Post Partum Infections among Rural Women

Vaishali Agrawal¹, Rohit Kamble²

ABSTRACT

Introduction: Women in the post partum period are vulnerable to many infections and morbidities. Study aimed to record the incidence of post partum infections in the rural population and to co-relate its occurrence with literacy.

Material and Methods: This was a prospective observational study carried out at a tertiary level health care unit in a rural set up. 1250 women who delivered at this facility were observed for postpartum infections.

Results: 16.4% women suffered breast engorgement, 19.02% of the rural, while 8.92% of the urban population, 37.1% of the illiterate compared to 15.8% of the literate women suffered breast engorgement. 65.2% had been given a right mediolateral episiotomy, 6.34% rural compared to 3.2% urban and 37.5% illiterate compared to 4.75% of the literate women had episiotomy site infections. 34.4% women underwent a cesarean section of whom 1.16% had a wound infection. 1.3% rural 0.83% urban women, 20% illiterate compared to 0.70% of the literate women suffered an infection at the incision site. 1.4% women suffered a urinary tract infection. 1.62% rural compared to 0.61% of the urban and 5.71% illiterate compared to 1.23% of the literate women suffered from a urinary tract infection.

Conclusion: Postpartum infections are a major cause of morbidity in this period. These infections are more commonly seen in the rural and the illiterate population.

Keywords: Post Partum, Infections

INTRODUCTION

Post partum phase can be a very stressful time for women. Women need care and support during this phase. After having completed an uneventful pregnancy and labor things may go wrong post delivery. Post partum sepsis being an important disorder during these times.

There are chances of puerperal pyrexia, duet of infections in the genital tract, urinary tract, caesarean section wound and breast engorgement. To add to this anemia and malnutrition rampant in rural India makes women more susceptible to infections. Also ante partum and intrapartum factors like pre labor rupture of membranes, repeated vaginal infections, operative deliveries, retained bits of placenta and post partum hemorrhage add to the increased incidence of infections. The extent of postpartum morbidity is under researched. Glanzener et al1 studied 1249 women in their post partum period and called for greater awareness of the needs of women in this phase. In the present study the aim was to observe women undergoing delivery at a rural tertiary care health center for a period of 7 days for the occurrence of infections and then compare the rates between rural and urban and literate and illiterate population.

MATERIAL AND METHODS

A prospective observational study was carried out at a tertiary care center situated in a rural area. Study was done after ethical clearance and proper informed consent from the subjects. A total of 1250 women who underwent delivery at the institute were observed in their postpartum period for a period of 7 days post delivery for occurrence of fever, breast engorgement, episiotomy or caesarean wound and urinary tract infection. The literacy and residential address of these women were noted. A comparison between post partum morbity between the rural and urban and literate and illiterate population was done.

RESULTS

Of the 1250 women, 925 (74%) were rural and 325 (26%) from the urban locality. 205 (16.4%) women suffered breast engorgement. Of the 925 rural women 176 (19.02%) had breast engorgement, while 29 (8.92%) of the urban population faced the same issue which is significantly less (p<0.05). 13 (37.1%) of the 35 illiterate compared to 192 (15.8%) of the 1215 literate women suffered from breast engorgement (p<0.05).

820 (5.6%) of 1250 had vaginal deliveries. 534 (65.2%) had been given a right mediolateral episiotomy. 26 (6.34%) of the 410 rural women compared to 2 (3.2%) of the urban women developed episiotomy site infections (p<0.05). Of the 8 illiterate in this group 3 (37.5%), compared to 25 (4.75%) of the literate women had episiotomy site infections (p<0.05). 430 (34.4%) women underwent a cesarean section of whom 5 (1.16%) had a wound infection. 4 (1.3%) of 307 rural women who underwent CS compared to 1 (0.83%) of the 123 urban women suffered from a caesarean site wound infection. 1 (20%) of the 5 illiterate women in this group compared to 3 (0.70%) of the 425 literate suffered an infection at the incision site (p<0.05).

17 (1.4%) women suffered a urinary tract infection. 15 (1.62%) of the rural compared to 2 (0.61%) of the urban

¹Associate Professor, Department of Obstetrics and Gynecology, SMBT Institute of Medical Sciences and Research Centre, Dhamangaon, Nashik, ²Senior Resident, Department of Obstetrics and Gynecology, SMBT Institute of Medical Sciences and Research Centre, Dhamangaon, Nashik, Maharashtra, India

Corresponding author: Dr Vashisht NK, Professor, Department of Obstetrics and Gynecology, SMBT Institute of Medical Sciences and Research Centre, Dhamangaon, Nashik, Maharashtra, India

How to cite this article: Vaishali Agrawal, Rohit Kamble. Post partum infections among rural women. International Journal of Contemporary Medical Research 2019;6(4):D8-D9.

