SHORT COMMUNICATION

Practices at an AYUSH health camp for asthma in Pendra, Chhattisgarh

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ABSTRACT

Chhattisgarh has abundant herbal resources and a parallel AYUSH public health system. AYUSH health camps are conducted regularly in rural areas of the State by public and social sectors. The study aims to advocate the gravity of policy issues involved in AYUSH practices at health camps. A cross-sectional study was conducted in Pendra block of Bilaspur district, Chhattisgarh. Random sample of 600 people attending the camp were interviewed. A semi-structured questionnaire was used to collect data on disease complaints and established risk factors for asthma. Pearson’s Chi-square test was used to calculate odds ratio (OR) with 95% confidence interval (CI). Analysis suggests that there was a significant decrease in reported asthmatic attacks (OR 6.68, 95% CI 4.05–11.01) among those who attended the camp. Established risk factors of asthma that were identified as prevalent in the community were using wood and biomass as fuel (OR 2.61, 95% CI 1.30–5.24) and damp walls (OR 1.88, CI 0.9–3.93). Practices at AYUSH health camps conducted by the public and nonpublic sectors need to be documented and reported. People have faith in traditional medicine, and the remedies and practices need to be further explicated and validated in context to health care-seeking practices. The importance of formulation of guidelines by the government for conducting AYUSH health camps is indicated.

Key words: AYUSH, asthma, policy

INTRODUCTION

Chhattisgarh is a predominantly tribal state having an abundance of herbal and medicinal plants.[1] Thus the indigenous systems of medicine and service available from the local herbal medicine practitioners, bone setters, and traditional healers are well accepted. AYUSH health camps are temporary outreach units where treatment is provided to people through indigenous systems of medicine (Ayurveda and Unani) and Homeopathy in this State of India. The study examines an AYUSH health camp held in the state, which stands out due to high participation of over 3000 people and due to the unique leadership provided by medical officers from public sector AYUSH facilities. There are no laid down guidelines for organizing these AYUSH health camps, thus holding the camp as well as treatments are adopted from empirical practices and mythology, which have not been scientifically validated. In India neither the Department of AYUSH at the Centre nor States have any regulation in this regard even though there is a global consensus that there should be standards for traditional medicine (TM). As one of the articles in Beijing declaration at the WHO Congress on Traditional Medicine (2008), Beijing, China, states that: “governments have a responsibility for the health of their people and should formulate national policies, regulations and standards, as part of comprehensive national health systems to ensure appropriate, safe and effective use of traditional medicine.”

In particular, the camp under the study was annually organized for the past 6 years in Pendra block, Bilaspur district. The government doctors from neighboring AYUSH dispensaries are roped in by the community to attend to beneficiaries visiting the camp. A pathologist also volunteers, who does routine blood tests for required patients for free. The camp starts in the morning and people report at the camp with general health complaints for which the AYUSH medical officers examine and provide standard
AYUSH medicines. People diagnosed symptomatically with asthma or wheezing problems were suggested to return at midnight to have the medicated kheer\(^{[2]}\) as remedy. The camp is organized every year on Sharad Purnima\(^{[2]}\) in the month of October. Choice of Sharad Purnima is based on the mythological belief that the pouring of immortal nectar to the earth was believed to have happened on this day, as per Indian Epics. However, a herbal preparation (not divulged) is added to the kheer for patients with asthmatic symptoms. It is believed that the kheer cooked in the open, under the sky on the day of Sharad Purnima is blessed with the nectar. The said remedial preparation for symptomatic asthma is mixed with the kheer (5 g of herbal drug for every 95 g of kheer) is distributed at midnight of the Sharad Purnima.

As evening set in there were increasing numbers of people at the site of the camp. Each person attending the camp got approximately 100 g of medicated kheer. The people were advised not to have food or sleep 4 h before and after, having the medicated kheer. Arrangements were made for keeping the patients awake through the night with devotional programs and folklore till 4 am in the morning.

