

Evaluation and comparison of the maternal and neonatal complications prevalence before and after Health Transformation Plan (HTP) implementation

Abstract

Background and objective: Childbirth is the most important stage of pregnancy. Natural delivery is the best type of delivery with fewer complications. The health transformation plan has been implemented in 2014 with the aim of reducing cesarean delivery and promoting maternal and newborn health. In this program, vaginal delivery process has been done without asking for any operational fees due to motivate mothers to deliver their babies by vaginal birth. On the other hand, the income of obstetrician and antenatal team has been increased for motivating the treatment team to perform natural born. Moreover, more equipment and facilities have been provided to make the natural child birth more accepted and also to increase the health state of both the mother and new born babies. The purpose of this study was to evaluate the effect of health plan on complications of vaginal delivery and cesarean section.

Methods : This study was a descriptive-analytical study that cross-sectional data were collected before and after the health transformation plan from 880 mothers in two groups of natural delivery and cesarean section (220 samples in each group) that was gathered from patients information and HIS and hospital statistics. A researcher-made checklist based on the purpose of the study was used for data collection. Data were analyzed using SPSS software version 22.

Results: : The rate of natural delivery decreased from 51.4% to 60.2% before and after the plan of health transformation, and the rate of cesarean section increased from 48.6% to 39.8%. The rate of postpartum hemorrhage requiring intervention increased (p <0.001). The rate of hysterectomy and readmission and PPH in both groups did not change before and after the health plan. Perinatal injury rate, use of interventions such as episiotomy and pain relief decreased, hospitalization in neonatal ward increased, and NICU hospitalization unchanged. The pattern of cesarean delivery showed that the most common cause of cesarean section was recurrent cesarean which was not performed without indication despite the change in delivery pattern of cesarean section before the health transformation plan.

Conclusion : Due to the increase in natural delivery statistics, it is recommended to increase the physical space, equipment, skilled personnel, and skill and commitment of physiological delivery and accurate data recording. Increased post-transfusion hemorrhage can be attributed to the greater number of deliveries and the emphasis on continuing the natural delivery process. The reason for the decrease in complications can be attributed to more facilities and facilities for performing normal vaginal delivery

Keywords: Normal vaginal delivery - Cesarean section - Birth complications - Neonates - Health transformation plan - Postpartum hemorrhage - Hysterectomy - Episiotomy - Amplification of labor pain