

# ABSTRACT

## **Introduction**

Unmet need for family planning is the concept related to family planning which has got the attention of demographers as well as sociologists and clinicians during past three decades. It describes the discrepancy between sexual and contraceptive behavior and stated fertility preferences of women in the reproductive age. The objective of the study was to assess the prevalence and correlates of unmet need for family planning in Kalutara district and to evaluate the effectiveness of health education intervention on field staff (Public Health Midwives) as well as on clients (women with unmet need for modern methods) in improving the knowledge, attitudes and practices on modern methods of family planning which eventually reduce the unmet need and thereby reducing the risk of unintended pregnancy.

## **Methods**

The study was consisted of three components. The first component was a community based descriptive cross sectional survey to assess the prevalence of unmet need for family planning. The second was a case control study to identify the correlates of unmet need. The third component was a community based intervention study to assess the effectiveness of health education intervention in improving the knowledge, attitudes and practices related to FP in both service providers and target community.

## **Component one**

Assessment of prevalence of unmet need was done on a sample of 1200 individuals from 60 clusters selected according to probability proportional to size (PPS) technique, of which 1119 participated in the study. Data collection was done using IAQ by trained PHNSS. The prevalence was assessed using internationally accepted standard definitions (Westoff 1988) [Annex V111].

## **Component two**

The correlates of unmet need were assessed using all the cases with unmet need and the controls without unmet need for any method of FP identified in the prevalence survey.

### **Component three**

This consisted of four phases of which the first one was to assess the perceptions on unmet need among FP service providers. Three Focus Group Discussions (FGDs) were conducted among Medical Officers of Health (MOHH), Public Health Nursing Sisters (PHNSS) and Public Health Midwives (PHMM). The second phase was to assess the base line knowledge and attitudes on FP and unmet need among all the PHMM and a group of women in reproductive age with unmet need for modern methods of FP from 22 clusters selected using PPS technique in each intervention (MOH area Horana) and control (MOH area Matugama) areas of the intervention study. The third phase was the health education intervention which was applied on PHMM as well as the selected group of women with unmet need for modern methods only to the intervention area. The fourth phase was the evaluation of the effectiveness of the intervention in relation to improvement in knowledge and attitudes on FP and unmet need among PHMM as well as among the target community and the reduction of the unmet need in the intervention group comparative to the control group.

### **Results**

The prevalence of unmet need for any FP method was 9.4 % (95% CI: 7.7-11.1) with 1.5 % (95% CI: 0.79-2.2) for spacing and 7.9% (95% CI: 6.3-9.5) for limiting. The unmet need for modern methods was 18.7% (95% CI=16.1 - 20.6). The unmet need for correct use was 28.7% (95% CI = 25.1 – 30.3). The main reasons identified for unmet need for FP in the study were low perceived risk of pregnancy (36.2%; n=38), fear of side effects (30.5%; n=32), less frequent of sexual intercourse (19%; n=20).

With regard to correlates of unmet need, significantly increased risk of unmet need was found to be associated with being older than 35 years ( $p=0.01$ ; OR=1.8; 95% CI=1.12-2.88), having education less than primary level ( $p=0.03$ ; OR=2.21; 95% CI=1.1-4.5) and being unemployed ( $p=0.03$ ; OR=2.13; 95% CI=1.1-4.2), having sex less than once /week ( $p=0.01$ ; OR =1.9; 95% CI=1.2-2.9), desire of not having any more children ( $p=0.001$ ; OR= 2.43; 95% CI=1.4-4.4), not expecting to use a modern FP method in future ( $p=0<0.001$ ; 95% CI=2.1-5.4) and not having counseling in FP ( $p=0.04$ ; OR=1.74; 95% CI=1.01-3.0)

The FGDs conducted among FP service providers revealed the need of training (basic and in service) for all the working categories supported by provision of simple and clear guide lines. The need identified for the community was to improve the knowledge and the awareness on modern methods of FP and the consequences of unmet need.

With regard to the intervention study on PHMM, the overall percentage mean score in IA at pre intervention and 2 months after intervention was 29.9% (SD=9.8) and 65.7% (SD=7.2) respectively. The median attitude scores for the IA were 37.5% (IQR: 23.7-45) and 86% (IQR: 81-96) in pre intervention and 2 months post intervention respectively. All of these were statistically significant with comparison to those of CA ( $p<0.001$ ).

When the intervention on women with unmet need for modern methods was considered, the overall percentage mean scores in IA were 37.6% (SD=14.3) and 70.6% (SD=11.8) in pre and post intervention respectively. The median attitude scores for the IA were 20% (IQR: 0 - 50) and 70% (IQR: 50-70) in pre intervention and 6 months post intervention respectively. All of these were statistically significant with comparison to those of CA ( $p<0.001$ ).

.At the end of the due period of 6 months of intervention, 68.7% (n=180) of the IA and 21% (n=54) had started a modern method of FP, reducing the unmet need in IA by 68.7% and in CA by 21% with a highly significant difference ( $p<0.001$ ) which can be attributed to the intervention itself.

### **Conclusions and recommendations**

The prevalence of unmet need for family planning in the district of Kalutara was 9.4 % (95%CI: 7.7-11.1) with 1.5 % (95% CI: 0.79-2.2) for spacing and 7.9% (95% CI: 6.3-9.5) for limiting with correlation to age more than 35 years, education level below primary level, decreased sexual contact, not expecting to have more children, not expecting to use a modern family planning method in future, not having counseling on family planning and unemployment status of the women. The training conducted on PHMM revealed a

significant impact on knowledge and attitudes in both service providers and clients leading to change in the FP practice resulting in reduction in unmet need.

Recommend conducting regular in service training programmes to improve and upgrade knowledge and to sustain favorable attitudes among PHMM with the intention of utilizing them to motivate the target community women in adopting favorable behavior towards FP.