# ABSTRACT

Epidemiological studies conducted in developing countries have shown a high prevalence of gynaecological morbidity among women. Although there have been a few community based studies on gynaecological morbidities such as infertility, sexual dysfunction, menopause and menstrual problems in Sri Lanka, there is a paucity of information on more common morbidities. The present study aimed to assess the community prevalence of gynaecological morbidity and to determine the correlates, perceptions, consequences and health care seeking behaviour related to gynaecological illnesses. In order to achieve these objectives, a community based cross sectional study employing both qualitative and qualitative methodologies was carried out in the district of Ratnapura.

One thousand and eight hundred study subjects were selected using multi stage cluster sampling technique. The strata with relatively lower proportion of women were over sampled to ensure the capturing of more realistic variations among them. The resultant differential probabilities were accounted for using weighted analysis.

Information on socio demographic characteristics, menstrual and obstetrics histories, contraceptive use, sexual behaviour, gynaecological symptoms, impact of gynaecological symptoms on women's day-to day life and health seeking behaviour was collected using an interviewer administered, pre coded, structured questionnaire. Complete clinical examination was carried out including a gynaecological examination and laboratory investigations to detect RTIs, cervical cell abnormalities, syphilis, random blood sugar and haemoglobin levels. Focus group discussions, in-depth interviews and key informant interviews were used to gather information on perceptions, consequences and healthcare seeking behaviour related to gynaecological morbidity.

The participation rate was high (95.5%). The prevalence of self reported gynaecological symptoms was 62.4% (95%CI 59.7-65.1). The most common gynaecological problem was pre menstrual syndrome (62.4%, 95%C.I. 59.4-66.1), followed by problems related to menstrual bleeding (43.1%, 95%C.I. 38.9-46.6). The prevalence of dysmenorrhoea was 33.4% (95%C.I. 30.2-36.7). Multivariate logistic regression models revealed statistically significant associations of irregular periods with living in the estate sector (p=0.026) and 'no schooling' (p=0.031). Heavy menstrual bleeding was associated with IUD use (p=0.005) and there was at association between LRT and dysmenorrhoea (p=0.004).

The prevalence of reproductive tract infections in the study population was 38.7% (95%C.I. 34.9-42.6). The prevalence of sexually transmitted infections was low (3.6%, 95%C.I. 2.4-5.3).

The prevalence of trichomoniasis was 1.0% (13 cases) chlamydial infection 2.1% (18 cases), and syphilis 0.2% (5 cases). The prevalence of endogenous infections was 37.0% (bacterial vaginosis 22.4%, candidiasis 8.3% and non specific vaginitis 8.2%).

Logistic regression analysis showed that women were at higher risk of RTIs if they were 35 years old or less when their first pregnancy occurred (OR=2.86). History of an abortion (OR=0.53, 95%C.I. 0.33-0.84) or still birth (OR=0.38, 95%C.I. 0.16-0.91) was associated with a statistically significant reduction in diagnosis of RTIs. An increased risk of RTIs was seen among women educated up to primary level (OR= 2.71) as well as with education beyond O/L (OR= 2.64). Women whose husbands had studied up to secondary level showed increased odds of having RTIs (OR=2.75). Women who were reported physical abuse by their partners were at increased risk of RTIs (OR=24.09).

The prevalence of utero-vaginal prolapse was 14.7 % (95%C.I. 12.9-16.7). Being a woman aged more than 35 years (OR=2.16), having more than three children (OR=34.4) and a BMI of $> 23$ kg/m$^2$ (OR= 1.37) and living in estate or urban sector were significantly associated with utero-vaginal prolapse in multivariate analysis.

Stress incontinence was diagnosed in 9.8% (95%C.I. 8.1-11.6) of the study population. The risk of developing stress incontinence increased with increasing parity. Utero-vaginal prolapse was a significant predictor of stress incontinence (OR=15.07). History of an instrumental delivery (OR= 4.16) and being in social class I (OR=3.40) or social class III (OR=1.99) were significant associates of stress incontinence in the logistic regression model.

The prevalence of dysparaunia was 12.4% (95%C.I. 10.6-14.5) and in multivariate analysis, presence of utero-vaginal prolapse (OR=3.74), history of instrumental delivery (OR=1.99), being a young woman (age less than 35 years) (OR=1.81) and low standard of living index (OR=2.27) were significant predictors of dysparaunia.

Five cases of cervical malignancies and four cases of low grade squamous intraepithelial lesions were detected (0.3%, 95%C.I. 0.1-0.7). The prevalence of non specific inflammatory changes in the cervical smear was seen in 18.6% (95%C.I. 16.5-20.9). The presence of reproductive tract infections (OR=1.54) and increasing age increased the odds of having non specific inflammatory changes.

Primary infertility was seen among 3.9% (95%C.I. 3.0-5.2) of study population. Odds of being infertile among women in the estate sector was 2.48 (95%C.I. 1.26-3.25) while among women

whose marriage took place after 35 years of age, it was 4.61 (95%C.I. 1.54-13.8) in bivariate analysis.

The prevalence of other related morbidities were also found to be high. Urinary tract infection was diagnosed in 4.7% (95%C.I. 3.7-6.0). The prevalence of under-nutrition was 16.9% (95%C.I. 15.4-19.5) while 28.6% (95%C.I. 26.1-31.2) of the study population were obese. Anaemia was seen in 36.9% (95%C.I. 31.2-43.8) while severe anaemia was reported in 0.8% (95%C.I 0.4-1.8). The prevalence of diabetes mellitus was 4.5% (95%C.I. 3.4-5.9); and hypertension 6.6% (95%C.I. 5.3-8.3).

The major impact of gynaecological morbidity was on emotional and psychological wellbeing of women. Although a large number of women internalized their gynaecological symptoms, once they decide to talk about it to someone, husbands were the choice of the majority, except in the case of menstrual problems. For menstrual problems help was sought from the Public Health Midwife. The proportion of women seeking treatment for gynaecological symptoms varied from 6.0% in those with stress incontinence to 80.0% in those with genital ulcers. Allopathic medicine was the most preferred treatment modality. Physical discomfort, fear of cancer or severe disease and difficulty in engaging in day-to-day activities due to the symptoms were the main reasons for seeking treatment. The perception that some of the symptoms observed were "normal", embarrassment in divulging such information to outsiders and social values and taboos prevailing in the community regarding gynaecological symptoms were the main barriers for seeking treatment.

The study identified that gynaecological morbidity among ever married reproductive age females in the Ratnapura district was high and that health seeking behaviour was poor. It highlights the need for comprehensive health care service to non pregnant women and post partum women.