Original Research Article

Gynaecological morbidities and health seeking behaviour of aged tribal women in Trivandrum district, Kerala, India

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ABSTRACT

Background: Gynaecological morbidities is any condition, disease or dysfunction of the reproductive system that is not associated with pregnancy which include reproductive tract infections, cervical cell changes, prolapse, urinary tract infection, back pain due to osteoporosis. The community based prevalence of gynaecological morbidities are influenced by demographic, social, cultural and behavioural factors. Geriatric gynaecological problem especially in tribal population has not received adequate attention in India. It is a fact that, health seeking behaviour forms an important component in formulating health programs as successful interventions depends on the accessibility and acceptability ,both of which relates to social factors. The objective of this study was to assess the gynaecological morbidities of aged (>60 years) tribal women in Trivandrum district living in various settlement areas and also to study their health seeking behavior.

Methods: 11 panchayats were selected where the density of tribal population was high, and using cluster sampling method, a sample size of119 was arrived at, and these many women were included in this study out of the total of 2362 aged tribal women residing in Trivandrum. 12 camps were conducted in settlement areas during the period of one year of study. Socio-demographic, general health, and gynaecological examination was conducted and findings noted in a proforma.

Results: 47.1% women had one or more coexistent gynaecological morbidities. 16% had clinical evidence of vaginitis, 9.2% had urinary tract infection, 12.6% had prolapse of some degree, 3.4% had cervical lesions. 80% of tribal women belonged to low socio economic status. 74.8% tribal women were anaemic. However around 80% had health seeking behaviour. The rest did not seek because of inaccessibility or shyness to discuss gynaecological morbidities.

Conclusions: Aged trial women harbour considerable gynaecological morbidities. Inspite of having a very high level of health seeking behaviour it was noted in the current study that the prevalence of anaemia was very high. Therefore there is an urgent need to further improve health facilities and health care in these areas.

Keywords: Anaemia, Health seeking behaviour, Morbidity, Pap smear, Tribal

INTRODUCTION

Gynaecological morbidities is any condition, disease or dysfunction of the reproductive system that is not associated with pregnancy, which includes reproductive tract infections, cervical cell changes, prolapse, urinary tract infection, back pain due to osteoporosis.¹ The community based prevalence of these morbidities are influenced by demographic, social, cultural and behavioural factors. Women do not consider it as a significant health problem or hesitate to talk about it. The onset of the menopause not only signals the end of a woman’s reproductive function but also the start of a new
phase in which she has the freedom to appreciate the quality of her life. A woman’s physical and mental condition during this stage of her life will have a significant influence on her later years. Illiteracy, ignorance, gender discrimination, poor socio economic status, lack of decision making power especially in women from rural and tribal areas further complicates the problems. All these tend to reduce the case reporting and delays treatment which ultimately increases the prevalence. Geriatric gynaecological problems especially in tribal population has not received adequate attention in India and tribal women are considered as one of the weakest section of the population. The present study was done in an attempt to find out the common gynaecological morbidities and health seeking behaviour of aged women living in various tribal settlement areas in Trivandrum district of Kerala state. Since health seeking behaviour forms an important component in formulating health programs, these issues were also looked into, to enable successful interventions and thereby increasing accessibility and acceptability. Last two decades have seen drastic change in population dynamics and the increase in aged (>60 years) population (60.5% during 1980–2000) is more than that of general population i.e. (37.6%), the increase was 82.5% and 46.2% respectively in developing countries. With the increase in proportion of aged population, number of elderly with ailments are also on the rise but the health care delivery system of most developing countries is not sufficiently equipped to tackle the problem. The longevity makes them prone to different kinds of morbidities both non communicable and gynaecological, of which gynaecological morbidities remains hidden and neglected because of the cultural silence by women.

The situation demands a definite health programme for the elderly women particularly in tribal population. This is more important for developing countries as resource availability is less and most elderly women are living in the rural and tribal areas. Gynaecological morbidity has implications for a range of interrelated aspects of women’s lives. This study shows that a large number of women are seeking help for gynaecological problems, hence emphasizing the importance of research in this area.

METHODS

An institutional ethics committee clearance was obtained prior to the study.

