

The Robson Ten-Group Classification System: A Clinical Imperative For Optimizing Nursing Strategies In Caesarean Birth Management

Pooja Singh¹, Suman Lata², Tanima Verma³, Lokesh Kumar Sharma⁴

M.Sc. Nursing, King George's Medical University¹
Assistant Professor, King George's Medical University²
Assistant Professor, King George's Medical University³
M.Sc. Nursing King George's Medical University⁴

Abstract

Background: The escalating global rate of Caesarean sections (CS) warrants attention due to potential increases in maternal morbidity. The World Health Organization endorsed the Robson Classification in 2015 as a standardized tool to categorize CS patients based on key obstetric characteristics (e.g., parity, previous CS, labour onset). This system facilitates auditing CS rates, enabling institutional comparisons and quality improvement efforts. Beyond its epidemiological value, this study explores the clinical application of Robson's Classification in guiding nursing care. Using ten case examples representing different Robson groups, it illustrates how understanding a patient's classification can help nurses tailor assessments, interventions, and educational support to meet specific needs associated with their group. This approach promotes individualized, patient-centred nursing care for the diverse population undergoing CS, potentially improving postpartum outcomes.

Objective: To describe the nursing care provided to ten C-section mothers, each representing a different group within Robson's Classification, highlighting how the classification can inform and individualise nursing interventions in the antenatal, intrapartum and postpartum periods.

Methods: A retrospective chart review examined ten postpartum mothers undergoing caesarean section at Queen Mary Hospital (24 Dec - 15 Feb), selected to represent diverse Robson classification groups. Data included Robson group, demographics, obstetric history, and caesarean indication. Detailed nursing care considerations for antenatal, intrapartum, and postpartum phases, specific to caesarean needs, were outlined.

Results: Ten cases representing distinct Robson groups demonstrated varied nursing care reflecting group-specific risk profiles. Common interventions were tailored; group-specific differences highlight Robson classification's utility for individualizing nursing care.

Conclusion: Robson classification audits caesarean sections, revealing patient heterogeneity. Its application informs tailored nursing assessment, planning, and intervention, potentially improving postpartum outcomes and fostering patient-centred care following caesarean delivery.

Keywords: Robson Classification, Caesarean Section, Nursing Care, Case Series, Postpartum Care, Obstetric Classification

Date of Submission: 02-09-2025

Date of Acceptance: 12-09-2025

I. Background

Caesarean section rates are high globally, making it a frequently performed obstetric surgery. A study by Oliphant et al. revealed a doubling of the caesarean section rate over a 27-year period.¹ According to WHO, the ideal rate for c-sections is between 10%-15%. The national family health survey recorded rising C-section rates over time, from 9.5% of all hospital births in 1992-93 to 17.2% in 2015-16 & 21.5% in 2021.² Initially, survival for women undergoing Caesarean sections was rare. However, maternal mortality related to the procedure significantly decreased over time, falling to 5–10% by the end of the 19th century and further to 0.1% by 1950.³ Maternal mortality following caesarean section is estimated at approximately 5.81 to 6.1 deaths per 100,000 procedures (0.00581% to 0.0061%).⁴ This relatively low rate has led some obstetricians to view caesarean sections as a comparatively "easier option."⁵ While caesarean sections are crucial interventions in certain situations, they are also linked to a higher risk of complications for the mother. These risks include postpartum haemorrhage, the need for blood transfusions or hysterectomy, and in rare cases, maternal death. Furthermore, a previous caesarean scar can elevate the risk of uterine rupture, placenta previa, or placenta accreta in future pregnancies. In response to the rising rates of caesarean births, the World Health Organization (WHO) introduced Robson's classification system in 2015 to better understand the factors contributing to this trend.⁶ Robson's Ten

Group Classification System as a globally recognized tool for classifying obstetric populations based on key characteristics (parity, prior C-section, onset of labor, presentation, and gestational age) and its purpose is standardized monitoring, audit, comparison of C-section rates, and identification of specific groups contributing most to overall rates. Its strength lies in its simplicity and ease of use, making it clinically relevant and readily applicable across diverse settings. Linking Robson's Classification to Nursing Care provides a framework to understand the different needs and risk profiles of women undergoing C-sections. Also, nursing care can be more effectively tailored and targeted when informed by Robson's Classification, leading to improved patient outcomes and resource allocation.

