INTERNATIONAL NURSING CONGRESS 2018

RESEARCH SESSIONS

"Exploring Nurses' Role towards Better Health Care"

PROCEEDINGS

Volume I

06th and 07th April 2018

Hosted by
Department of Nursing
Faculty of Allied Health Sciences
University of Peradeniya
Sri Lanka

NATIONAL
SCIENCE
FOUNDATION

Maternal socio demographic, economic factors and previous history of pregnancy outcome contributing to preterm birth occurring at tertiary care unit, Jaffna, Sri Lanka.

S. Sasrubi[1]*, V. Arasaratnam[2], M.G. Sathiadas[3], R. Surenthirakumaran[4]

[1]Faculty of Graduate Studies, University of Jaffna, Kokuvil
[2]Department of Biochemistry, Faculty of Medicine, University of Jaffna, Kokuvil
[3]Department of Paediatrics, Faculty of Medicine, University of Jaffna, Kokuvil
[4]Department of Community and Family Medicine, Faculty of Medicine, University of Jaffna, Kokuvil
*sasrubi@hotmail.co.uk

Introduction: Several maternal conditions were identified as risk factors for preterm birth. The aim of this study was to assess the influence of `known maternal socio demographic, economic factors and the previous history of preterm outcomes on the gestational weeks of pregnancy terminated.

Methodology: A cross sectional study was carried out in maternity wards of Teaching hospital, Jaffna, among 173 mothers who delivered preterm babies at the gestational age of 28-37 weeks during October 2015 to February 2017. Data on maternal factors such as age, pre-pregnancy Body Mass Index (BMI), religion, marital status, education, employment, family type, and monthly income in SLR, type of house, previous history of preterm birth, abortion and cesarean section were obtained from the pregnancy cards. Period of gestational week which preterm delivery occurred was categorized as very preterm (28-32 weeks) and moderate to late preterm (32-37 weeks) SPSS 16.0 was used to analyze the data.

Results: The mean gestational age was $35(\pm1.96)$ weeks. The delivery which occurred at 32-37 weeks was 92% (n=159) and 67.9% (n=117) of preterm babies were identified as LBW (Birth weight <1500g). The mean maternal age and BMI were 27.9 (±5.6) years and 23.7 (±4.6) kgm^{-2} respectively. Among the mothers 98.8% (n=171) were legally married, 72.3% (n=125) hindu, 72.3% (n=125) and have studied above G.C.E. (O/L), 14.5% (n=25) were employed, 77.5% (n=134) were living with extended family, 92.5% (n=160) of them got a monthly income $\geq10,000$ SLR and 89.0% (n=154) are living in their own houses. Among the mothers 50.8% (n=88) were multiparous and rate of had previous history of preterm birth, abortion and cesarean section were 20.5% (n=18), 31.8% (n=28) and 19.3% (n=17) respectively. Compared with moderate to late preterm delivery, very preterm

deliveries occurred less frequently in <19 or >35 years of maternal age (14.3%), with the BMI of <18.5 or >25.0 kgm^{-2} (42.9%), in unmarried mothers (7.1%), in Christians (21.4%), in those who studied above G.C.E. (O/L) (28.6%), in employed mothers (7.1%), in mothers who receive family monthly income <10,000 SLR (7.1%) and living in nuclear families (21.4%) as well as in their own houses (35.7%). In fact, being unmarried (OR= 0.082; 95% CI= 0.005-1.393; p-value=0.029) and living in rented house (OR= 0.174; 95% CI= 0.051-0.591; p-value=0.002) correlated to the risk of very preterm related to moderate to late preterm deliveries and a statistically significant relationship was found.

Conclusion: In this study marital status and living arrangements showed statistical significance and other studied factors couldn't explain the increase in preterm birth. Further studies with larger population have to be done to consider other factors affecting maternal population that could explain the observed trend of extreme preterm birth.

Keywords: economic factors, gestational week, low birth weight, socio demographic factors

References

1. World Health Organization. (2017). Preterm Birth fact sheet, [online], Available from http://www.who.int/mediacentre/factsheets/fs363/en/, Updated November 2017