.050         | 0.533(0.283-1.002)        |
| Above school level                | 45(48.9)          | 47(51.1)              | 92        |               | Ref.                      |
| <b>Occupation</b>                 |                   |                       |           |               |                           |
| Service holders                   | 41(44.1)          | 52 (55.9)             | 93        | 0.210         | 1.435(0.815-2.528)        |
| Others                            | 39(35.5)          | 71(64.5)              | 110       |               | Ref.                      |
| <b>Family Income</b>              |                   |                       |           |               |                           |
| Not sufficient for 1 year         | 53(36.1)          | 94(63.9)              | 147       | 0.113         | 0.606(0.325-1.129)        |
| Sufficient for 1 year             | 27(48.2)          | 29(51.8)              | 56        |               | Ref.                      |
| <b>Duration of Illness</b>        |                   |                       |           |               |                           |
| Acute                             | 19(37.3)          | 32(62.7)              | 51        | 0.716         | 0.886(.461-1.703)         |
| Chronic                           | 61 (40.1)         | 91(59.9)              | 152       |               | Ref.                      |

Pearson Chi Square ( $\chi^2$ ) Test, \*: p value significant at < 0.05 level, Ref: Reference

Table 6 shows that the lower age group ( $\leq 45$  years) was almost more than two times (OR:2.349; CI:1.310-4.210) more likely to utilize AM at first. The difference between two groups was statistically significant ( $p=0.004$ ). Patients with education level up to SLC were less likely to use AM at first than the patients with education above SLC (OR: 0.533; CI: 0.283-1.002). The association between two educational class was nearly statistically significant ( $p=0.050$ ).

Female patients (OR:0.871,CI:0.485-1.564) were more likely to use AM at first than male. Unmarried (OR: 0.771,CI:0.349-1.703) were more likely to use alternative medicine at first than married patients. Service holders (OR: 1.435, CI:0.815-2.528) were more likely to use AM at first. Patients who saved money for more than one years (OR:0.606,CI:0.325-1.129) were more likely to use AM at first. Patients with chronic illness (OR: 0.886, CI:0.461-1.703) were more likely to use AM as a first choice of medicine. But, there was no significant association of utilization of AM at first with sex, marital status, occupation, and duration of illness.

## Discussion

Findings of the study reveals that respondent's age were between 35-44 years (23.80%), female (63.3%), from Municipality (75.2%), married (85.2%), higher educated (31.6%), and homemaker (36.2%) were more likely to use alternative medicine. This finding is supported by the findings of Gau, Yang, Huang, & Lou (2012); where 62.1 percent were female, 56.1 percent were married; and Jaiswal (2015) found that mean age was 45.24 years, 72 percent were residing in urban areas, 76.0 percent were educated.

The main source of information was friends or family (82.9%) followed by self (21.4%) and media (8.6%). This finding is supported by a study conducted among Malaysian Cancer patient which showed that the main source of CAM was friends or family

(75.5%) followed by own interest (17.9%) and mass media (12.5%) (Farooqui et al., 2015).

Regarding the health problems, common illness were back/ neuromuscular pain (40.5%), followed by digestive problems (28.1%). 74.76% of the respondents were suffering with chronic illness. This finding is consistent with the finding of Hori, et al., (2008), where musculo-skeletal (38%), gastrointestinal (32%), and cardiac problems (31%) used CME.

Similarly, more than half (51.3%) of the respondents had used alternative at first time for family tradition followed by just to try (46.2%), avoidance of side effects (33.33) respectively. Among the patients who had visited CAM after using modern medicine, 59.2% of the patients have used it due to dissatisfaction with modern medicine followed by faith on holistic approach of healing (45.2%), and for complete cure of disease (41.6%).. This finding is consistent with the study conducted by Naja et al., (2015) which showed that reason for CAM use was belief in the advantages of CAM products ( 76.3%), trying because of the suggestion (12.6%)", "feeling of having no alternative (8.3%), and disappointment with conventional medical therapy (7.4%).

Respondents with age less than 45 years (48.6%) were almost two times (OR:2.349, CI:1.310-4.210) more likely to use alternative medicine at first than those below 45 years. The difference was statistically significant ( $p=0.004$ ). Regarding sex, females (40.60%) were more likely (OR:0.871, CI:0.485-1.564) to use alternative medicine. This finding is consistent with the study conducted by Chang et al (2011) which showed that Younger age ( $p = 0.004$ ), female gender (37.6%) than male (15.6%) ( $p < 0.001$ ), higher annual household income ( $p = 0.001$ ), private health care insurance ( $p = 0.001$ ), were found to be factors associated with more likely CAM use. In my opinion, Female and younger may be perceived benefit from AM than allopathic medicine and further studies are need to explore the causes behind this.

The association between education level was nearly statistically significant ( $p=0.05$ ) and there was no association between other variables with utilization of alternative medicine. This finding is consistent with a study which found that female ( $p < 0.001$ ), younger age ( $p = 0.004$ ), higher educational background ( $p < 0.001$ ), higher annual household income ( $p = 0.001$ ), private health care insurance ( $p = 0.001$ ), non-Christian ( $p < 0.001$ ) were found to be factors associated with more likely CAM usage (Mbada, et al., 2015). In my opinion, people with lower education and income levels are less likely to know about AM. So the lack of knowledge may be the reason associated with lower use of AM. Further research is necessary to explore the issue regarding these matters.