II. Method

This retrospective study was conducted at the Department of Obstetrics and Gynaecology, King George's Medical University, Lucknow. The study sample comprised 10 cases systematically selected from each category of the Robson ten-group classification system.

Data were collected through a retrospective review of both electronic and paper-based medical and nursing records. A standardized data extraction form was developed and utilized to ensure consistent data abstraction across all included cases.

The extracted data included the following variables: patient demographics (age, parity, gestational age, BMI, etc.), obstetric history (previous pregnancies, deliveries, complications), Robson Group classification, labor and delivery details (onset of labor, fetal presentation, stage of labor, indication and urgency of C-delivery, fetal outcome, birth weight, and Apgar scores), nursing care documentation include postoperative nursing assessments (pain scores, wound assessment, vital signs, lochia, fundal checks, mobility status, emotional state), nursing interventions (pain management, fetal monitoring, wound care, mobility assistance, breastfeeding support, emotional support, patient education, referrals), and postpartum outcomes (length of hospital stay, complications, breastfeeding success, patient satisfaction, and readmission within a timeframe).

Data Collection:

Between 24 December and 15 February 2025, Data was collected from hospital records.

- Develop a Data Extraction Tool (case report form).
- Data was retrieved from hospital records (Access electronic or paper medical records for identified cases; Follow hospital protocols for record access and confidentiality). Record them on the Case report form.
- Calculate Robson Classification (if not directly documented): If Robson classification is not pre-calculated, use the extracted variables (parity, prior CD, gestation, onset of labor, presentation) and apply the Robson classification algorithm to assign each case to the appropriate Robson group.

The Robson group for each CS case was recorded on the data capture sheet.

Cases	Groups	Clinical characteristics
Case 1	Group 1	Nulliparous, singleton, cephalic, term, spontaneous labor.
Case 2	Group 2	Nulliparous, singleton, cephalic, term, induced labor or pre-labor C-section.
Case 3	Group 3	Multiparous without prior C-section, singleton, cephalic, term, spontaneous labor.
Case 4	Group 4	Multiparous without prior C-section, singleton, cephalic, term, induced labor or pre-labor C-section.
Case 5	Group 5	Multiparous with prior C-section, singleton, cephalic, term.
Case 6	Group 6	All nulliparous breeches, singleton.
Case 7	Group 7	All multiparous breeches, singleton (including previous C-section).
Case 8	Group 8	Multiple pregnancies (including previous C-section).
Case 9	Group 9	Malpresentation, singleton (including previous c-section).
Case 10	Group 10	Singleton, cephalic, preterm (including previous c-section).

III. Results

The following ten cases illustrate the application of Robson's Classification in guiding nursing care for mothers undergoing caesarean section.

Case 1: Robson Group 1 (Nulliparous, singleton, cephalic, term, spontaneous labor)

Patient Profile – A 28-year-old woman, categorized as Robson Group 1 (nulliparous, singleton, cephalic presentation, term gestation, and spontaneous labor), presented in active labor at 39 weeks and 5 days gestation. This was her first pregnancy (G1P0), and her antenatal care had been routine and uncomplicated, with no significant past medical or obstetric history. Labor was spontaneous in onset, and the fetus was in a cephalic (vertex) presentation. Initially, vaginal delivery was anticipated; however, she developed failure to progress in the second stage of labor despite adequate augmentation and demonstrated maternal exhaustion. An urgent Caesarean delivery was performed due to failure to progress. The foetal outcome was a live birth, with a birth weight of 3450 grams and Apgar scores of 8 at 1 minute and 9 at 5 minutes. The indication for the Caesarean section in this pregnancy was failure to progress in the second stage of labor.