DOI: http://dx.doi.org/10.21276/ijcmr.2019.6.4.47

women and 2 (5.71%) of the 35 illiterate compared to 15 (1.23%) of the 1215 literate women (p<0.05) suffered from a urinary tract infection.

16.4% women suffered breast engorgement, 19.02% of the rural, while 8.92% of the urban population, 37.1% of the illiterate compared to 15.8% of the literate women suffered breast engorgement. 65.2% had been given a right mediolateral episiotomy, 6.34% rural compared to 3.2% urban and 37.5% illiterate compared to 4.75% of the literate women had episiotomy site infections. 34.4% women underwent a cesarean section of whom 1.16% had a wound infection. 1.3% rural 0.83% urban women, 20% illiterate compared to 0.70% of the literate women suffered an infection at the incision site. 1.4% women suffered a urinary tract infection. 1.62% rural compared to 0.61% of the urban and 5.71% illiterate compared to 1.23% of the literate women suffered from a urinary tract infection.

DISCUSSION

Post partum maternal care is often neglected, all the concern and care being diverted to the newly arrived baby. The mother is in need of physical and mental support in this phase, with a possibility of many complications arising if not taken care of.

In the present study breast engorgement was seen in 205 (16.4%) women, which is a significant proportion of the post partum population. Cunningham et al² have reported an incidence of 15%. Of the rural women 176 (19.02%) while 29 (8.92%) of the urban population, 13 (37.1%) of the illiterate compared to 192 (15.8%) of the literate women suffered from breast engorgement (p < 0.05). The belief among rural and illiterate women that breast milk is harmful for the baby in the first few days after birth seems to prevent them from feeding the babies immediate post delivery. The health care professionals would play a critical role in advocating immediate breast feeding post delivery.

Coutu et al³ studied 4463 women post delivery and found episiotomy wound infection in only 5 (0.21%), post cesarean surgical site infection incidence was 1.6%, but when post discharge surveillance was carried out the incidence rose to 9.6%, emphasizing the need of a post discharge surveillance. In the present study of the 534 (65.2%) women with episiotomy, 6.34% of the rural women compared to 3.2% of the urban women, and 37.5% of the illiterate, compared to 4.75% of the literate women had episiotomy site infections. In the present study of 430 women who underwent a cesarean section 1.16% had a wound infection, the incidence being significantly higher in the rural women; 1.3% compared to the 0.83% in urban women and 20% of the 5 illiterate women compared to 0.70% of the literate women. Wound infection presents as erythema, discharge and induration of the incision complicating 2-6% of caesarean sections.⁴ Methods proposed for reducing rate of wound infections are prophylactic antibiotics, changing gloves after delivery of fetus⁵ and antibiotic irrigation.⁶

Of the 1250 women 1.4% suffered a urinary tract infection of which 1.62% of the rural compared to 0.61% of the urban women and 5.71% of the illiterate compared to 1.23% of the literate women suffered from a urinary tract infection.

There is a tendency amongst family members and to some extent even the health care providers to be casual about the ailments in the post partum period. But these ailments can be a cause of major morbidity and in some events even mortality.

CONCLUSION

Vigilance and a caring attitude is of utmost importance in preventing post partum morbidities. The higher rate of complications in rural and illiterate women may be attributed to poor hygiene, ignorance and malnourishment. Health education regarding the same needs to be imparted during the ante natal period during which they are more receptive and continued through the post partum period.

REFERENCES

- Glazener CM, Abdalle M, Stroud P, Naji S, Templeton 1 A, Russel IT. Post natal maternal morbidity: Extent, Causes, prevention and treatment. British Journal of Obstet Gynecol.1995;102:282-287.
- 2. Cunnigham FG, Gant NE, Levene KG, Gilstrap LC, Hauth JC, Wenstrom KD. The Puerperium in : Williams Obstetrics, Mc Graw Hill. United States of America. 2001:403
- 3. Coutu RC, Pedrosa TM, Nogucira JM, Gomes DL, Neto MY, Rezende NA. Post discharge surveillance and infection rates in obstetric patients. Int J Gynecol Obstet 1998; 61:227-31.
- 4 Tita AT, Szychowski JM, Boggess K. Adjunctive azithromycin prophylaxis for caesarean delivery. N Engl J Me. 2016; 375:1231-41.
- 5. Ventolini G, Neiger R, Mckenna D. Decreasing infectious morbidity in CD by changing gloves. J Reprod Med. 2004;49:13-6.
- 6 Magann EF, Doson MK, Ray MA, Harris RL, Martin JR, Morris JN. Preoperative skin preparation and intra operative pelvic irrigation impact on post cesarean endometritis and wound infection. Obstet Gynecol 1993; 81:922-5.

Source of Support: Nil; Conflict of Interest: None

Submitted: 15-03-2019; Accepted: 02-04-2019; Published: 29-04-2019