Introduction

The study on Selected Reproductive Health (RH) Morbidities among Women Attending Reproductive Health Camps was conducted primarily to determine the prevalence of selected RH morbidities, namely Pelvic Organ Prolapse (POP), Obstetric Fistula, Cervical Cancer and Human Papillomavirus (HPV - types 16 and 18) among women aged 15-49.

The study was carried out by the Center for Molecular Dynamics Nepal (CMDN) under the leadership of the Family Health Division (FHD) of the Ministry of Health with technical and financial support from the United Nations Population Fund (UNFPA).

Methodology

This cross-sectional study was conducted from September 2014 to December 2015 among 4,277 women of reproductive age who attended RH camps in 15 districts, covering all three ecological and five development regions for national representation (Figure 1).

All the 4,277 women were interviewed after obtaining consent followed by a collection of background information using structured questionnaires and screening for RH morbidities. The respondents diagnosed with any RH morbidity were provided on-site treatment services by gynaecologists or referred to a higher centre for further management as required. A key informant interview was also conducted with District (Public) Health Offices to gather information on the situation of RH morbidities in the 15 districts. Additionally, secondary data collection was done in four sites providing Obstetric Fistula services including RH screening camps being conducted by the government.

Among the 4,277 women enrolled in the study and interviewed, 4,031 of them were screened for POP and Obstetric Fistula, 3,831 for Cervical Cancer and 3,464 for HPV 16/18.

Key Findings

Background Characteristics

The majority of the women enrolled in the study were Hindu by religion (90.3%), from upper caste groups (46.6%), in the age group of 20 to 39 years (62.6%), married (95.5%), having married young (around the median age of 17 years) and with varying levels of education. Pregnancies at a young age (below 20 years) were common (53.7%) with the median age of first pregnancy being 19 years. Many of them had become pregnant up to four times (40.6%), with the median number of children being three and the majority (66.7%) having their last child delivered at home.
Knowledge about RH Morbidities

A considerable proportion of women (79.1%) had knowledge about Pelvic Organ Prolapse. However, only 42.9% of women had knowledge about Cervical Cancer and only 5.4% on Obstetric Fistula (Figure 2).

![Figure 2: Percentage of women aged 15-49 years by knowledge on prolapse, fistula and cervical cancer](image)

<table>
<thead>
<tr>
<th>Information</th>
<th>POP</th>
<th>Obstetric Fistula</th>
<th>Cervical Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>79.1</td>
<td>5.4</td>
<td>42.9</td>
</tr>
</tbody>
</table>

Source of Information on RH Morbidities

Relatives/friends followed by health personnel were the main source of information on prolapse and cervical cancer. Doctors, nurses and health camps (66.8%) were the main source of information followed by television/radio (53.7%) for fistula.

Prevalence of RH Morbidities

Among the total women screened, 6.4 percent had prolapse, 1.6 percent had cervical pre-cancerous lesions and 5.4 percent had HPV 16 and/or 18 (Figure 3).

![Figure 3: Percentage of women aged 15-49 with prolapse, cervical pre-cancerous lesions and HPV 16/18](image)

<table>
<thead>
<tr>
<th>Condition</th>
<th>POP</th>
<th>Cervical Pre-Cancerous lesions</th>
<th>HPV 16/18</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion</td>
<td>6.4</td>
<td>1.6</td>
<td>5.4</td>
</tr>
</tbody>
</table>

Eight cases suspected of cervical cancer were referred for confirmatory diagnosis. However, confirmatory diagnosis of these cases could not be made as the respondents could not be further followed-up. Additionally, only three cases of fistula were identified in the RH camps. Therefore, the study could not determine the prevalence of cervical cancer and fistula.

Pelvic Organ Prolapse

Among the 6.4 percent of women diagnosed with different degrees of prolapse, 3.7 percent had first degree prolapse, 1.4 percent had second degree and only 1.1 percent had third and fourth degree prolapse requiring surgical management (Figure 4).