Nursing care considerations-

- **Group-Specific Focus:** Monitoring labor progress in a first-time mother, recognizing deviations from normal, managing potential exhaustion, and supporting the transition to an unplanned Caesarean.
- **Nursing Responsibilities:**
- **Labor Progress Assessment:** Diligent monitoring of cervical dilation and foetal descent, especially in the second stage. Recognize prolonged second stage (e.g., >3 hours with epidural, >2 hours without in nulliparas).
- **Foetal Well-being:** Continuous or intermittent electronic foetal monitoring (EFM) as appropriate, assessing for reassuring FHR patterns.
- **Maternal Coping & Exhaustion:** Assess maternal fatigue, hydration, and coping. Encourage, position changes, and support pushing efforts. Discuss pain relief options.
- **Augmentation Management:** If oxytocin is used, monitor uterine activity (tachysystole) and FHR response closely according to protocol (AWHONN, 2020).
- **Preparation for C/S:** When FTP is diagnosed and C/S decided:
 - Provide clear explanations and emotional support regarding the change in the delivery plan.
 - Ensure informed consent is obtained.
 - Initiate urgent C/S preparations (NPO status confirmation, IV access, pre-op medications, abdominal prep, urinary catheter insertion).
 - Communicate effectively with the surgical and anaesthesia teams.
- **Postoperative Care:** Standard C/S post-op care, with additional focus on emotional support related to the unplanned surgery and unmet expectations for vaginal birth. Facilitate early skin-to-skin and breastfeeding initiation.

Case 2: Robson Group 2 (Nulliparous, singleton, cephalic, term, induced labor or pre-labor C-section)

- **Patient Profile-** A 26-year-old nulliparous patient at 39 weeks of gestation with a singleton cephalic pregnancy elected for a pre-labor Caesarean section due to tokophobia (fear of childbirth) after extensive counselling. An elective Caesarean delivery was performed prior to the onset of labor, resulting in a live birth of a female infant weighing 3100 grams with Apgar scores of 9 and 10 at 1 and 5 minutes. Her medical and obstetric history was otherwise unremarkable. The indication for Caesarean delivery was a maternal request for an elective Caesarean section.
- **Nursing care considerations-**
- **Group-Specific Focus:** Pre-operative preparation for an elective Caesarean, addressing maternal anxiety/tokophobia and ensuring informed consent.
- **Nursing Responsibilities:**
- **Psychosocial Support:** Acknowledge and validate the patient's fear (tokophobia). Provide empathetic support and reinforce information provided during counselling. Assess anxiety levels and employ calming techniques.
- **Pre-operative Education:** Reinforce pre-operative instructions (NPO, arrival time, skin prep), what to expect during the surgery, anesthesia options, and immediate post-operative recovery.
- **Informed Consent:** Verify understanding and confirm signed consent for the Caesarean delivery and anaesthesia.
- **Routine Pre-operative Care:** Execute standard pre-operative checklist (vital signs, baseline FHR if applicable, IV insertion, administer pre-op medications as ordered, surgical site confirmation).
- **Postoperative Care:** Routine post-Caesarean care, focusing on pain management, mobilization, incision care, and breastfeeding support. Continue psychosocial support, assessing satisfaction with the birth experience.

Case 3: Robson Group 3 (Multiparous without prior C-section, singleton, cephalic, term, spontaneous labor)

- **Patient Profile-** A 32-year-old woman, gravida 3 para 2, at 39 weeks gestation, presents in spontaneous active labor with a singleton, cephalic presentation. She has a history of two prior uncomplicated vaginal deliveries and no prior Caesarean sections. Her medical and obstetric history is otherwise unremarkable. Currently, there is no indication for a Caesarean delivery.
- **Nursing care considerations-**
- **Group-Specific Focus:** Anticipating potentially faster labor progression compared to nulliparas, routine monitoring unless complications arise.
- **Nursing Responsibilities:**
- **Labor Assessment:** Recognize that multiparous labor can progress more rapidly. Perform cervical checks as indicated, being prepared for imminent delivery.
- **Foetal and Maternal Monitoring:** Standard monitoring of FHR and maternal vital signs.
- **Comfort Measures:** Provide comfort measures and support as requested. Multiparous women may have clearer preferences based on prior experiences.
- **Preparation for Delivery:** Ensure delivery room/area is prepared.

