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Issue No 20.
Spring 2014

Complementary and Alternative Medicine Usage in India and in the United States

International public health officials are warning that complementary and alternative medicine (CAM) usage is neither regulated nor monitored the way it should be. CAM use is not commonly reported to, or detected by, health care providers. But CAM use is much more important than we assume. Herbal and dietary supplements, for example, used by nearly 1 in 5 Americans, are the second leading cause of drug-induced liver injury. On the other side, some CAMs undoubtedly are a useful addition to the prevention and treatment of certain conditions and some undoubtedly can contribute to the healthier lifestyle and general well-being.

CAM use is increasing all over the world. In the US the number of all Americans that used some form of CAM had nearly doubled between 1990 and 2002. The numbers remain on the rise: today, more than a third of Americans use some form of CAM.

The understanding of the conventional treatment options is based on the evidence, but CAM use is not being matched by evidence-based evaluation of the various treatments and therapies that fall under its umbrella. Therefore, the real importance of CAM in terms of its short- and long-term benefits and risks is not known.

While the options and choices of conventional treatment remain similar all over the world, the choice of CAM differs in different populations even in the same country. In the US, for example, the gap in the rate of CAM use is expanding: e.g.: whites are

more than twice as likely to see a CAM provider as African-Americans or Hispanics. CAM use by Hispanics increased by only 1% over the five-year period. Asians used CAM practices only slightly less than whites.

Understanding the reasons for the differences and the varieties is probably the most important next step in the research on CAM use.

Hamza Chaudhry, Momodou Sallah, Najeeb Siddiq, Wasim Talib, Gedeon Yohannes

Complementary and Alternative Medicine Usage in India and the United States

Hamza Chaudhry, Momodou Sallah, Najeeb Siddiq, Wasim Talib, Gedeon Yohannes

Mentor : Dr. Milutinovic

Abstract

Background and Objective: The purpose of this particular research is to assess the use of complementary and alternative medicine primarily among adults within India and United States and the circumstances under which they discuss such use with their physicians.

Subjects and Methods: The research study was conducted in India under the direction of SJSM. We compared the results in India with corresponding results in USA using the 2007 National Health Interview Survey (NHIS). The data includes various types of CAM therapies and adults from both India and the United States were interviewed. The ANOVA test was performed to analyze a significant difference between means.

Results: There were no major differences in the overall usage of CAM therapies between India and the United States. There was however significant differences between the USA and India when it comes to the use of CAMs between married / unmarried respondents, social status, type of the CAM used and gender. For the ethnicities using CAM in India, all of the respondents were either Indo-Aryan or were not specified; however, in the United States the ethnicities were more varied. Also, it was noted that a majority of CAM users in India were female compared to the United States which was more balanced.

Conclusion: Overall, the use of CAM therapies was found to be equivalent in the United States and in India. However, marital status, gender, and socioeconomic showed specific significant changes.

Introduction

Complementary and alternative medicine (CAM) refers to a series of medical and health care practices and products that are normally not an integral part of conventional medicine due to insufficient proof of their safety and effectiveness. People often turn to CAM when they have a long-lasting problem that has not been completely cured by conventional medicine, sometimes in addition to current treatments to deal with any symptoms or side effects from conventional treatments and/or to try to prevent illness, to ensure a healthier lifestyle and general well being.

The purpose of this particular research is to assess the use of CAM primarily among adults within India and United States and the circumstances under which they discuss such use with their physicians.

Materials and Methods

The research study was conducted in India under the direction of SJSM, mentored by Dr. Branka Filipovic and Dr. Mirjana Milutinovic.

We compared the results in India with corresponding results in USA using the 2007 National Health Interview Survey (NHIS). CAM data is self-reported, collected from randomly selected adults aged 18 and above from India and the United States. The ANOVA test was performed to analyze a significant difference between means.

Specific types of CAM in the United States were compared to India: Herbal Therapy, Massage Therapy, Mind and Body Therapies, Energy Therapies, and Homeopathic Therapies.

