Assess the Knowledge and Attitude Regarding Alternative System of Medicine among the Adults in Rural Community Area

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Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Introduction: The folk medicine which is available such as herb, flora, found and minerals. The people taking some treatment for improving health and treat the person which lies in ancient times. Some of the people of the alternative system such as homeopathy, Ayurveda, Siddha, Unani, naturopathy and yoga. The alternative system of medicine is widespread. This leads to improving knowledge regarding the alternative system of medicine in the rural community area.

Background: The present study has been designed to capture the knowledge and attitude towards the Alternative health care system of medicine in its user and non-users to compare the differences in its source of knowledge among the rural community people. Knowledge regarding the alternative therapies that are living in the rural community area. The person has some knowledge regarding alternative health such as naturopathy, homeopathy, yoga, Unani and Siddha. The people will have known about alternative therapies.

Objective: To assess the knowledge of adults in rural community areas regarding the alternative

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system of medicine. To assess the attitude towards an alternative system of medicine among rural community areas.

**Methods:** The sample size is 100 among the adults in the rural community area.

**Results:** In the present study 98% of the adults were having a positive attitude and only 2% of them had a negative attitude. Association of knowledge score and attitude score with the selected demographic variables there is a significant in the gender and not significantly associated with education, occupation, caste regarding the alternative system of medicine and significant association between attitude score the gender and not significantly associate with education, occupation, caste regarding the alternative system of medicine.

**Conclusion:** This study revealed that in wardha city, there is relatively high public interest in complementary and alternative medicine and a significant number has a produce good awareness attitude toward complementary and alternative medicine.

**Keywords:** Alternative system of medicine; knowledge; attitude; adults; rural area.

**1. INTRODUCTION**

India is an ancient civilization that has various community support of living tradition. In Indian medicine tradition including some of the folk medicine and classical medicine system [1].

The folk medicine which is available such as herb, flora, found and minerals. Folk medicine is widespread. It is practiced by the indigenous dais, who are about 7 lacks in members and she will be conducted deliveries in rural as well as tribal areas [1].

The people taking some treatment for improving their health and treat the person which is lying by the ancient time. Some of the people of the alternative system such as the homeopathy, Ayurveda, Siddha, Unani, naturopathy and yoga [2,3].

Globally there has been a revival of the interest in the complementary system of the health care system [4,5,6]. Especially in management in the chronic illness of the lifestyle-related non-communicable diseases and diseases for which there is no effective drug in the Morden system of medicine is currently in demographic and lifestyle transition which will prevalence in of non-communicable diseases and lifestyle-related disorder [6]. ISM and H (Indian School of Medicine and Homeopathy) especially in Ayurveda, yoga and naturopathy can play an important role in the prevention and management of the disorders that are managed by the alternative system of medicine [7,8,9].

The alternative system of medicine is a profitable industry, with a strong lobby, and faces less far regulation over the use of the marketing of unproven treatment. Its marketing often advertises the being “natural” or “holistic” in comparison to those offers by “big pharma” billions of duller spent for these studying alternative medicine with little to no positive effort [5,10,11]. Some of the successful practiced are only considered alternative under very specific definition such as those which include all physical activity under the umbrella of the “alternative system”. [7,12,13].

**2. MATERIALS AND METHODS**

**2.1 Research Design**

The research was adopted a descriptive survey method design to assess the attitude of the rural community area regarding the importance of alternative medicine of Wardha district. It provides the best framework for the study. This gives hand information and enhances in obtaining of accurate and meaningful data.

**2.2 Study Setting and Research**

We conducted the descriptive research design study in Wardha of Maharashtra. We search for the rural area in Wardha city and adults in the area.

**2.3 Sample Size and Sampling Technique**

This research aims towards assessing knowledge and attitude regarding the alternative system of medicine in a rural community area. A total number of 100 were taken inside this study. The study uses a purposive sample technique. Those who are having already some type of knowledge regarding the alternative system of medicine.

**2.4 Data Analysis**

Data collected by the checklist prepared by expert consultation and literature review. In the
demographic data like age, gender, caste, occupation, and education. We assess the knowledge and attitude in adults among the alternative therapies in a study.

