Introduction: The study aims in finding out the basic reproductive health condition of the women in rural areas of Nepal who are lacking far behind in access to basic health facilities and to fill in the gap of the evidence present in these areas.

Methods: This study is the descriptive analysis of women who attended the 10 day long gynaecological Health camp organized at the premises of District Hospital, Jumla during October 2008, led by a Gynaecologist from Kathmandu. The diagnosis was made on clinical evaluation. A carbon copy of the prescription was made at the time of examination and was later analysed using Epi Info 4.3.3.

Results: 565 of 640 women had attended the camp were included in the study. Majority of them were suffering from RTI, followed by infertility and pelvic organ prolapse. Most of them had adopted the permanent methods for family planning and the average family size for adopting permanent method was 2.9

Conclusion: Major Reproductive Health (RH) morbidity in the study was Pelvic Inflammatory Disease (PID), cervicitis and vaginitis. A significant number of the women were suffering from urinary tract infection, acid peptic disorder. Drugs as per protocol for STI treatment was most frequently used while ranitidine was the most common drug besides antibiotics. Most of them adopted vasectomy as the method of family planning, showing the increasing trend for awareness about family planning.

Key Words: Reproductive Health, sub-fertility, STI, RTI, vasectomy, menstrual disorders

Pantha S¹, Gartoulla P²
¹National Academy of Medical Sciences (NAMS)
²Nepal Institute of Health Sciences

ABSTRACT

Introduction: The study aims in finding out the basic reproductive health condition of the women in rural areas of Nepal who are lacking far behind in access to basic health facilities and to fill in the gap of the evidence present in these areas.

Methods: This study is the descriptive analysis of women who attended the 10 day long gynaecological Health camp organized at the premises of District Hospital, Jumla during October 2008, led by a Gynaecologist from Kathmandu. The diagnosis was made on clinical evaluation. A carbon copy of the prescription was made at the time of examination and was later analysed using Epi Info 4.3.3.

Results: 565 of 640 women had attended the camp were included in the study. Majority of them were suffering from RTI, followed by infertility and pelvic organ prolapse. Most of them had adopted the permanent methods for family planning and the average family size for adopting permanent method was 2.9

Conclusion: Major Reproductive Health (RH) morbidity in the study was Pelvic Inflammatory Disease (PID), cervicitis and vaginitis. A significant number of the women were suffering from urinary tract infection, acid peptic disorder. Drugs as per protocol for STI treatment was most frequently used while ranitidine was the most common drug besides antibiotics. Most of them adopted vasectomy as the method of family planning, showing the increasing trend for awareness about family planning.

Key Words: Reproductive Health, sub-fertility, STI, RTI, vasectomy, menstrual disorders

CORRESPONDENCE

Dr. Sandesh Pantha,
1st Year Resident, MDGP, NAMS
E-mail:sandu_cmc@yahoo.com, gulmi21@hotmail.com
INTRODUCTION

Reproductive Health is the basic need of every individual living either in developed or developing countries, rural or urban areas. Lack of education, poverty, patriarchal society with male dominance, gender based violence affects the physical, mental and social well being of women. In developing countries like Nepal, women living in most of the rural areas lack the access even to the basic health problems; let’s forget the specialized care needed for them during pregnancies and other conditions. Jumla is one of the remote areas in Nepal, lacking in basic access to Health facilities.

There is an increasing awareness about reproductive health in most of the urban areas of Nepal while the condition of the same is grave in the rural areas. Although the national health indicators have shown a great improvement (MMR falling from 517 to 281 per 1000 live birth, NMR falling from 85 to 48 per 1000 live birth, TFR falling from 4.8 to 3.1 and deliveries conducted by the skilled health workers increasing to 20% of total deliveries) over the past decade\(^1\), this national data does not reflect the real condition of the rural areas. There is lack of information and evidence based data of the reproductive morbidity of women of these areas.

WHO has designed Reproductive Health (RH) package to the women that includes 9 basic components- Family planning, Safe Motherhood, child Health (New born Care), Prevention and Management of complications of Abortion, RTI/STI/HIV/AIDS, Prevention and Management of Sub-fertility, Adolescent Reproductive Health, Problems of elderly women and Domestic Violence (Gender Based Violence)\(^2\) we are not able to provide even a single component of this to all of our women. Government still lacks trained manpower to provide all of these services to the community. This failure has made RH a major public health issue in Nepal.

