

Factors associated with late booking for antenatal care among rural women

Khandait Devendra W., Koram Manisha R.

Dept. of Preventive and Social Medicine, Govt. Medical College, Nagpur. And Cottage Hospital, Hinganghat, Dist. Wardha Maharashtra

Summary

The present study was undertaken to find out the prevalence of late booking and to examine the factors associated with it among the rural women attending the antenatal clinic of Cottage Hospital, Hinganghat, District- Wardha.

The prevalence of late booking (those attending for first time after 28 weeks of gestation) was 39.1%. The factors of importance were found to be lower socioeconomic status (OR 4.21, 95% CI = 2.70-6.51), parity more than 3 (Parity 4-5: OR= 3.64; 95% CI = 2.58-5.14; parity > 6: OR=19.09, 95% CI= 11.05-35.82), illiteracy (OR= 2.95, 95% CI = 2.37-3.68), unplanned pregnancy, (OR = 1.80, 95% CI = 1.44-2.25) and distance from health center more than 2 km (OR=3.47, 95% CI= 2.62-4.59).

Introduction

Early contact by pregnant women with antenatal services is advocated in an attempt to identify those at particular risk of developing complications so that these might be prevented in order to ensure healthy mother and healthy baby. To be effective, women need to contact antenatal services preferably by 16 weeks and certainly by 20 weeks gestation (Govt. of India, CSSM, 1992; Simpson and Walker, 1980.). The vulnerability of the fetus in first trimester and the ability to detect certain abnormalities before 16/20 weeks of gestational age lead to concerns about those who book late. There are however, quite a sizable proportion of pregnant women in India who visit health center for antenatal check up quite late.

Though a few workers (Simpson and Walker, 1980, Lewis, 1982; Chisolm, 1989) have tried to examine the characteristics of these late bookers, studies from Indian set up, that too from rural areas are not available.

Against this background, we carried out a study to assess prevalence of late booking and to identify risk factors for late ANC booking among rural women from Wardha district, Central India.

Material And Methods

The present study was carried out at antenatal clinic of Cottage Hospital, Hinganghat, Dist. Wardha, Maharashtra which caters to the population of around 1.8 lakhs. All pregnant women who were coming for the first time for antenatal check up during July 1996 to March 1997 were considered as study subjects and were interviewed using predesigned and pretested proforma.

Late bookers were defined as those booking for antenatal care after 28 weeks of gestation according to the date of the last menstrual period. The socioeconomic status of women was assessed using Prasad classification for rural people (Kumar, 1993.). The data was analysed using chi-square test odds ratio and its 95% confidence interval.

Results

Of the total 1440 women included in the study 563 (39.1%) booked late according to above criteria. Women above 35 years, though fewer in number were more likely to be late in booking and this trend was significant. (Table I)

Table I
Late booking and age

Age Groups (years)	Total number of women for ANC check up	women who booked late
< 20	260	101 (38.8)
20-24	512	184 (33.9)
25-29	378	162 (42.9)
30-34	197	79 (40.1)
> 35	64	37 (57.8)
Total	1440	563 (39.1)

Figures in parentheses indicate percentages.
 * χ^2 17, df 4, p < 0.01, highly significant

On exploring the data related with sociodemographic variables, lower socioeconomic status, parity more than 3, illiteracy, unplanned pregnancy and

distance from health center more than 2 km were found to be significantly associated with late booking. (Table II).

Discussion

In an attempt to identify the at risk women, early contact by pregnant women with antenatal services is advocated. This is especially important if there is to be sufficient time to undertake prenatal screening. The reasons for relatively late contact with health services are various.

We found that as many as 39.1% pregnant women visited health center for ANC check up for first time after 28 weeks. Though this cannot be the representative figure, it certainly throws light on the overall scenario. We found no literature from Indian set up in this regard, though a few studies from other parts of the world are available reporting the incidence of late booking in the range of 10%-26%, the criteria used being 16 weeks/20 weeks (Simpson and Walker 1980; Chisholm 1989).

Table II
Prevalence of late booking according to stratification of Sociodemographic factors

Sociodemographic factors	Total ANC mothers	Booking Late (%)	Odds Ratio (95% CI)	Chi-square (p value)
Socioeconomic status				
Upper class (I)	111	28 (19.9)	Reference	
Middle class (II & III)	547	151 (27.6)	1.54 (0.98-2.43)	00.7
Lower class (IV & V)	752	384 (51.1)	4.21 (2.70-6.51)	< 0.001
Parity				
1	490	135 (27.6)	Reference	
2-3	654	214 (32.7)	1.27 (0.97-1.64)	91.6
4-5	186	108 (61.8)	3.64 (2.58-5.14)	< 0.001
> 5	120	106 (88.3)	19.9 (11.05-35.82)	
Literacy status				
Literate	572	312 (54.5)	2.95* (2.37-3.68)	140.6
Primary school	462	182 (39.4)		< 0.001
Middle school and above	406	69 (17.0)		
Planning of Pregnancy				
Planned	584	181 (31.0)	Reference	
Unplanned	856	382 (44.6)	1.80 (1.44-2.25)	23.1*
Welcome	692	273 (39.5)		< 0.001
Unwelcome	164	109 (66.5)		
Average distance to Health Centre				
< 2 km	512	154 (30.1)	Reference	
1-2 km	549	182 (33.2)	1.15 (0.88-1.51)	102.2
> 2 km	379	227 (59.9)	3.47 (2.62-4.59)	< 0.001

* Odds ratio is calculated as illiterates vs literates.
 * Chi square value is calculated at df=1.

Our study showed that women booking after 28 weeks are more likely to be from lower socioeconomic status, higher parity and illiterate, which is in accordance with earlier studies (Simpson and Walker, 1980).

Though significant association between average distance from health center and late booking was observed, it also showed that social factors (socioeconomic status, literacy) were also equally important as the distance from the hospital.

Even though, many of the findings were as expected, local data has value in raising the issues. Unless a high proportion of women contact antenatal services early, CSSM's moto of healthy mother and healthy baby can not be the reality.

References

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