



Category: Miscellaneous

Assesment on Reproductive Performance and Hormonal Studies in Rural Women Beedi Rollers in Jagitial District of Telangana State

Vanitha Baluka, Chiliveri Prashanth and P.P. Reddy

Bhagwan Mahavir Medical Research Centre A.C Guards, Hyderabad, Telangana, INDIA

Abstract

Beedi manufacturing is the second largest industry in India. It provides employment to millions of women mostly from the poor socioeconomic class. In North region of Telangana, beedi rolling is a major occupation for illiterate women in many villages. It may affect due to the inhalation of unfiltered tobacco dust and volatile and toxic components of tobacco. Biomonitoring of women beedi rollers and their reproductive performance assessment is necessary to take prevention/control the reproduction failure and carcinogen effect on cervical system. Continuous exposed to unfiltered tobacco dust may have systemic effect and lead to many disorders including hormone defects and reproductive health problems. Although studies have been carried out on beedi industry workers and tobacco smoke exposed people at national and international level, no such studies were carried out on women beedi rollers living in rural areas in Telangana State. Hence, this investigation is attempted to understand the study is find to association with hormonal levels and reproductive outcome in rural women beedi rollers of reproductive age in North Telangana. Statistical analysis was done for the obtained results to find the significance between the two groups for the reproductive outcome and Hormonal Studies. Total 50 women (married who are exposed minimum 6-10 years to the unfiltered tobacco dust) beedi rollers in the age group of 25 to 45 years from villages of Jagitial district were enrolled for this study. 50 equal numbers of women in the same age group belonging to the same socio economic status and not exposed occupationally to chemical and physical agents was selected for comparison (control group). Estroidal, Progesterone the T3, T4 and TSH levels were measured found significantly T3, T4 levels were low in the beedi rollers, compared the controls. TSH levels were found to be higher in the beedi rollers. Estroidal and progesterone levels were obtained non-significant. Reproductive outcome in both the groups indicated adverse reproductive outcome in the beedi rollers when compared to the controls. An increase in the frequency of premature births, neonatal deaths, still births and uterine problems and a decrease in the fertility rate and frequency of live births were observed in women beedi rollers when compared to controls. The overall results showed adverse reproductive outcome and imbalance of thyroid hormone profile was found in rural women beedi rollers. These effects in women might be due to occupational exposure to tobacco dust in the work environment. There is a need to be concentrate with more sample size on reproductive outcome and hormonal related diseases in women beedi rollers who work with tobacco from time to time and in order to generate data on various health and reproductive issues. Awareness programmes on safety measures may be taken up for these illiterate women beedi rollers to prevent/control these effects.

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