ORIGINAL ARTICLE

Gynecological Morbidity Among Grass-root Level Health Care Providers in an Urban Setup

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Abstract

Objectives The study of health status of grass-root level health care providers may help us understand the delivery gaps from the programmatic point of view.

Methods A detailed interview of 313 *Anganwadi* workers (AWW) was taken in a predesigned, pretested questionnaire, and their clinical examination and Pap smear study were arranged at New Civil Hospital, Surat during November 2007–April 2008. All AWWs were accompanied for follow up and examination. Data were analyzed using Epi-Info Software.

Results Mean age of menarche and menopause was 14.3 and 44 years, respectively. Among 73 women having menopause, 53 (72. 6%) had natural menopause. On taking history, only 9.5 % gave positive findings, while 42.3 % had positive clinical signs on examination. Inflammation was reported in 43.4 % Pap smear, while 2.8 % had cervical dysplasia of varying grades.

Conclusions All women should be advised to undergo complete pelvic examination including Pap Smear for the detection of gynecological morbidity.

Keywords *Anganwadi* workers · Reproductive morbidity · Pap smear

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Introduction

Anganwadi worker (AWW), a lady selected from the local community, is a community based frontline voluntary worker of the integrated child development services (ICDS) Scheme [1]. As per reproductive and child health program, AWWs are expected to play a major role in identifying reproductive morbidity among women. Although early detection and treatment of RTIs can prevent and minimize the severity of long term sequel, many infections go unnoticed. Utilization of specialized services for the management of RTIs is often low, because these infections are frequently asymptomatic or produce vague, non-specific symptoms.

This study was planned to find interventional levels from programmatic point of view to improve the reproductive morbidity among AWWs as undiagnosed, and uncared reproductive morbidity among them is an

important evaluation indicator of the success of our health programs regarding reproductive health of women.

Methods

The present study was conducted in Department of Community Medicine, Government Medical College, Surat from November 2007 to April 2008. All 313 ICDS functionaries (AWWs) of the Surat city were included in the study after taking the required permission from the Surat Municipal Corporation authorities. A detailed history including menstrual and obstetric history was taken in a predesigned and pretested questionnaire. After taking informed verbal consent, they were examined on fixed days. The monthly schedule was shown to them a month in advance, and their respective Mukhya Sevikas (ICDS supervisors) were given a copy to facilitate the smooth operationalisation of the study.

Initially, the form was filled at their Anganwadi center, and preliminary check up was done. Specific date was given to them to attend the Obstetrics, and Gynecology OPD at the New Civil Hospital, Surat. A group of ten AWWs were given the same date. Upon arrival, they were accompanied to the OPD where routine pelvic examination was done. The Pap smear was collected, fixed, stained,, and examined according to the Bethesda system [2]. Required investigations were carried out including ultrasonography to help in making the final diagnosis. Appropriate treatment and follow-up procedure was advised.

Data were entered and analyzed using the EPI INFO software.

Results

Out of 313 AWWs, majority (43 %) were between 31 and 40 years of age. The mean age was 38 years and median age 37 years in the present study. Education up to secondary level was found in 65 % workers while 35 % were educated above secondary level. Only three percent were unmarried. Almost half of the women belonged to socioeconomic class III as per modified Prasad's classification [3] (Table 1).

Mean age of menarche was 14.3 years and 62 % had achieved menarche by the age of 14 years. Almost 90 % were married at or after the age of 18 years. Mean age at first pregnancy was 22.1 years. History of abortion was present in 115 AWWs (36.7 %) (Table 2). A total of 73 (23.4 %) women had menopause. Among them, 53 (72.6 %) had natural menopause. The mean age of menopause was 44.4 years. Minimum age for menopause was 29 years while maximum age was 53 years. The mean age for hysterectomy was 35.68 years. The causes for hysterectomy

Table 1 General information of *Anganwadi* workers

	Number	Percentage
Age (in years) (N = 313)		
21–30 years	61	19.5
31–40 years	134	42.9
41–50 years	89	28.4
51–60 years	29	9.2
Education (N = 313)		
Secondary	204	65.2
Higher secondary	109	34.8
Marital status (N = 313)		
Unmarried	11	3.5
Married	275	87.8
Widow, divorcee, separated	27	8.6
Socioeconomic status (N = 305)[a]		
I and II	79	25.9
III	134	43.9
IV and V	92	30.1

[a] Some AWWs had large joint families and could not tell exact income of all family members

Table 2 Distribution according to age at menarche, marriage, pregnancy, and abortions

	Number	Percentage
Age at menarche (N = 313)		
<15 years	195	62.0
≥15 years	118	38.0
Age at marriage (N = 302)		
<18 years	39	12.9
≥18 years	263	87.1
Age at first pregnancy (N = 277)		
<20 years	97	35.0
≥20 years	180	65.0
Types of abortions (N = 302)		
Spontaneous abortions	52	33.5
Induced abortions	103	66.5
Total abortions	155	100.0

were menorrhagia, polymenorrhagia, multiple fibroids, uterine prolapse, and chronic cervicitis (Table 3).