- **Postpartum Care:** Routine postpartum assessment, focusing on uterine involution (higher risk of atony with higher parity), lochia, perineal care, and breastfeeding support.

Case 4: Robson Group 4 (Multiparous without prior C-section, singleton, cephalic, term, induced labor or pre-labor C-section)

- **Patient Profile-** Mrs. Smith is a 32-year-old woman, gravida 4 para 3, who presented at 39 weeks and 5 days gestation for induction of labor due to suspected fetal macrosomia. Her obstetric history is significant for three previous uncomplicated vaginal deliveries at term and a history of gestational diabetes in a prior pregnancy, which was managed with diet and resolved after delivery. In this pregnancy, labor was induced, and she progressed to the active phase of labor with a cephalic presentation. However, she experienced arrested progress in the first stage of labor despite adequate contractions. Due to arrested labor (dystocia), an urgent (Category 2) Caesarean section was performed as a maternal indication. She delivered a live female infant weighing 4250 grams with Apgar scores of 8 and 9 at 1 and 5 minutes. The Caesarean section in this pregnancy was indicated due to the arrested progress of labor.
- **Nursing care considerations-**
 - **Group-Specific Focus:** Managing labor induction, monitoring for labor dystocia in a multiparous woman (less common but can occur, especially with factors like macrosomia), and preparing for C/S due to arrest. GDM history requires attention.
 - **Nursing Responsibilities:**
 - **Induction Management:** Administer induction agents (e.g., oxytocin) per protocol. Closely monitor uterine contraction pattern (risk of tachysystole) and FHR response.
 - **Labor Progress Assessment:** Assess labor progress carefully; arrest in the active phase (e.g., no cervical change for ≥ 4 hours with adequate contractions or ≥ 6 hours with inadequate contractions) necessitates evaluation.
 - **Macrosomia Awareness:** Be aware of potential complications related to suspected macrosomia even if C/S occurs (e.g., neonatal hypoglycaemia due to maternal GDM history). Ensure the paediatrician is aware.
 - **GDM Consideration:** Monitor maternal blood glucose levels during labor if indicated by protocol or recent GDM status.
 - **Preparation for C/S:** Initiate urgent C/S preparation upon diagnosis of arrest, providing explanations and support.
 - **Postoperative Care:** Standard C/S care, monitor for potential postpartum hemorrhage (risk factors: induction, prolonged labor, macrosomia). Monitor infant for hypoglycemia.

Case 5: Robson Group 5 (Multiparous with prior C-section, singleton, cephalic, term)