Lack of personal hygiene, awareness about menstrual cycle and its measures, heavy work during menstruation and pregnancy has resulted in RH morbidity in a significant number of these women. Sexually transmitted and reproductive tract infections, Urinary Tract Infections(UTI) are predominant in our rural community and morbid presence of these conditions has deteriorated the health of women. About 20% of women experience a single episode of UTI in their lifetime and 3% of women have more than one episode in one year.\(^3\)

Menstrual disorders, sub-fertility, and pelvic organ prolapsed are other areas of reproductive health that needs special consideration and needs to be addressed by the Government and other agencies working in the Health centre.\(^4\)

METHODS

Altogether 640 female patients attended the 10 day long gynaecological health camp at the premises of the District Hospital, Jumla run jointly by the District Health Office and Shangrilla Orphanage Home, Kathmandu. This camp was led by a Consultant Gynaecologist from Kathmandu and a team of 3 doctors, including a foreign gynaecologist who examined the patients. The main aim of this health camp was to screen for possible cases of carcinoma cervix using the VIA (Visual Inspection with Acetic Acid) technique.

This is a cross sectional descriptive study involving the attendants at the above mentioned health camp at the Maternal and Child Health (MCH) clinic of District Hospital, Jumla. Proper history including gynaecological and obstetric history was taken and the copy of the prescription sheet was then reviewed and analysed. All of those having gynaecological complaints underwent pelvic examination. Diagnosis was made on the basis of clinical history and examination findings. Data entry was done in Epi Info 4.3.3 version and analysis was done using the same programme.

Among those attending the mobile health camp, all those already diagnosed pregnant women attending the regular MCH clinic of the hospital were also examined in the camp but were not included in this study as they needed to be documented in the MCH record books and it was difficult to make a separate card for the need of the study. However pregnant ladies who came for the first time knowing or without knowing that they
were pregnant were included in the study. Also those with incomplete history and those who refused pelvic examination were excluded from the study.

Data was analysed for methods of family planning, disease distribution, medicine use and special consideration was made for infertility, genital prolapse and those with possibility of cervical carcinoma.

RESULTS

In the study women aged from 15 years to 65 years attended the camp. Mean age was 31.04 years (standard deviation of 9.27 years). About two thirds of the women attending the camp were from 21-35 years group. This shows the increasing trend of health awareness among middle aged women.

Among the knowledge and awareness of the cervical cancer, most of the women came to the camp for having lower abdominal problems while only few of them came to the camp even though they did not have any specific complaints, 14.3%.

### Table 1. Presenting Complaints of the Women

<table>
<thead>
<tr>
<th>Traits</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Abdominal Pain</td>
<td>347</td>
<td>61.4%</td>
</tr>
<tr>
<td>PV discharge</td>
<td>315</td>
<td>55.7%</td>
</tr>
<tr>
<td>Back Ache</td>
<td>197</td>
<td>34.9%</td>
</tr>
<tr>
<td>Burning Micturation</td>
<td>116</td>
<td>20.5%</td>
</tr>
<tr>
<td>Dysmenorrhoea</td>
<td>240</td>
<td>42.5%</td>
</tr>
<tr>
<td>Painful Periods</td>
<td>187</td>
<td>33.1%</td>
</tr>
<tr>
<td>Inability to conceive</td>
<td>41</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

### Table 2: Distribution of the health Problems of women attending the Camp

Most of them had reproductive tract infections 43.2%. Other significant conditions included infertility and pelvic organ prolapse: 29% of the women did not have any gynaecological problems. Similarly many of them had non gynaecological conditions; Acid peptic disease (11.8%) and Urinary tract infection (6.4%) leading the list among them.

### Figure 1. Family planning methods

An increasing awareness of family planning was found among the women. Vasectomy was the most popular method of family planning adopted by 39.1% of the respondents. Most of the couples had adopted...
permanent method after having 3 living children. The average family size for adopting permanent method was 2.9 children.

Sub-fertility was present among 49 (8.7%) of the attendants. Primary sub-fertility was more common than the secondary sub-fertility; 7.3% and 1.4% respectively.

Per speculum examination showed 157 (27.8%) of the patients had cervical erosion or unhealthy cervix and among them 5.1% tested positive with acetic acid. 1.1% of them had potentially suspicious carcinoma of cervix due to presence of irregular mass that bleed on touch.

It was found that, 134 (23.3%) of the patients had clinically significant purulent cervical discharge: 64 (11.4%) of them also had significant cervical tenderness on pelvic examination: 93% of non-pregnant had normal sized uterus while uterus was anteverted in 91% of them.

Altogether 44 attended the camp with complaints of something coming down through the vagina, and on examination prolapse was found clinically in 4.5% cases and 1.6% of them were treated with a ring pessary: 18 women who came for check up after having hysterectomy for genital organ prolapse at different places at different times: 4 (22.2%) of them had vault prolapse.