Sample population

Women aged 60 years and above residing in tribal areas in Trivandrum District, Kerala, India

Type of study

Cross sectional study

Study period

One year (November 2014 to November 2015)

Study area

Total number of settlement areas in Trivandrum district: 226

Total number of families: 5183

Total tribal population in Trivandrum – 17,185

Total number of tribal women in Trivandrum – 9050

Total number of tribal aged women in Trivandrum – 2362

Sample size,  \( n = \frac{z^2pq}{d^2} \)

Where,

\( z^2 = 1.96 \)

\( p = \) population proportion of factor under study (55%)

\( q = (100 - p) \)

\( d = \) Maximum affordable variability (20% of 55 = 11)

\[ n = \frac{1.96^2 \times 0.55 \times 0.45}{0.20^2} = 78.5 = 79 \]

Design effect of 1.5 is multiplied with calculated sample size i.e. 79 x 15 = 118.5 = 119.

Each panchayat in Trivandrum having a tribal population was considered as a cluster and about 11 randomly selected cluster with higher density of tribal population was chosen and, tribal women meeting the inclusion criteria were included in the study. Tribal settlement areas in Trivandrum district included the following panchayats. Kuttichal, Nandiyodu, Palodu, Peringamala Amboori, Vithura, Aryanadu, Tholikodu, Poovachal, Vellavada, Pangodu etc.

Inclusion criteria

Tribal women aged >60 years of age who give consent to participate in the study.

Exclusion criteria

Women with debilitated illness who could not participate in the camp conducted in settlement areas.

Methodology

After getting sanction from District Tribal Officer for conducting geriatric camps in tribal settlement areas in all selected panchayats, camps were conducted with the help of PHC (Primary health centre) medical officers and district programme officer. There were 12 camps conducted in the above mentioned panchayats. JPHNs(Junior public health nurses), JHIs (Junior health inspectors), ST promoters (Scheduled tribe promoters), ASHA workers (Accredited social health activists) and
Anganwadi workers gave publicity about the camps in their settlement areas and also gave support to conduct camps. After getting written informed consent the proforma was filled by asking questions. After taking anthropometric measurements, haemoglobin estimation was done. General examination and gynaecological examination was done in a nearby house or side room of community hall or in the anganwadi as per available facilities. Abdominal examination, Local examination, per speculum examination, per vaginal examination was also done. Pap smear was taken with Ayres spatula and it was immediately spread to the numbered slides and fixed with 95% Ethanol in a Koplik’s jar. All slides were transported to the cytology lab in Govt Medical College Trivandrum for cytological examination. Slides were examined and reported within 2 weeks. Nearly 120 slides were reported.

After examination, treatment was advised and medicines were provided by PHC. Those who needed further evaluation and check up, were referred to nearest taluk hospital or medical college hospital. These cases were reported to concerned JPHN and ASHA worker for further motivation and follow up.

**RESULTS**

The data collected was entered in excel sheet and analysis was done by using SPSS software.

**Age group:** Out of the total participants in the study, there were 92 patients in the age group of 60-65, 19 were in the age group of 66-70, 3 women were in the age group of 71-75 and 5 women were between 76 years and 80 years of age (Table 1).

**Tribal settlements studied:** Women recruited in this study were more or less equally distributed in the various tribal settlements (Table 2).

**Occupation:** 59.7% of the women in the study were employed whereas 40.3% were unemployed.

**Housing** 68.9.4% of women lived in kuccha house, 19.3% had pucca house, and 11.8% had no house and lived in makeshift houses (Table 3).

**Educational status:** 52.1% of women studied up to 4th standard. Only 6.7% studied up to 10th standard.

**Marital status:** 4 women in this study were unmarried. Rest all were married.

**Obstetric score:** As this study was looking into Pap smear, parity was enquired. 46 women were Para 4 and above accounting to about 38.7% (Table 4).

**Table 2: Frequency distribution of women in various tribal settlements.**

<table>
<thead>
<tr>
<th>Name of panchayat</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuttichal</td>
<td>11</td>
<td>9.2</td>
</tr>
<tr>
<td>Aryanadu</td>
<td>9</td>
<td>7.6</td>
</tr>
<tr>
<td>Vithura</td>
<td>16</td>
<td>13.4</td>
</tr>
<tr>
<td>Amburi</td>
<td>16</td>
<td>13.4</td>
</tr>
<tr>
<td>Palode</td>
<td>8</td>
<td>6.7</td>
</tr>
<tr>
<td>Poovachal</td>
<td>11</td>
<td>9.2</td>
</tr>
<tr>
<td>Nandiyodu</td>
<td>12</td>
<td>10.1</td>
</tr>
<tr>
<td>Peringamala</td>
<td>15</td>
<td>12.6</td>
</tr>
<tr>
<td>Tholicode</td>
<td>11</td>
<td>9.2</td>
</tr>
<tr>
<td>Pangode</td>
<td>10</td>
<td>8.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>119</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Table 3: Type of dwelling**