![Figure 4: Prevalence of POP among women aged 15-49 years according to degrees](image)

<table>
<thead>
<tr>
<th>Degree</th>
<th>I Degree</th>
<th>II Degree</th>
<th>III Degree</th>
<th>IV Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion</td>
<td>3.7</td>
<td>1.4</td>
<td>0.8</td>
<td>0.3</td>
</tr>
</tbody>
</table>

The study also showed that among the women diagnosed with prolapse, 11.3 percent were from Far-Western Development Region, 6.6 percent were from the Terai and 7.1 percent were from urban areas. The majority of women were from upper caste groups (49.2%), within the age group of 40-49 (67.2%), illiterate (61.7%), and married (91.8%).

Among the women diagnosed with prolapse, the majority (86%) were married before the age of 20 and 58 percent had their first pregnancy before the age of 20 (Figure 5).

![Figure 5: Percentage of women aged 15-49 years with POP by fertility-related information](image)

<table>
<thead>
<tr>
<th>Age at First Pregnancy</th>
<th>Below 20 years</th>
<th>20-29 years</th>
<th>30 and above</th>
<th>No pregnancy</th>
<th>Don’t remember/know</th>
<th>12 times</th>
<th>14 times</th>
<th>16 times</th>
<th>20 times</th>
<th>57 times</th>
<th>8 or more times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Pregnancies</td>
<td>57.8</td>
<td>39.8</td>
<td>0.4</td>
<td>0</td>
<td>2</td>
<td>16</td>
<td>41.8</td>
<td>32.4</td>
<td>9.8</td>
<td>41.8</td>
<td>32.4</td>
</tr>
</tbody>
</table>

Furthermore, among the women diagnosed with prolapse, the majority (82.8%) had their last delivery at home and only about 31 percent received assistance from health workers during their last childbirth (Figure 6).

![Figure 6: Percentage of women aged 15-49 years with POP by delivery-related information](image)

Only 35 percent of women currently having prolapse had gone to a service provider. Among those who sought help, most of the women (82.6%) had consulted doctors.

**Cervical Cancer**

The screening for cervical pre-cancerous lesions was carried out in line with the National Cervical Cancer Screening and Prevention Guidelines, 2010. Among the women with cervical pre-cancerous lesions, 2.2 percent were from Terai and Eastern Development Region and 1.8 percent were from rural areas. Majority of them were between were aged between 30-39 (50%), with secondary-level education (41.7%), from upper caste group (33.3%), married (96.7%) and married before the age of 20 years (75%).

Only 1.5 percent of the women enrolled in the study ever had been screened for cervical cancer in the past (Figure 7). Among those who had been screened for cervical cancer, half (50.8%) had Pap smear test as a method of screening.

![Figure 7: Percentage of women aged 15-49 years by screening for cervical cancer](image)

HPV 16 and HPV 18 were found among 3.6 percent and 2 percent respectively among the women screened. In addition, co-infection of both HPV 16 and 18 was found among 0.2 percent of the women. Similarly, either HPV 16 or HPV 18 was found among 5.4 percent (Figure 8). Among women with HPV positive results, 6.8 percent were from Western Development Region, 6.2 percent were from the Terai Region and 5.6 percent were from urban areas.

![Figure 8: Prevalence of HPV among women aged 15-49 years](image)

**Way Forward/Recommendations**

- Continue supporting the sexual and reproductive health and rights of women, including those belonging to marginalized groups, focusing on preventing early marriage and delaying pregnancy, ensuring access to quality contraceptive choices and skilled birth attendants and promoting gender equality across sectors.

- Increase awareness on different morbidities, including available treatment and treatment sites through focused programmes.

- Expand and strengthen RH morbidity related services to different level of health facilities to increase access, including the availability of trained human resources.

- Prioritize conservative management of prolapse equally to surgical management.

- Need for a focused strategy to increase awareness and identify women with fistula.

- Strengthen referral mechanisms from peripheral level health facilities providing RH morbidity services through specialized centers, particularly for cervical cancer.