Patients with chronic illness (40.1%) preferred to utilize AM at first (OR: 0.886, CI:0.461-1.703). This finding is consistent with the other studies carried out in Lebanon showed that CAM use was more frequent among subjects with a chronic disease (OR: 1.5, 95% CI: 1.14–1.91) (Naja, et al., 2015) and study conducted in Malaysia found out that respondents with duration of illness more than two years (71.6%) were more likely to utilize CAM (Alshagga, et al., 2011).

### Conclusion

Patients with chronic health problem, younger age, married, female, urban residence, higher educated, employed rich are more likely to utilize AM at first. People with neuromuscular problem, digestive problem, HTN, diabetes, and skin problems are commonly using alternative medicine. Nearly half of the people choose alternative medicine at first due to family advice. Role of family members is a vital factor for utilization alternative medicine. Therefore, there is a need for integration of alternative medicine with conventional medicine. So it is necessary to integrate alternative medicine with national medical system for providing holistic health service under one roof of the health care system.

### References

- Alshagga, M. A., Al-Dubai, S. A., Faiq, S. S. M., & Yusuf, A. A. (2011). Use of complementary and alternative medicine among asthmatic patients in primary care clinics in Malaysia. *Annals of Thoracic Medicine*, 6(3), 115–119. doi: 10.4103/1817-1737.82438
- Chang, K. H., Brodie, R., Choong, M. A., Sweeney, K. J., & Kerin, M. J. (2011). Complementary and alternative medicine use in oncology: A questionnaire survey of patients and health care professionals. *BioMed Central Complementary and Alternative*, 11(196). doi: 10.1186/1471-2407-11-196
- F. Naja, M. Alameddine, L. Itani, H. Shoaib, D. Hariri, & Talhouk, S. (2015). The use of Complementary and Alternative Medicine among Lebanese Adults: Results from a National Survey. *Hindawi Publishing Corporation Evidence-Based Complementary and Alternative Medicine*. volume (2015) doi: <http://dx.doi.org/10.1155/2015/682397>
- Farah, N., Dana, M., Alameddine, M., Shoaib, H., Itani, L., & Mourad, Y. (2014). Prevalence and correlates of complementary and alternative medicine use among diabetic patients in Beirut, Lebanon: a cross-sectional study. *BioMed Central Complementary and Alternative*, 14(185). doi: <http://www.biomedcentral.com/1472-6882/14/185>.
- Farooqui, M., Hassali, M. A., Sharar, A. K. A., Farruqui, M. A., Sallem, F., Haq, N., & Chenoriahothman. (2015). Use of complementary and alternative medicines among Malaysian cancer patients: A descriptive study. *Journal of traditional and complimentary medicine*. March 18;6(4):doi: <http://dx.doi.org/10.1016/j.jtcme.2014.12.008>
- Gau, B. S., Yang, H. L., Huang, S. J., & Lou, M. F. (2012). The use of complementary and alternative medicine for patients with traumatic brain injury in Taiwan. *BioMed Central complementary and alternative medicine*, 12(1), 1. doi: 10.1186/1472-6882-12-211

- Jaiswal, K., Bajait, C., Pimpalkhute, S., Sontakke, S., Dakhale, g., & Magdun , A. (2015). Knowledge, Attitude and Practice of Complementary and Alternative medicine: A patient' perspective. 5(1) doi: 10.4103/2230-8598.151243.
- Kharel, P. (2009). Addressing barriers to the growth of traditional health services export of Nepal [A case study of Bhutan and Nepal]. South Asia network of Economic Research Institutes (SANEI). Retrived from
- Mbada, C. E., Adeyemi, T. L., Adedoyin, R. A., Badmus, H. D., Awotidebe, T. O., Arije, O. O., & Omotosho, O. S. (2015). Prevalence and modes of complementary and alternative medicine use among peasant farmers with musculoskeletal pain in a rural community in South-Western Nigeria. *BioMed Central Complement Alternative Medicine*, 15(164). doi:10.1186/s12906-015-0695-3
- National Institutes of Health. National Center for Complementary and Alternative Medicine (2006). Retrieved from <http://nccam.nih.gov>.
- Onyiapat, J.-I. E., Okoronkwo, I. L., & Ogbonnaya, N. P. (2011). Complementary and alternative medicine use among adults in Enugu, Nigeria. *BioMed Central Complementary and Alternative medicine*, 11(19). doi:10.1186/1472-6882-11-19
- Shankar, P., Partha, P., & Shenoy, N. (2002). Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal: a questionnaire-based study. *BioMed Central family practice*, 3(17). doi: 10.1186/1472-6882-10-36
- World Health Organization. (2007). *WHO guidelines for assessing quality of herbal medicines with reference to contaminants and residues*. Geneva, Retrieved from <http://apps.who.int/medicinedocs/documents/s14878e/s14878e.pdf>.