<table>
<thead>
<tr>
<th>Type of home</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kuccha</td>
<td>79</td>
<td>66.4</td>
</tr>
<tr>
<td>Pukka</td>
<td>23</td>
<td>19.3</td>
</tr>
<tr>
<td>No house</td>
<td>14</td>
<td>11.8</td>
</tr>
<tr>
<td>Ettaveedu (kuccha )</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td>Odu (kuccha)</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>119</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Table 4: Parity of the subjects**

<table>
<thead>
<tr>
<th>Obstetric status</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13</td>
<td>10.9</td>
</tr>
<tr>
<td>2</td>
<td>39</td>
<td>32.8</td>
</tr>
<tr>
<td>3</td>
<td>21</td>
<td>17.6</td>
</tr>
<tr>
<td>4</td>
<td>27</td>
<td>22.7</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>6</td>
<td>9</td>
<td>7.6</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>.8</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>3.4</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>119</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Available health facility:** Primary health centres were accessible to all these women and majority depended on government run hospitals for treatment. 77.3% of our study population had health seeking behaviour. Those who did not seek treatment, causes identified include one or more of the factors like shyness, economic reasons, hospital too far, loss of wages etc.

**Presenting complaints:** 54 out of 119 women complained of vulval itching, 49 out of 19 complained of...
vaginal discharge, 8 women gave history of postmenopausal bleeding, 23 women complained of
difficulty in passing urine, 28 women complained of constipation, 23 women complained of mass coming per
vagina and 2 women had already undergone surgery for pelvic organ prolapse. 36/119 women reported weight
loss. Significant number of women i.e. around 68.9% complained of tiredness. 63 women complained of
abdominal pain off and on, of which 23 complained of associated abdominal distension. 46 women also reported
dysuria. On lab evaluation urinary tract infection was found in 24 women and treatment was given.

General examination findings - 89 women (74.8%) had a Hb level of less than 10 thus explaining the tiredness
complained by most women. However 94 women (79%) had a normal BMI. Only 6 women were found to be
under weight and only 19 were overweight which was heartening to note considering global rise in obesity and
its related problems.

**Examination findings:** 65.6% of women had healthy looking cervix, 15.9% had vaginal discharge, 7.6% had
cystocele, 5% had rectocele, 2.5% had cervical erosion. 4 women were post radiated cases of carcinoma cervix
(Table 5).

<table>
<thead>
<tr>
<th>P/S</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White discharge</td>
<td>19</td>
<td>15.9</td>
</tr>
<tr>
<td>Healthy cervix</td>
<td>78</td>
<td>65.6</td>
</tr>
<tr>
<td>Cystocele</td>
<td>9</td>
<td>7.6</td>
</tr>
<tr>
<td>Ca cervix</td>
<td>4</td>
<td>3.4</td>
</tr>
<tr>
<td>Cervical erosion</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>Rectocele</td>
<td>6</td>
<td>5.0</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**Pap smear:** 64.7% of the women had inflammatory smear, 20.2% had atrophic smear, and in 15.1% of
women the smear had squamous cells only (Table 6).

<table>
<thead>
<tr>
<th>Papsmear</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atrophic smear</td>
<td>24</td>
<td>20.2</td>
</tr>
<tr>
<td>Inflammatory smear</td>
<td>77</td>
<td>64.7</td>
</tr>
<tr>
<td>Superficial sq cells</td>
<td>18</td>
<td>15.1</td>
</tr>
<tr>
<td>Total</td>
<td>119</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**DISCUSSION**

Nearly half of the women above 60 years of age had some gynaecological morbidity, whereas only one-fourth
of them complained of symptoms. Similar findings are documented in the literature. The wide variation in
prevalence across the studies is explained due to variation in baseline characteristics of study population.6 There is
difference in access to services, differing responses for

gynaecological examination and variations in methods of measurement of gynaecological morbidities. The tribal
women, being unaware of symptoms, and associated cultural inhibition in expressing symptoms related to
private parts, do not seek treatment and this has resulted in under reporting of gynaecological problems. Aged
women from tribal areas have limited ability to deal with diseases effectively because of limited access to
resources, ignorance, lack of support, and cultural inhibitions.

In developing countries, women are at a high risk for gynaecological morbidities. The problem arises primarily
due to early marriage, high fertility, repeated pregnancies and that too at short intervals and unsafe sex.7
Gynaecological morbidities in aged women is an important public issue and social problem.

