

Assessment of Knowledge Regarding Postnatal Care Among Men in Selected Rural Areas of Himachal Pradesh

Dr. Rohit Nadda

District Program Officer, Office of Chief Medical Officer Chamba

Abstract:

Background: WHO defined health as the state of complete physical, mental, and social well-being and not merely an absence of disease or infirmity, but it includes ability to lead socially and economically productive life.¹ Being a man or women has a significant impact on health, as a result of both biological as well as gender related differences.

This study assesses the knowledge about the antenatal care among married and unmarried men of 18-35 years age in selected rural areas of Himachal Pradesh.

Methods: The study was an unmatched case and control design where married men were considered as a case and unmarried men as comparator group. This study was a part of large study for which sample size of 268 men in each group was calculated assuming prevalence of female contraceptives 70% in unmarried men and 85% in married men. This was carried out by cluster-based sampling in villages of Nagrota Bagwan and Shahpur health blocks of DRPGMC Tanda at Kangra.

Results: The 93.3% participants among case group are aware of anaemia in pregnancy while only 64.9% among control group are aware of anaemia in pregnancy. The knowledge about all three causes of anaemia was statistically more in case group (61.9%) as compared to control group (38.8%). Assessment about high-risk pregnancy, about 72.4% participants among case group were aware about the risk factors in pregnancy as compared to 43.3% in control group with statistically significant differences (P=0.000). All the causes of high-risk pregnancy were reported by the participants of case group (44.0% vs 29.9%) with statistically significant differences.

Conclusions: Married men had significantly more knowledge about various components of antenatal care. The awareness approach for unmarried men needs to be designed regarding antenatal care.

Keywords: postnatal care, anaemia, married men, unmarried men

Introduction

WHO defined health as the state of complete physical, mental, and social well-being and not merely an absence of disease or infirmity, but it includes ability to lead socially and economically productive life.¹ Being a man or women has a significant impact on health, as a result of both biological as well as gender related differences.

Antenatal care (ANC) is most important aspect of women's reproductive health. The antenatal care is the care provided by skilled health care professionals to pregnant women and adolescent girls to ensure best health conditions for mother and baby during pregnancy. It reduces maternal and perinatal

morbidity and mortality both directly, through detections and indirectly, through the identification of women and girls at increased risk of developing complications during labour, delivery and ensuring appropriate level of care.² As per NFHS- 4, the 21% of pregnant women utilised full ANC, ranging from 2.3–65.9% across states. Overall, 51.6% had 4 or more ANC visits, 30.8% consumed IFA for at least 100 days and 91.1% had one or more doses of tetanus toxoid. Full ANC utilisation was inequitable across place of residence, caste, and maternal education.³ Registration of pregnancy, utilisation of government’s Integrated Child Development Services (ICDS) and health insurance coverage were associated with higher odds of full ANC utilisation. Lower maternal education, lower wealth quintile, lack of father’s participation during antenatal visits, higher birth order, teenage and unintended pregnancy were associated with lower odds of full ANC utilisation. This study assesses the knowledge about the antenatal care among married and unmarried men of 18-35 years age in selected rural areas of Himachal Pradesh.

Material and methods

The study was an unmatched case and control design where married men were considered as a case group and unmarried men as a comparator group. This study was carried out in selected villages of Nagrota Bagwan and Shahpur health blocks. Assuming knowledge prevalence about female contraceptives 70.0% in comparator and 85.0% in case group, a sample size of 134 males in each group (total 268) was calculated assuming 80.0% study power and 5.0% level of significance. The sample size was calculated using EpiInfo (7.2.3.1) software for unmatched case-control study design.

Results

This was a case control study among unmarried and married participants about their perceptions and knowledge about women empowerment. The table 1 shows the socio-demographic profile of participants. The type of family among cases, majority (57.5%) belongs to joint family whereas among controls, the majority (65.0%) belongs to nuclear with statistically significant difference (P=0.000). The majority among both groups (cases as well as controls) belongs to the OBC category with statistically significant difference. The statistical indifference was observed for religious association, as all the respondents in the case group while 97.0% respondents in control group practice Hindu religion.

| Characteristics | Case n=134, (%) | Control n=134, (%) | P value |
|-----------------------|-----------------|--------------------|---------|
| Type of family | | | |
| Joint | 77 (57.5) | 35 (26.0) | 0.000 |
| Nuclear | 47 (35.1) | 87 (65.0) | 0.000 |
| Three generation | 10 (7.5) | 12 (9.0) | 0.824 |
| Cast | | | |
| General | 48 (35.8) | 31 (23.1) | 0.031 |
| SC | 19 (14.2) | 16 (11.9) | 0.717 |
| ST | 10 (7.5) | 6 (4.5) | 0.440 |
| OBC | 57 (42.5) | 77 (57.5) | 0.007 |
| Others | 0 (0.0) | 4 (3.0) | 0.020 |
| Religion | | | |
| Hindu | 134 (100) | 130 (97.0) | 0.122 |
| Sikh | 0 (0.0) | 4 (3.0) | 0.122 |