- **Patient profile-** A 36-year-old woman, gravida 4 para 3, categorized, presented at 40 weeks gestation with spontaneous onset of labor. Her obstetric history includes two prior vaginal deliveries and one prior caesarean section for fetal macrosomia and borderline cephalopelvic disproportion in a previous pregnancy. She also has well-controlled chronic hypertension. In this singleton, cephalic, term pregnancy, she was initially considered for a trial of labor after caesarean (TOLAC). She progressed to active labor, reaching 8 cm dilation. However, labor progress slowed, and a concerning fetal heart rate pattern developed, indicating fetal distress. Due to these intrapartum complications, an urgent caesarean section was performed. This resulted in a live birth of a male infant weighing 3.9 kg with Apgar scores of 7 and 8 at 1 and 5 minutes. The indication for caesarean delivery in this pregnancy was urgent delivery due to fetal distress and slow progress of labor during a TOLAC attempt.
- **Nursing consideration-**
 - **Group-Specific Focus:** High-risk labor management during Trial of Labor After Caesarean (TOLAC), vigilant monitoring for uterine rupture, recognizing fetal distress, and rapid response for urgent C/S. Management of chronic hypertension.
 - **Nursing Responsibilities:**
 - **TOLAC Management:**
 - Ensure patient meets TOLAC criteria and understands risks/benefits.
 - **Continuous EFM is mandatory** -Be hypervigilant for FHR changes (bradycardia, deep/prolonged variable decelerations) that could indicate uterine rupture.
 - Assess for signs/symptoms of uterine rupture: sudden severe abdominal pain (may be masked by epidural), change in uterine contour, loss of fetal station, vaginal bleeding, maternal tachycardia/hypotension.
 - Avoid prostaglandins for cervical ripening; use oxytocin judiciously if needed.
 - **Fetal Distress Recognition:** Identify non-reassuring FHR patterns promptly and initiate intrauterine resuscitation measures (position change, IV fluids, oxygen, stop oxytocin).
 - **Hypertension Management:** Monitor blood pressure closely according to guidelines for chronic hypertension in pregnancy/labor. Administer antihypertensives as ordered.

- **Urgent C/S Preparation:** Immediate mobilization of the team for urgent C/S upon decision. Communicate status clearly ("Urgent C/S for fetal distress during TOLAC").
- **Postoperative Care:** Care specific to repeat C/S, increased vigilance for hemorrhage due to TOLAC attempt and potential uterine atony.
- Focus on counseling regarding future pregnancies and VBAC options.

Case 6: Robson Group 6 (All nulliparous breeches, singleton)

- **Patient Profile-** A 32-year-old nulliparous woman (G1P0) at 40 weeks gestation presented in spontaneous labor. During early active labor at 6 cm dilation, a complete breech presentation was diagnosed. Due to slow progress in labor (labor dystocia) in the context of the breech presentation, an urgent Caesarean section was performed. This was classified as a fetal indication for C-delivery due to the breech presentation and complicating labor dystocia, requiring urgent intervention. The fetal outcome was a live birth, with a birth weight of 3500 grams. Apgar scores were 7 at 1 minute and 8 at 5 minutes. The patient had a history of diet-controlled Gestational Diabetes Mellitus (GDM) but otherwise had routine prenatal care. The indication for the C-section in this pregnancy was an urgent Caesarean section for breech presentation diagnosed in active labor, complicated by labor dystocia (slow progress) and fetal malpresentation.
- **Nursing consideration-**
- **Group-Specific Focus:** Recognizing breech presentation, counseling on delivery options (usually C/S in nulliparas, especially if diagnosed in labor), and preparing for C/S. GDM management.
- **Nursing Responsibilities:**
- **Presentation Assessment:** Confirm breech presentation (Leopold maneuvers, vaginal exam, ultrasound).
- **Patient Counseling:** Provide information and support regarding the diagnosis. Explain the rationale for planned/urgent C/S, which is the standard of care for term breech in nulliparous women in many settings, especially with concurrent dystocia. Highlight the NICU liaison and emotional support related to prematurity.
- **Preparation for C/S:** Prepare for an urgent Caesarean delivery due to malpresentation and labor dystocia.
- **GDM Management:** Monitor maternal blood glucose levels as needed. Ensure neonatal team is aware for infant blood glucose monitoring.
- **Postoperative Care:** Standard C/S care.

Case 7: Robson Group 7 (All multiparous breeches, singleton (including previous C-section))