In most tribal communities there are so many myths about health. Health and treatment are closely related to
the environment that is forest ecology. They are more conscious to find out the cause of illness rather than cure.
They believe that most of the diseases are related to supernatural and religious causes and rely on herbal
plants for treatment. The tribal women are however aware of modern medicines and they are willing to take
allopathic medicine along with their traditional treatment.8 De forestation and destructions of eco system, and
infiltration of non-tribal elements into the tribal domain play a major role in changing tribal ethos, and
value systems .The tribal people live in the forest and depend only on the land and forest for their daily needs,
so for their medical problems also they prefer traditional treatment – indigenous medicine ,but this type of
traditional medicines are available only for some diseases like jaundice, hyper tension, diabetes mellitus, cold and
cough. They usually practiced traditional way to conduct deliveries and post-partum care. But they never practiced
traditional medicine in gynaecological problems.

Food habits are also very important. They never eat oily, tinned food or junk food. Most of the time they eat tuber
crops, tapioca, and fruits obtained from the forest. Though their food habits have largely helped in curbing
obesity, but most of them have nutritional deficiencies, most commonly anaemia. Prevalence of anaemia amongst these women was found to be very high in our study. They are used to walking long distances daily to
collect firewood from nearest forest. They depend on streams and ponds as the source of drinking water which
also poses threat in the form of water borne infections and infestations. Most of the tribal people do not have
latrine facility. They go for open air defecation. In Kerala however the tribal population is having a very good
health seeking behaviour and thereby they are much better in terms of development indices than the rest of the
country.10

Most of the study area had only preschool with single teacher facility. The level of education of the house hold
members mainly affects the health seeking behaviour. The education of the female members in the house hold plays a role very vital role in the decision making process of the treatment.6 The level of education of their children also affects the health seeking behaviour of that family. Anganwadis in all the studied panchayats were functioning properly. The dwellings were mostly kutch houses without electricity. Few of them had solar panel. In case of emergencies, four wheeler jeeps were used for transportation. There were no proper road and no proper communication facilities. All these factors played a very important role in utilisation of health delivery services and also factors such as availability, quality and cost which has been proven by several other studies.9

Kerala is a state where the health indices match the scenarios of the developed countries. Yet we found in our study that still many other health initiatives should be undertaken in order to uplift this section of our women. The tribal’s of our study area, practiced both modern medicine and traditional medicines for the treatment of their diseases. Non-availability of traditional practitioners has also contributed to this. They have also developed faith in government hospitals like PHC, CHC and Taluk Hospitals for their health treatment. This is a very reassuring scenario because this will enable the administration to come out with welfare schemes.

Limitations

Because of limited population in settlement areas geriatric camps alone could not be conducted. The lack of proper transport facilities were a hindrance to include bedridden women or those who could not reach the camps.

CONCLUSION

Aged tribal women harbour a considerable magnitude of gynaecological morbidities. There should be an urgency to improve the health care services as well as health providers for better treatment and accessibility in the tribal areas of the community. This study showed that 47.1% had gynaecological morbidities and 55.7% of the illiterate. Illiterate women had comparatively higher chance of gynaecological morbidity than literate. 80% of tribal women belonged to low socio economic class.56.3% of tribal women were not aware of cleanliness and health. 74.8% tribal women were anaemic, 5% of them are under weight, 77.3% had health seeking behaviour compared to other tribal areas in India the health seeking behaviour is better in Trivandrum District. This is because, efficient health promoting activities are going on at PHC level. Tribal mobile unit in Trivandrum district is functioning very well. Majority of tribal women in our area had access to pure water supply, non-polluted environment, un stressful life. Some draw backs were the lack of money to tackle their daily needs, lack of transport facilities, and inaccessibility to health centres. Approaches such as geriatric friendly medical camps and regular screening for both gynaecological as well as non-communicable chronic diseases can be considered to improve the general health and uncover the hidden gynaecological morbidities in this group.

Recommendations

- Conduct frequent medical checkups in their settlement areas through PHC and tribal mobile unit
- Provide symptomatic screening with a gynaecological symptom checklist in sub centres and primary health centres.
- Frequent health education should be given to peri menopausal women and post-menopausal women, just like adolescent clinic.
- Implement Nutritional programmes and supplementary Iron, Vitamins through Anganwadis like preschool children nutritional programme.
- Implement palliative health care unit just like in rural areas to provide health check-up for the aged people and bed ridden and physically ill.
- Conserve forest and maintain the eco system and allow them to live freely in their own life style without disturbances from outsiders.

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Ethical approval: The study was approved by the Institutional Ethics Committee

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