Table 2: Educational status and occupation of married and unmarried men in selected rural areas of district Kangra, Himachal Pradesh

| Characteristics | Case n=134, (%) | Control n=134, (%) | P value |
|--------------------------------|-----------------|--------------------|---------|
| Education status (Self) | | | |
| Postgraduate | 8 (6.0) | 2 (1.5) | 0.102 |
| Graduate | 58 (43.3) | 54 (40.3) | 0.710 |
| Intermediate | 37 (27.6) | 59 (44.0) | 0.007 |
| High school | 24 (17.9) | 14 (10.4) | 0.114 |
| Middle school | 4 (3.0) | 4 (3.0) | 0.084 |
| Primary school | 3 (2.2) | 1 (0.7) | 0.622 |
| Illiterate | 0 (0.0) | 0 (0.0) | NC |
| Occupation (Self) | | | |
| Professional | 7 (5.2) | 2 (1.5) | 0.172 |
| Semi professional | 22 (16.4) | 6 (4.5) | 0.002 |
| Businessman/ shop owner | 54 (40.3) | 17 (12.7) | 0.000 |
| Skilled worker | 35 (26.1) | 30 (22.4) | 0.568 |
| Semiskilled worker | 4 (3.0) | 5 (3.7) | 1.000 |
| Unskilled worker | 4 (3.0) | 10 (7.5)) | 0.167 |
| Unemployed | 8 (6.0) | 64 (47.8) | 0.000 |

The table 2 describes the study participants according to their education status. The table displays that the graduates were more 58 (43.3%) in cases and 59 (44.0%) in control group while none were illiterate in both cases as well as control group. The intermediate educational level was observed in 37 (27.6%) among cases and 59 (44.0%) among the comparator group which was statistically significant (P=0.007). The part B of table 2 describes participants according to their self-reported occupation status. The majority (40.3%) among case group were businessman/ shop owners followed by skilled workers (26.1%). Among controls the majority (47.8%) were unemployed followed by skilled workers (22.4%). The differences across these occupations were observed to be statistically significant (P=0.000)

Table 3: Socioeconomic status of married and unmarried men in selected rural areas of district Kangra, Himachal Pradesh

| Characteristics | Case n=134, (%) | Control n=134, (%) | P value |
|--------------------|-----------------|--------------------|---------|
| Upper class | 8 (5.97) | 3 (2.2) | 0.216 |
| Upper middle class | 40 (29.8) | 25 (18.6) | 0.045 |
| Middle class | 58 (43.2) | 70 (52.2) | 0.178 |
| Lower middle class | 26 (19.4) | 33 (24.6) | 0.376 |
| Lower class | 2 (1.4) | 3 (2.2) | 1.000 |

The table 3 describes the study participants according to their socioeconomic status. Higher proportion of participants belongs to middle class in case group (43.2%) and control group (52.2%) with no statistically significant differences.

Table 4: The knowledge about various aspects of natal and postnatal care among married and unmarried men in selected rural areas of district Kangra, Himachal Pradesh

| Characteristics | Case n=134,(%) | Control n=134,(%) | P value |
|--|----------------|-------------------|---------|
| Delivery should be conducted in | | | |
| Public hospital | 105 (78.4) | 120 (89.6) | 0.019 |
| Private hospital | 29 (21.6) | 14 (10.4) | 0.019 |
| Home | 0 (0.0) | 0 (0.0) | NC |
| Delivery should be ideally conducted by | | | |
| Doctor | 124 (92.5) | 108 (80.6) | 0.006 |
| Nurse | 10 (7.5) | 25 (18.7) | 0.010 |
| Dai | 0 (0.0) | 1 (0.7) | 1.000 |
| Family member | 0 (0.0) | 0 (0.0) | NC |
| Exclusive breast feeding to the infant | 132 (98.5) | 126 (94.0) | 0.103 |
| Duration of exclusive breast feeding | | | |
| Six months | 111 (82.8) | 77 (57.5) | 0.000 |
| One year | 20 (14.9) | 35 (26.1) | 0.033 |
| Two years | 1 (0.7) | 5 (3.7) | 0.213 |
| Don't know | 2 (1.5) | 17 (12.7) | 0.000 |
| Vaccination is important for children | 132 (98.5) | 128 (95.5) | 0.281 |

NC: Not Computed

The table 4 describes the knowledge about various aspects of natal and postnatal care among study participants. All the participants in case and control group were aware that delivery should be conducted in hospital and not in home with statistically significant difference.

Statistically high fraction of participants reported public hospitals in control whereas private hospital in case group.