- **Patient Profile-** A 38-year-old woman, gravida 4 para 2 abortion 1, at 38 weeks and 5 days gestation with a singleton pregnancy in complete breech presentation, presented in spontaneous active labor at 4 cm dilation. The indication for caesarean delivery was fetal breech presentation in the context of a previous caesarean section, and the urgency was urgent. She had a history of a previous caesarean section for failure to progress, a subsequent vaginal delivery, a first-trimester abortion, and gestational hypertension in this pregnancy managed with medication. A live female infant was delivered, weighing 3100 grams, with Apgar scores of 7 and 8 at 1 and 5 minutes respectively. The caesarean section in this pregnancy was indicated due to the complete breech presentation diagnosed in active labor, complicated by her prior caesarean section and gestational hypertension.
- **Nursing consideration-**
- **Group-Specific Focus:** Managing breech presentation in a multiparous patient with a prior C/S and gestational hypertension (GHTN). C/S is strongly indicated.
- **Nursing Responsibilities:**
- **Presentation & History Confirmation:** Confirm breech presentation and history of prior C/S.
- **Patient Counseling:** Explain the combined indications for C/S (breech, prior scar) and the associated risks (uterine rupture, although C/S likely planned/early).
- **GHTN Management:** Monitor BP closely, assess for signs/symptoms of severe features or progression to preeclampsia (headache, visual changes, epigastric pain, proteinuria). Administer antihypertensives as ordered.
- **Preparation for C/S:** Prepare for urgent Caesarean delivery.
- **Postoperative Care:** Care for repeat C/S, continued monitoring of BP postpartum, monitor for potential complications related to GHTN.
- Highlight NICU liaison and emotional support related to prematurity.

Case 8: Robson Group 8 (Multiple pregnancies (including previous C-section))

- **Patient Profile-** A 34-year-old woman, gravida 3 para 2 with a history of two prior Caesarean sections, presented at 38 weeks gestation with a twin pregnancy, both fetuses in cephalic presentation. Due to her previous two C-sections and twin gestation, an elective Caesarean section was scheduled prior to labor. The indication for the C-section was maternal, based on her obstetric history and twin pregnancy. The delivery was elective and resulted in two live-born infants, Twin A weighing 2600g and Twin B weighing 2550g, with

excellent Apgar scores. Her previous C-sections were for non-progress of labor and breech presentation in prior pregnancies. The indication for this C-section was repeat Caesarean due to prior surgeries and twin gestation.

- **Nursing consideration-**

- **Group-Specific Focus:** Pre-operative preparation for a scheduled repeat C/S involving multiple gestation and higher risk factors. Coordination for two infants.
- **Nursing Responsibilities:**
- **Pre-operative Coordination:** Ensure availability of adequate staff (nurses, anesthesia, two neonatal teams). Confirm blood products availability (higher PPH risk).
- **Patient Preparation:** Standard pre-op care for elective C/S, addressing anxiety related to repeat surgery and twin delivery. Verify consent.
- **Intraoperative Support:** Assist the team, manage patient comfort, facilitate partner presence if desired/possible. Ensure correct labeling and identification of twins.
- **Postoperative Care:** Increased vigilance for postpartum hemorrhage (uterine overdistension from twins, repeat surgery). Manage pain effectively. Facilitate bonding and feeding support for two infants, potentially requiring lactation consultant involvement. Assess maternal coping with multiples.

Case 9: Robson Group 9 (Malpresentation, singleton (including previous c-section))

- **Patient Profile-** A 32-year-old Gravida 2 Para 1 woman with a history of a prior Caesarean section for fetal distress presented at 38 weeks and 5 days gestation in spontaneous labor. Upon examination, the fetus was found to be in a frank breech presentation, confirmed by ultrasound. She was in early labor, with a cervix dilated to 4cm and spontaneously ruptured membranes. Due to the breech presentation and her previous Caesarean section, an urgent Caesarean delivery was indicated for fetal malpresentation. A live female infant was delivered weighing 3100 grams, with Apgar scores of 8 and 9 at 1 and 5 minutes respectively. The indication for the Caesarean section in this pregnancy was the persistent breech presentation in a patient with a previous Caesarean section who presented in spontaneous labor."