Gynecological examination was done in 274 workers because 27 AWWs were not willing for examination, and 11 were unmarried. During the examination, 116 (42.5 %) women were found to have gynecological problems. Among these women, the most common diagnosis was cervicitis (22.6 %). Ultrasonography was advised for 14 patients out of which, two had fibroids, one had ovarian cyst, and one had nabothian cyst (Table 4). Inflammation was reported in 43 % of Pap smears while 2.8 % had

Table 3 Distribution of profile of *Anganwadi* workers with amenorrhea

Menstruation absent (n = 73)		
	Number	Percentage
Natural menopause	53	72.6
<45 years	24	45.3
45–47 years	13	24.5
>48 years	16	30.2
Surgical menopause (hysterectomy)	17	23.3
Lactational amenorrhea	2	2.7
Secondary amenorrhea (pregnancy)	1	1.4

Table 4 Distribution according to gynaecological examination findings (N = 274)

	Number	Percentage
Gynecological examination		
Normal	158	57.7
Abnormal	116	42.3
Vaginitis	45	16.4
Cervicitis	62	22.6
Prolapsed	9	3.2
USG examination		
USG advised	14	5.1
Normal on USG	10	71.4
Abnormal on USG	4	28.6

Table 5 Distribution of the Pap smear results of *Anganwadi* workers

Pap smear results	Number	Percentage
Normal	128	51.4
Inflammation	108	43.4
ASCUS	3	1.2
LSIL	2	0.8
HSIL	2	0.8
Ca cervix	0	0
USFE	5	2.0
Total	249	100

cervical dysplasia of varying grades (Table 5). All AWWs with abnormal findings in their reports were counseled and further investigated.

It was a matter of concern to note that out of 116 (42.3 %) workers having positive clinical findings suggestive of reproductive morbidity, only 11 (9.5 %) had given a positive history during interview. Out of 86% women gave a negative history during interview, 44.7 % turned to be positive on clinical examination. The difference was statistically significant (*p* value 0.054).

Discussion

As the AWW is from the local community, her health most likely represents the health of the same community. The mean age for menarche and menopause was 14.3 and 44.4 years, respectively, in the present study. Acharya et al. observed the mean age at menarche was 13.34 years. [4] Sidhu et al. found the mean age at menopause in educated women of Punjab to be 47.54 years [5].

According to NFHS-3,the median age at marriage is 17.3 years among Indian women, while they for first pregnancy is 19.8 years as compared to the median age of 20 years at marriage, and 22.15 years at first pregnancy in our study [6].

The present study shows 42.3 % women suffering from reproductive tract morbidity. Maximum number had cervicitis (22.6 %). Pandit et al. studied the morbidity pattern of women attending screening program in an urban slum in Mumbai. Among the 154 women examined; 20.7 % had cervical erosion, 6.7 % had cervical congestion, and 14.0 % had vaginitis. Thus, nearly 41 % women had signs of reproductive tract infections [7].

Out of the 116 women found to have reproductive morbidity, only 11 (9.5 %) had positive history during interview. Thus, the sensitivity of positive history to actual morbidity being present on examination was quite low. This indicates that women tend to be either complacent about their reproductive morbidity or unaware or hesitant. It also reflects the mental neglect even at this level where they have the exposure to the health system yet they do not feel the symptom to be important enough to consult a doctor. We depend on this category as the primary motivators for changing health-seeking behavior in the community. No wonder then that we have such poor rates of utilization of the governmental setup.

After the breast examination, two AWWs were found to have discharge from nipple. They were followed up by FNAC which showed a normal discharge. A second chance is not always there for everybody.

Thus, awareness needs to be built up on a very committed way to bring forward these women toward speaking about their RT morbidity. This low reporting is also relevant as these AWWs are used to the health setup, and are trained for RTI symptoms identification under the HIV training. In contrast, 82 % women had given a negative history out of those who were found negative on examination (Fig. 1).

Pap smear study of the AWWs shows 45 % had inflammation, and 2.8 % had cervical dysplasia. This is similar to the findings by Pandit et al. who report 2.5 % women with cervical dysplasia, and 69 % women with inflammation in his study of slums of Mumbai [7]. Khattak et al. studied only symptomatic women and found 3.8 %
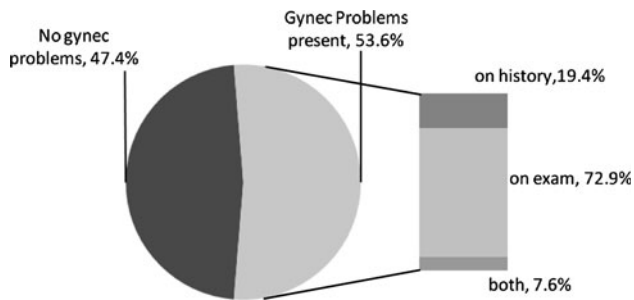
Fig. 1 Distribution of AWWs according to their gynecological problems

with dysplasia and 32 % with inflammation [8]. The study reports less cervical dysplasia in women compared to other studies as this is a community based study in which apparently healthy workers were included.

Thus, the study of the AWWs of Surat city will probably represent the overall health status of women residing in these slums.

Going by the findings of the present study, we conclude that history given by the women should not be considered a pre-requisite for examination. On the contrary, every woman should be examined per vagina and per speculum for detection of RT morbidity. Regular Pap smear needs to be encouraged among women as 1.2 % workers were detected with ASC-US (Atypical squamous cells of unde-termined significance), and 1.6 % with LSIL (low-grade squamous intraepithelial lesion), and HSIL (high-grade

squamous intraepithelial lesion) which has grave health implications. Early diagnosis and prompt treatment is the key to reduce morbidity and mortality related to carcinoma cervix, and this should be strictly adhered to for the best outcome.

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