2.5 Statistical Analysis

The data was entered into the MS-Excel 2019 software and the Social Sciences Statistical Package (SPSS, version 17) was used for data analysis.

3. RESULTS AND DISCUSSION

The descriptive study was undertaken by 100 purposively selected adults in a rural area of Wardha city, to assess the knowledge and attitude regarding the alternative system of medicine among adults in the rural community area with the help of questioners and the checklist. A checklist is made with the opinion of experts.

3.1 Distribution of No. of Adults in Demographic Variables

This deals with the percentage-wise distribution of adults concerning their demographic characteristics. A convenient sample of 100 subjects was drawn from the study population, who were adults from rural community areas. The data obtained to describe the sample characteristics including age, gender, occupation, caste and educational status respectively.

3.2 Assessment of Knowledge Score in a Rural Community Area Among Adults of an Alternative System of Medicine

This section deals with the assessment of the level of knowledge and attitude regarding the alternative system of medicine among adults in the rural community area. The level of knowledge score is divided under the following heading of poor, average, good, very good and excellent. The attitude score is divided into the area of positive attitude and negative attitude.

3.3 Assessment of Attitude Score Among Adults in a Rural Community Area for the Alternative System of Medicine

The above Table shows that 98% of the adults were having a positive attitude and only 2% of them had a negative attitude. The minimum attitude score was 16 and the maximum attitude score was 48. The mean attitude score was 38.90 ± 5.29 and the mean percentage of attitude score was 77.80 ± 10.59.

This Table shows the association between the knowledge score and attitude score of adults. Knowledge score and attitude score are compared and Pearson’s Correlation Coefficient is applied at a 5% level of significance.

3.4 Association of the Level of Knowledge Score Regarding the Alternative System of Medicine among Adults in Rural Community Area in Relation to Demographic Variables

Association of knowledge score with the selected demographic variables. The age in years of rural adults in a community area is statistically not associated with their knowledge score and there is a significant association in the gender and not significantly associated with education, occupation, caste regarding the alternative system of medicine.

3.5 Association of the Level of Attitude Score Regarding the Alternative System of Medicine among Adults in Rural Community Area in Relation to Demographic Variables

Association of attitude score with the selected demographic variables. There is no significant association between attitude scores with rural community adults. There is a significant association between attitude score the gender and not significantly associate with education, occupation, caste regarding the alternative system of medicine.

Table 1. Assessment with the no. of adults in demographic variables n=100

| Demographic Variables | No. of Adults | Percentage (%) |
|-----------------------|--------------|----------------|
| Age(yrs)              |              |                |
| 25-30 yrs             | 24           | 24             |
| 31-35 yrs             | 12           | 12             |
Demographic Variables | No. of Adults | Percentage (%)
---|---|---
36-40 yrs | 18 | 18
>40 yrs | 46 | 46

Gender
- Male | 44 | 44
- Female | 56 | 56

Occupation
- Farmer | 60 | 60
- Housemaker | 30 | 30
- Daily Worker | 3 | 3
- Private Employee | 7 | 7

Caste
- Hindu | 92 | 92
- Muslim | 1 | 1
- Buddhist | 7 | 7
- Christian | 0 | 0

Education
- Illiterate | 11 | 11
- Primary | 30 | 30
- Secondary | 30 | 30
- Higher Secondary | 21 | 21
- Graduate and above | 8 | 8

Information regarding the alternative system of medicine
- Yes | 42 | 42
- No | 58 | 58

Table 2. Assessment with the level of knowledge score n=100

| Level of knowledge | Score Range | Level of Knowledge Score |
|---|---|---|---|
| No of adults | Percentage |
| Poor | 1-6 | 5 | 5 |
| Average | 7-12 | 37 | 37 |
| Good | 13-18 | 45 | 45 |
| Very Good | 19-24 | 13 | 13 |
| Excellent | 25-30 | 0 | 0 |
| Minimum score | | 2 |
| Maximum score | | 22 |
| Mean knowledge score | | 13.52 ± 4.28 |
| Mean % Knowledge Score | | 45.06 ± 14.28 |