About 92.5% of participants among cases believe that delivery should be conducted by doctor whereas significantly high proportion of control group referred nurse as birth attendant (7.5% vs 18.7%).

About 82.8% of participants among case group know correctly about duration of exclusive breast feeding while only 57.5% among control group with statistically significant difference.(Table:4)

Discussion

In pregnancy, women face greater risks, both because of physiological differences and gender inequities. Marriage is a partnership and women have a right to health but protecting that right often depends on a partner's support.⁴ Worldwide, only a few studies have been conducted to explore married and unmarried men perception and practices in family planning and reproductive health of women. The present study was community-based unmatched case control study in which 268 participants- 134 cases (married participants) and 134 controls (unmarried participants) were recruited for assessment. As expected in present study, the average age of married participants was significantly high (32.4 years) while of unmarried participants was 24.0 years. It was comparable to most of studies conducted in the past on married and unmarried men about reproductive health and contraception. Like Chankapa YD et al⁵ conducted a population based cross-sectional study among 596 married participants in rural area of Sikkim in which mean age of participants was 32.9 years.

In present study among married participants majority belonged to joint family while among unmarried participants majority (64.9%) belonged to nuclear family. A hospital based cross-sectional study was done by Narang H. et al¹ at Lady Hardinge Medical College, New Delhi among 232 married participants. In this study as well, most (60.3%) of married participants were living in joint families. J. Suresh and P. Balram³⁶ conducted a community based cross-sectional study among 385 married men in rural areas of Maharashtra in which majority (60.8%) of married participants belonged to nuclear families and 39.2% belonged to joint families. Char A. et al³² conducted a study in which 51.6% of unmarried participants living innuclear families and 48.4% living in joint families.

In present study majority of married and unmarried participants belonged to Other Backward Classes (OBC) category followed by general category, SC category and ST category respectively. Pragyam P. et al³³ conducted a hospital based cross-sectional study among 365 married males through semi-structured questionnaire in Chhattisgarh where majority (77.3%) of them belonged to OBC category. Char A. et al³² conducted a study among unmarried participants in which large group (60.0%) belonged to OBC category.

After assessment for social class, education level assessment showed that 43.3% participants among case group were graduate while 44.0% among controls were educated up to intermediate. This difference corresponds with the age group distribution of case and controls. As most of the participants in case group have higher mean age. J. Suresh and P. Balram³⁶ conducted a study among married participants in which 28.1% were illiterate, 18.2% have completed primary schooling, 38.2% have completed secondary level education and 15.6% have competed higher secondary education. Char A. et al³² conducted a study on unmarried men in which 70.2% have completed secondary level education, 20.6% middle level education, 4.1% primary level education and 5.1% were illiterate.

Exclusive breast feeding has a role in reducing childhood morbidity and mortality. In present study among married men, the 98.5% know that exclusive breast feeding to be given to infants and 82.8% correctly know about duration of exclusive breast feeding. While among unmarried men, 94.0% know that the exclusive breast feeding to be given to infants and 57.5% correctly knows about duration of exclusive breast feeding. The exclusive breast-feeding knowledge was high in both group of participants but duration of exclusive breast-feeding was highest among married men. T. Swetha et al³⁸ conducted a community based cross-sectional study in rural area of Karnataka among 400 married men. The 70.0% of participants in this study correctly know about duration of exclusive breast feeding. K. Abhinaya et al¹¹ conducted a hospital based cross-sectional study among 93 married men in Chennai in which 75.3% have correct knowledge about breast feeding. Bhatta D.N.⁴² conducted a community based cross-sectional study among 2178 married men in Nepal. In this study the 99.6% participants agreed with necessity of breast feeding and 58.7% encouraged their partner for exclusive breast feeding.

Conclusion

The findings revealed several significant differences in socio-demographic factors between the two groups. Married men were more likely to belong to joint families, while unmarried men predominantly came from nuclear families. Moreover, the study highlighted differences in caste distribution, with a higher proportion of participants belonging to the OBC category in both groups. This study examined the knowledge of antenatal care among married and unmarried men in selected rural areas of Himachal Pradesh.

Educational status also varied between the two groups, with a higher percentage of graduates among the

married participants and more individuals with an intermediate level of education in the unmarried group. This discrepancy in education levels could be attributed to the age difference between the two groups, as married participants tended to be older on average.

Occupation status showed notable disparities, with a significant number of married men engaged in businesses or as shop owners, while a larger proportion of unmarried men were unemployed.

Married men had significantly more knowledge about various components of natal and postnatal care. The knowledge and importance of exclusive breast feeding among unmarried men need to be improved by various health promotional activities. The awareness approach for unmarried men needs to be designed regarding natal and postnatal care so that they can know about various complications during delivery and post natal complications in mother and child which can further improve maternal and child health.

Financial support and sponsorship: Nil

Conflict of interest: There is no conflict of interest

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