Only 8 of 52 women who had had induced abortion had taken CAC services which accounts for 15.4% of those having induced abortion and 1.4% of the total women attending the camp. Deworming was done in all women as a routine practice with 400mg of albendazole with the exception of the pregnant ladies who were below 3 months of gestation or who already had done deworming. Doxycycline, Metronidazole, Fluconazole were the most frequently used antibiotics. Ranitidine was most frequently used drug apart from antibiotics.

**DISCUSSION**

According to WHO at 36% of total disease burden in women is due to reproductive ill health conditions.

A study in rural area of India shows more than half of women are suffering from at least one or more RTI/STDs. In a study in rural Gambia, reproductive tract infection (47%) was the leading cause of RH morbidity.

A camp based study in western Nepal has shown POP (18%), RTI(14%), subfertility (14%) and menstrual disorders (7%) to be four leading RH problems. Another clinic based study done in far western districts of Nepal 25% had POP, 20% had RTI, 17.1% had infertility and 12.3% had menstrual disorders.

In another study conducted in the women attending a RH camp in eastern Terai of Nepal STI (30%) was leading RH morbidity followed by POP (20%), menstrual disorders (17%) and sub fertility (9%).

<table>
<thead>
<tr>
<th>Study</th>
<th>RTI</th>
<th>POP</th>
<th>Sub-fertility</th>
<th>Mens. Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonetti T R7,</td>
<td>20.1%</td>
<td>25.1%</td>
<td>17.1%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Tuladher H6,</td>
<td>14.1%</td>
<td>18%</td>
<td>14%</td>
<td>7%</td>
</tr>
<tr>
<td>Dangal G8,</td>
<td>30%</td>
<td>18%</td>
<td>9%</td>
<td>17%</td>
</tr>
<tr>
<td>Present study</td>
<td>43%</td>
<td>4.4%</td>
<td>8.2%</td>
<td>17.2%</td>
</tr>
</tbody>
</table>

Table 3. Reproductive Health Morbidity in various places of Nepal

In our study too RTI, POP, sub-fertility and menstrual disorders are the leading cause of reproductive health morbidity in women which is consistent with the findings of the other studies.

However in our study the prevalence of RTI/STI is much more than the findings of other similar studies conducted in different parts of Nepal (Table 3).

Higher prevalence of RTI/STI in Jumla may be due to poor hygiene of the women, existing social and religious taboos of women being compelled to stay in cowshed during menstrual periods and child birth, not giving them nutritious food during this time and lack of adequate rest during pregnancy, child birth and even during the puerperium and menstrual periods.

Only 4.4% of the women in our study had various degrees of POP which is quite low in comparison to findings of other studies done in various parts of Nepal. This may be due to lack of surgical facilities during the camp.

Although minilap is the most commonly used method of permanent family planning among the Nepalese couples, our study shows that 39.1% among 40.5% of couples who had opted for permanent methods of family planning...
had undergone vasectomy by the male partners (Figure 1). This may be due to the fact that vasectomy camps are usually more frequently organized in these areas than are the minilap camps.

**CONCLUSION**

People from rural areas like Jumla, where only access is by air transport, lack access even to basic health care and are far behind in comparison to those from the urban areas like Kathmandu.

Hence special attention should be given to these people regarding providing specialized services. Although cost of organizing highly specialized health camps with sophisticated instruments for diagnosis is expensive, this is found to be cost effective if compared to the expenses that each individual needs to come to the specialized health care centre. For example the minimum cost for 2 people to come to Nepalgunj, the nearest city from Jumla, is nearly 20,000 excluding the cost for investigations and treatment. So the government and NGO’s should take the initiatives in organizing specialized camps with proper diagnostic facilities rather than organizing camps only with human expertise as proper diagnosis cannot be reached in the absence of laboratory evidence.

Menstrual disorders, sub-fertility, and pelvic organ prolapsed are other areas of reproductive health that needs special consideration and needs to be addressed by the Government and other agencies working in the Health centre.

**ACKNOWLEDGEMENT**

I would like to extend my thanks team of the Shangrilla Orphanage Home, Kathmandu; Mr. Jay Shrestha, district coordinator of Shangrilla Orphanage Home, who provided the financial contribution for the health camp; Dr. Asha Singh, Consultant Gynaecologist, Birendra Police Hospital, Kathmandu who was the leader of this health camp; Mr. Brish Shahi, District Public Health Officer and to each and every member of the health camp and District Health Office, Jumla who helped me in collection of the history of the clients attending the health camp.

**REFERENCES**

1. Nepal Demographic and Health Survey(NDHS); Kathmandu; Department of Health Services; 2006
2. Clinical Protocol on RH for Medical Officers, Kathmandu, Department of Health services, 2008