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Results

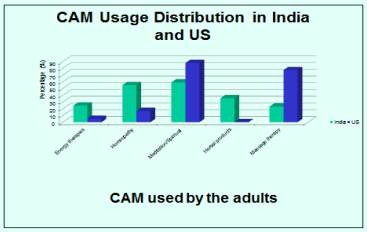

Fig. 1: CAM usage distribution in India and the US. (p >0.05)

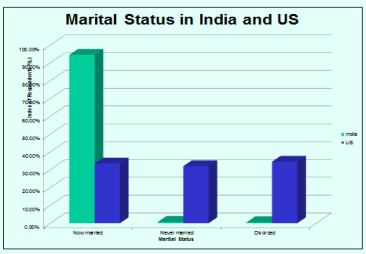

Fig. 2: Marital Status Distribution of CAM users in India and US. (p < 0.05)

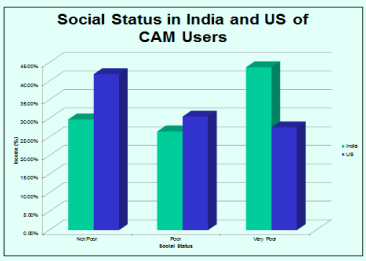

Fig. 3: Social Status Distribution of CAM users in India and US. (p < 0.05)

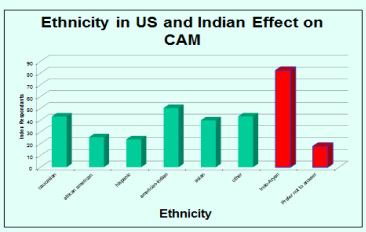

Fig. 4: Ethnicity of CAM users in India and US

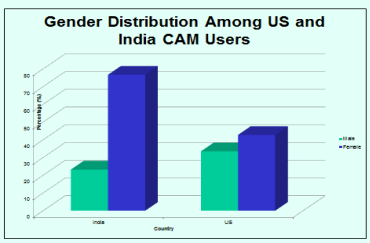

Fig. 5: Gender distribution among India and US CAM users. (p < 0.05)

Results / ANOVA Test

The null hypothesis was supported within the text showing no major difference of the **overall** usage of CAM between India and the United States. Although, specifically there is a higher usage of energy therapies homeopathy, and herbal products in India. Also, Meditation and Massage therapy is used more often in the US. Furthermore, there is a significant difference in the characteristics of the participants regarding marital status, social status, and gender.

Table No. 12 Paired Samples Test

		Paired Differences	T	Df	Sig. (2-tailed)
		95% Confidence Interval of the Difference – Upper			
Pair 1	Alternative medicine India - Alternative medicine USA	53.33972	0.916	4	.112
Pair 2	Marital status India - Marital status USA	131.51861	1.000	2	.000
Pair 3	Sex India - Sex USA	280.80712	1.000	1	.000
Pair 4	Socioeconomic status India - Socioeconomic status USA	8.61337	1.000	2	.000

Discussion

The primary objective of this research was to determine which country, United States or India, used CAM therapies more. When comparing CAM therapies **as a whole** (all forms of therapies together), the p-value ($p > 0.05$) showed that there was no significant difference between the number of CAM use in India and the number of CAM use in the USA allowing us to accept our null hypothesis.

Another objective for the research team was to determine which specific type of CAM usage was preferable among respondents in each country: Energy therapies, Homeopathy, Herbal products, Meditation/Spiritual techniques, and Massage therapy were the most favorable. In India an the more common CAM types were Energy therapies, Homeopathy, and Herbal products. In the USA, Meditation/Spiritual techniques, and Massage therapy were more common.

An additional purpose of our research was to evaluate the influence of cultural (and other – if possible) differences on CAM choice. Our focus was to determine how various people from different marital status, social statuses, sex, and ethnicities examining their likelihood to use CAM techniques and their specific preferences.

Our results showed a significant difference between the USA and India when it comes to the use of CAMs between married / unmarried respondents and was proven by the p-values ($p < 0.05$).

Our social status classification was labeled into Very Poor, Poor, and Not Poor. According to our p-value, there is a distinct difference on the usage of CAMs dependent on poverty status between the two countries.

In comparison of gender, CAM usage is much more common in females in India. However, the usage between the two sexes is pretty similar in the United States. The p-values comparing the differences in sexes in India and USA still showed a significant difference rejecting our null hypothesis.

Conclusion / Further Work

Overall, the use of CAM therapies was found to be equivalent in the United States and in India, accepting our null hypothesis. However, when focusing on marital status, gender, and socioeconomics, the results showed specific significant changes.

For future or continued studies of CAM therapies we recommend the same principles and standards of evidence of treatment effectiveness apply to all treatments, whether currently labeled as conventional medicine or CAM. Implementing this recommendation requires that investigators use and develop as necessary common methods, measures, and standards for the generation and interpretation of evidence necessary for making decisions about the use of CAM and conventional therapies. Examples of recommended methods, measures, and standards that could be used are: N-of-1 trials, preference randomized controlled trials (RCTs), observational studies, cohort studies, and case-control studies.