The objective of the study is to point out the gap in framing AYUSH regulatory frameworks owing to which unregulated treatment procedures amalgamated with mythology are being practiced without validation, especially in remote areas. The camp is well known for reducing asthma among local people and predominantly attended by people suffering from asthma-related symptoms from neighboring villages and districts. An unrevealed herbal preparation, which is claimed to be the cure is added to the kheer. TM practices, whose efficacy and adverse effects are yet to be validated and documented, are being accepted by the community, in this case for asthma.

Bronchial asthma is a public health concern in India with a prevalence of 2.38\%\(^{[2]}\). The common sources of indoor allergens are furry pets, damp housing, smoke emitting fuel used for cooking, which exacerbate asthma-related symptoms were probed in the questionnaire of the study.\(^{[2-4]}\) The study also encompasses a description of the evident asthma risk factors prevalent among the people attending the camp, based on self-reported factors.

This AYUSH camp is conducted with the participation of various stakeholders, which includes the community services, the funds being provided by donors and the clinical service providers are government AYUSH medical officers. Role of AYUSH medical officers in conducting the camps are sensitization regarding the camps, monitoring the preparation of ayurvedic medicines, providing consultation services, and disbursing medicines. The camp remains open throughout the day, treating patients of all diseases and symptoms. Only patients complaining of asthmatic symptoms are advised to come at midnight for the medicated kheer.

**MATERIALS AND METHODS**

The researchers informed the organizers that they were there to document the activities of the camp and probe into risk factors for which patients with asthma-related symptoms attend the camp. A table was arranged for data collectors at the camp and the people who came with health complaints at the registration desk were guided to the interview post registration. Participants were interviewed face-to-face using a semi-structured questionnaire. The questionnaire consisted of sociodemographic conditions and environmental factors along with a few established risk factors of asthma, such as use of smoke emitting fuel, dampness of housing, and furry animals in the house.

**Analysis**

The data was coded and compiled in Microsoft Excel version 2007 and SPSS version 12. Pearson's Chi-square test was used as test of significance at the 5% level and OR of cross-tabulated variables for potential risk factors and whether there was significant reported decrease of asthma attacks in patients previously visiting the camp.

**RESULTS**

The current study included interview of 600 people, selected randomly, who attended the camp. While the data was being cleaned some of the responses from the people were seen to be inappropriate, due to difficulty in understanding the questions by the respondent, thus varying responses have been analyzed in [Table 1]. The mean age of the people attending the camp was 43 ± 16.61 years. About 81.49\% of the housing condition of the interviewed people was made of mud. Fifty percent of the people reported their walls of the houses being damp. Around 85\% of the people suffering from asthma-related symptoms reported the use of smoke emitting fuel like wood and bio-mass. Fifty eight percent of the interviewed people were Below Poverty Line (BPL) card owners. Damp areas surrounding the house like ponds and perennial water bodies, which could bring in possibility of damp walls through seepage was only 27\%, and 34\% of the interviewed people had furry pets inside their house.

The data was further analyzed to understand whether the reported data has some significant findings. Analysis depicts that patients who reported attending the camp were 6.68 times less likely to have asthmatic attacks. People who...
reported wood and biomass as fuel were 2.61 more likely to have asthma [Table 2].

**DISCUSSION**

The study duly highlights the TM practices in the field, which is nonstandardized but accepted by the community due to multiple reasons. Clinical research for the validation of such TMs along with the significance of consuming it on *Sharad Purnima* night is crucial. The evaluation of TMs is challenging, their effectiveness and quality could be influenced by numerous factors. This is one of the reasons there is a dearth of data in TM research resulting in sluggish development of regulation and legislation for TM use.

The results that have been analyzed are not being compared as the sample population was skewed at the health camp. They do not establish causations, but likelihood of association. The study reports practices that are being carried out in the field of TM should be clinically probed so that these are either propagated or barred. The prevalence of risk factors of asthma needs to be studied taking a population sample, although awareness may be raised regarding the associated risks that have emerged in this study. Studies like this are not usually reported due to inadequate data and nomenclature of documenting, whereas people in communities are adapting the services provided. The AYUSH doctor who prepared the medicated kheer did not want to reveal the preparation, claiming it was his empirical knowledge that he has mastered through experimentation from the scriptures of Ayurveda and Hindu mythology. The author feels that, instead of such non-revelation of the drug, the best way should be to clinically test it, validate it, and to patent it, so that the drug could be used for greater good, if found useful during these processes. The government policies should ensure that at least doctors practicing in the public health system should be more inclined test the efficacy of medicines than involving the concept of faith healing.