Fig. 1. Level of knowledge score
Table 3. Assessment of attitude score among adults in a rural community area

| Level of attitude | Score Range | Level of Attitude Score |
|------------------|-------------|-------------------------|
| Positive Attitude| >50%        | 98                      |
| Negative Attitude| ≤50%        | 2                       |
| Minimum score    |             | 16                      |
| Maximum score    |             | 48                      |
| Mean attitude score |          | 38.90 ± 5.29            |
| Mean % Attitude score |      | 77.80 ± 10.59           |

Fig. 2. Attitude score among adults in a rural community area

Table 4. Correlation between knowledge score and attitude score of adults

| Overall   | Mean   | SD    | Correlation ‘r’ | p-value |
|-----------|--------|-------|-----------------|---------|
| Knowledge Score | 13.52  | 4.28  | 0.086           | 0.397   |
| Attitude Score   | 38.90  | 5.29  |                 | NS, p>0.05 |

Fig. 3. Correlation between knowledge score and attitude score of adults
Table. 5 Association of the level of knowledge score regarding the alternative system of medicine among adults in rural community area in relation to demographic variables (n=100)

| Age (yrs)   | No. of adults | Mean knowledge score | F-value | p-value     |
|-------------|---------------|----------------------|---------|-------------|
| 25-30 years | 24            | 13.83±4.03           | 0.08    | 0.97        |
| 31-35 years | 12            | 13.66±4.43           |         | NS, p>0.05  |
| 36-40 years | 18            | 13.22±3.75           |         |             |
| >40 years   | 46            | 13.43±4.66           |         |             |

| Gender     | No. of adults | Mean knowledge score | t-value | p-value     |
|------------|---------------|----------------------|---------|-------------|
| Male       | 44            | 14.81±4.01           | 2.77    | 0.007       |
| Female     | 56            | 12.50±4.24           |         |             |

| Occupation | No. of adults | Mean knowledge score | F-value | p-value     |
|------------|---------------|----------------------|---------|-------------|
| Farmer     | 60            | 13.88±4.15           | 1.17    | 0.32        |
| Housemaker | 30            | 12.70±4.18           |         | NS, p>0.05  |
| Daily worker | 3            | 16.66±2.88          |         |             |
| Private employee | 7 | 12.57±5.88 |         |             |

| Caste      | No. of adults | Mean knowledge score | F-value | p-value     |
|------------|---------------|----------------------|---------|-------------|
| Hindu      | 92            | 13.52±4.31           | 0.06    | 0.93        |
| Muslim     | 1             | 12±0                 |         | NS, p>0.05  |
| Buddhist   | 7             | 13.71±4.42           |         |             |
| Christian  | 0             | 0±0                  |         |             |

| Education  | No. of adults | Mean knowledge score | F-value | p-value     |
|------------|---------------|----------------------|---------|-------------|
| Illiterate | 11            | 13.63±4.00           | 0.68    | 0.60        |
| Primary    | 30            | 14.33±4.13           |         | NS, p>0.05  |
| Secondary  | 30            | 13±4.54              |         |             |
| Higher Secondary | 21 | 12.66±4.44 |         |             |
| Graduate and above | 8 | 14.50±4.07 |         |             |

| Information| No. of adults | Mean knowledge score | t-value | p-value     |
|------------|---------------|----------------------|---------|-------------|
| Yes        | 42            | 14.33±4.14           | 1.62    | 0.10        |
| No         | 58            | 12.93±4.32           |         | NS, p>0.05  |

