

IMPLEMENTATION OF THE 10-GROUP CLASSIFICATION SYSTEM (ROBSON CLASSIFICATION) FOR CAESAREAN DELIVERIES: EXPERIENCE FROM A TERTIARY CENTRE IN CYPRUS

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Introduction: The 10-Group classification system (Robson classification) for caesarean deliveries is a method used to standardize the way perinatal events and outcomes are analyzed in the process of labour and delivery. These events include diagnosis of labour, methods used to accelerate labour, intrapartum fetal monitoring, methods and indications of induction and indications for caesarean section. This method ensures measurable, standardized, comparable events and outcomes that may assist in monitoring and assessing caesarean delivery rates within a delivery unit as well as between units. By using the 10-Group classification the aim is to identify the groups of women that influence the high caesarean section rate of Cyprus, one of the highest in Europe, ranging above 50%.

Material: All caesarean deliveries performed at Archbishop Makarios III Hospital in Cyprus, the only tertiary maternity centre of the island between 01-01 and 31-06 2016. Between the time period described, 320 caesarean sections were performed in a total of 727 deliveries.

Methods: Retrospective analysis of the birth registry and maternity records of all caesarean section cases and classifying them according to the 10-Group classification system.

Results: The overall caesarean section rate of the sample analyzed was 44% (320/727). In Group 1 (nulliparous, single, cephalic >37 weeks, with spontaneous labour) group size was 11.87% and contribution of 5.22%, less than described by Robson. Group 2 (nulliparous, single, cephalic, >37 weeks, induced or caesarean section before labour) size was 18.75% and 8.25% contribution, higher than expected. Group 3 (multiparous, single, cephalic, >37 weeks, spontaneous labour) size was 4.68% and contribution of 2.06%, while group 4 (multiparous, single, cephalic, >37 weeks, induced or caesarean section before labour) size was 4.37% and contribution of 1.92%, both less than expected. Group 5 (previous caesarean section, single, cephalic, >37 weeks) size was 28.43% and contribution 12.51% larger than expected, while group 6 (nulliparous breech) size was 0.93% and contribution 0.41% and group 7 (multiparous breech) size and contribution were 1.87% and 0.82% respectively, both close to previously reported rates. Group 8 (multiple pregnancies) size and contribution were 8.12% and 3.57%, increased compared to reported rates, group 9 (abnormal lies) size and contribution at 0.93% and 0.41%, same as reported and finally group 10 (all single cephalic, <36 weeks) at 20% and 8.80% respectively, higher than expected.

Conclusions: Groups 1, 2 and 5 contribute to 60% of all caesarean sections while with the inclusion of groups 8 and 10, the contribution of the five groups reaches 87%. The contribution of group 5 is significant and is expected to remain high, as there are many women with a previous scar that will opt for an elective caesarean section in the future. The contribution of multiples and preterm caesarean section is also significant as the data are from a referral tertiary centre for high risk pregnancies but also due to high rates of multiple pregnancies due to multiple embryo transfer policy in all subfertile women. Group 2 women have a significant contribution probably due to the high pharmacological induction rate observed in GDM, PET and PPRM cases as well as lack of mechanical induction methods.