Further research is needed to determine the outcome of the medicated kheer if not given on *Sharad Purnima* night. The reduction in asthma attacks have been reported due to the medicated kheer. Concern of a mythological significance being involved gives a psychological dimension to the reported reduction in asthmatic attacks. High attendance at the camp may also be due to the religious folktales being performed by troupees and perception of the people regarding the kheer as a blessing. The multiple factors which can bring down the attacks and cause to report a positive outcome further impedes the inference of the study regarding the efficacy of the drug.

Limitations of the study: The data used in analysis is self-reported data. The clinical diagnosis of asthma was not asked as proof.

**CONCLUSION**

The government should identify such TM practices and provide technical support for clinical trials and validation. Formulation of guidelines for carrying out AYUSH health

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**Table 1: Characteristics of the surveyed population**

| Variable                              | No. | %   |
|---------------------------------------|-----|-----|
| Gender (n=587)                        |     |     |
| Male                                  | 385 | 65.59 |
| Female                                | 202 | 34.41 |
| Marital status (n=563)                |     |     |
| Yes                                   | 491 | 87.2 |
| No                                    | 72  | 12.8 |
| Socioeconomic status (n=588)          |     |     |
| Non BPL                               | 341 | 57.99 |
| BPL                                   | 247 | 42.01 |
| Type of housing (n=562)               |     |     |
| Kuccha House (Mud)                    | 458 | 81.49 |
| Cemented houses                       | 104 | 18.51 |
| Fuel used for cooking (n=553)         |     |     |
| Smoke emitting                        | 473 | 84.99 |
| Non smoke emitting                    | 83  | 15.01 |
| Dampness of walls in house (n=545)    |     |     |
| Yes                                   | 275 | 50.46 |
| No                                    | 270 | 49.54 |
| Damp areas around the house (n=533)   |     |     |
| Yes                                   | 244 | 47.02 |
| No                                    | 389 | 52.98 |
| Having furry pets inside house (n=529) |     |     |
| Yes                                   | 178 | 33.65 |
| No                                    | 351 | 66.35 |
| Mean age                              | 42.82 |
| Std. deviation (age)                  | 16.61 |

**Table 2: Crude odds ratio of cross-tabulated variables**

| Variables                                    | P-value | Odds Ratio (95%CI) |
|----------------------------------------------|---------|-------------------|
| Attended previous year and reduction in asthma attacks | 0.000   | 6.68 (4.05–11.01) |
| Socio economic status (BPL) and asthmatic symptoms | 0.455   | 1.25 (0.69–2.24)  |
| Wood/biomass and asthmatic symptoms          | 0.013   | 2.61 (1.30–5.24)  |
| Damp sources around the house and asthmatic symptoms | 0.240   | 0.645 (0.32–1.26) |
| Furry pets and asthmatic symptoms            | 0.148   | 0.579 (0.29–1.13) |
| Damp walls and asthmatic symptoms            | 0.126   | 1.88 (0.9–3.93)   |
| Sex and asthmatic symptoms                   | 0.743   | 0.846 (0.44–1.67) |
Stringent monitoring mechanism needs to be developed by state to report such practices in order to ensure health safety.

**Notes**

i. *Kheer* is thickened milk with rice boiled in it usually served as a dessert.

ii. Sharad Purnima is also called Kojagiri Purnima. Mythologically on this full moon night Goddess Laxmi goes around from place to place asking, “Who is awake?” (“Ko jagarti?”) and shows her pleasure on those she finds awake. Hence, the night is spent in festivity and various games of amusement, in honor of the goddess. So people sit in the moonlight singing songs, or keep themselves entertained in some other way. There is also a tradition to have cool milk and rice flakes on this night. It is a harvest festival and is celebrated throughout the country.

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