Table. 6 Association of the level of attitude score regarding the alternative system of medicine among adults in rural community areas in relation to demographic variables. (n=100)

| Age (yrs)   | No. of adults | Mean attitude score | F-value | p-value     |
|-------------|---------------|---------------------|---------|-------------|
| 25-30 years | 24            | 38.83±7.05          | 0.20    | 0.89        |
| 31-35 years | 12            | 38.16±4.93          |         | NS, p>0.05  |
| 36-40 years | 18            | 38.44±5.51          |         |             |
| >40 years   | 46            | 39.30±4.30          |         |             |

| Gender     | No. of adults | Mean attitude score | t-value | p-value     |
|------------|---------------|---------------------|---------|-------------|
| Male       | 44            | 40.22±4.72          | 2.26    | 0.026       |
| Female     | 56            | 37.85±5.52          |         | S, p<0.05   |

| Occupation | No. of adults | Mean attitude score | F-value | p-value     |
|------------|---------------|---------------------|---------|-------------|
| Farmer     | 60            | 39.41±4.73          | 1.82    | 0.14        |
| Housemaker | 30            | 37.33±6.40          |         | NS, p>0.05  |
| Daily worker | 3            | 37.66±2.08         |         |             |
| Private employee | 7 | 41.71±4.23 |         |             |

| Caste      | No. of adults | Mean attitude score | F-value | p-value     |
|------------|---------------|---------------------|---------|-------------|
| Hindu      | 92            | 38.89±5.46          | 0.50    | 0.60        |
| Muslim     | 1             | 34±0                |         | NS, p>0.05  |
| Buddhist   | 7             | 39.71±2.49          |         |             |
| Christian  | 0             | 0±0                 |         |             |

| Education  | No. of adults | Mean attitude score | F-value | p-value     |
|------------|---------------|---------------------|---------|-------------|
| Illiterate | 11            | 38.09±3.67          | 0.95    | 0.43        |
### 4. DISCUSSION

In the present study 98% of the adults were having a positive attitude and only 2% of them had a negative attitude. Association of knowledge score and attitude score with the selected demographic variables there is a significant in the gender and not significantly associated with education, occupation, caste regarding the alternative system of medicine and significant association between attitude score the gender and not significantly associate with education, occupation, caste regarding the alternative system of medicine.

A study was conducted on 5 January 2018 on perception and practice of AYURVEDA among users and non-users: a comparative study: “The present study has been designed to capture the current perception and practice of Ayurveda in its user and non-users. To compare the differences in its source of knowledge among both the groups, satisfaction level among those who have already used it and identification of factors that promote or demote it. As this was a questionnaire-based cross-section study, we develop a questionnaire for it, after piloting we modified and validated it. This questionnaire was presented to the common public via three ways, online portal, printed form and telephonic interview [14].

Respondents for the study were selected after a pre-decided criterion. A total of 728 responses were selected for analysis out of which 376 (52%) were Ayurveda users and 352 (48%) were non-users, out of all participants 222 (30.4%) were females and the rest 506 (69.5%) were males. Results also showed that while people of all age groups, both sexes, all occupational and educational group uses Ayurveda, it appears that males and people older than 30 years of age prefer Ayurveda. A survey made clear that most of the users were more or less satisfied with the effect of Ayurveda as they feel. While no statistically significant difference was found in the source of knowledge between users and non-users, ignorance and unavailability of dependable Ayurvedic physicians appear to be the main demotivation for the common public that prevents to use of Ayurveda” [15].

### 5. CONCLUSION

This study revealed that there is a relatively high public interest in complementary and alternative medicine practices in Wardha city. A fair number of respondents in the Wardha city 98% of the adults were having a positive attitude and only 2% of them had a negative attitude.

#### 5.1 Scope of the Study

This study has been expected to highlight the most important aspects of the attitude of rural community people regarding the alternative system of medicine. This study highlights an alternative system of medicine that includes Ayurveda, homeopathy, Unani, Siddha, yoga and naturopathy. There is need for building positive attitude regarding alternative health care system of medicine among rural community people which help to build a positive attitude towards positive. We hope that this study will help to build the attitude and gain knowledge of student’s farmers, adults and all community people. The findings of the study may give direction for further research.

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### CONSENT

Before taking any type of history we took written consent from adult people who are living in the rural community area in their local language (Marathi).
ETHICAL APPROVAL

Ethics approval was obtained from IEC, DMIMS (DU)/IEC/Sep-2019/8485).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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