- **Nursing consideration-**

- **Group-Specific Focus:** Similar to Group 7. Identifying malpresentation (in this case, breech) in a patient with a prior C/S presenting in labor. Urgent C/S is indicated.
- **Nursing Responsibilities:**
- **Presentation Assessment:** Confirm malpresentation (breech) via exam and/or ultrasound.
- **History Confirmation:** Note prior C/S history.
- **Patient Communication:** Explain the need for urgent C/S due to the combination of breech presentation and previous scar, especially with spontaneous labor onset/ruptured membranes increasing risks.
- **Urgent C/S Preparation:** Initiate immediate preparations for C/S.
- **Fetal Monitoring:** Monitor FHR until delivery, especially with ruptured membranes (risk of cord prolapse with malpresentation).
- **Postoperative Care:** Standard care for repeat C/S.

Case 10: Robson Group 10 (Singleton, cephalic, preterm (including previous c-section))

- **Patient Profile-** A 32-year-old woman (Gravida 2, Para 1) at 35 weeks and 4 days gestation, with a history of a previous Caesarean section, presented in spontaneous preterm labor with a singleton cephalic fetus. During active labor (6cm dilation), fetal monitoring revealed a non-reassuring fetal heart rate tracing. Due to fetal distress and the patient's prior Caesarean section, an urgent Caesarean delivery was performed within 45 minutes. A live baby boy was born weighing 2300 grams with Apgar scores of 7 and 9 at 1 and 5 minutes, respectively. The indication for Caesarean section in this pregnancy was fetal distress in the context of preterm labor and a previous uterine scar, raising concern for uterine rupture.

- **Nursing consideration-**

- **Group-Specific Focus:** Managing preterm labor, recognizing fetal distress in a preterm infant (less reserve), potential administration of antenatal corticosteroids, and urgent C/S in the context of prematurity and prior uterine scar.
- **Nursing Responsibilities:**
- **Preterm Labor Assessment:** Assess contractions, cervical change, and confirm gestational age.
- **Antenatal Corticosteroids:** Ensure administration if ordered and within the appropriate gestational age window (usually 24-34 weeks, potentially up to 36+6) to promote fetal lung maturity.
- **Fetal Monitoring: Continuous EFM is crucial.** Preterm fetuses tolerate labor stress less well. Identify non-reassuring patterns promptly.
- **Fetal Distress Management:** Initiate intrauterine resuscitation. Prepare for immediate delivery if the pattern does not improve.
- **Prior C/S Consideration:** Be aware of uterine rupture risk, although fetal distress is the primary driver here.

- **NICU Coordination:** Notify the neonatal intensive care unit (NICU) team promptly regarding imminent preterm delivery and indication (fetal distress).
- **Urgent C/S Preparation:** Rapid preparation and communication for urgent delivery.
- **Postoperative Care:** Standard C/S care, plus emotional support related to preterm birth. Facilitate communication with NICU and maternal-infant interaction as feasible.

General Principles Applicable to All Groups:

- **Assessment:** Continuous assessment of maternal vital signs, fetal heart rate (FHR) and pattern, labor progress (cervical dilation, effacement, station), contraction pattern (frequency, duration, intensity), pain levels, coping mechanisms, and hydration status.
- **Communication:** Clear communication with the patient, family, and multidisciplinary team (obstetrician, anesthetist, pediatrician/neonatologist).
- **Support:** Providing emotional, physical, and informational support throughout labor, delivery, and postpartum periods.
- **Safety:** Ensuring a safe environment, preparing for potential complications, and adhering to infection control protocols.
- **Pain Management** (scheduled analgesics, non-pharmacological methods).
- **Wound Care** (dressing changes, wound assessment, signs of infection monitoring).
- **Mobility and Ambulation:** (assistance with first mobilization, frequency of ambulation, DVT prophylaxis).
- **Infant Feeding Support:** (breastfeeding initiation and support, positioning, lactation consultant referral, formula feeding support if needed).
- **Emotional Support and Education** (addressing anxieties, providing information on postpartum recovery, infant care education, and resources).
- **Documentation:** Accurate and timely documentation of all assessments, interventions, and patient responses.

IV. Discussion

This case series effectively demonstrates the practical application of Robson's Classification System as a valuable tool for guiding and tailoring nursing care for mothers undergoing Caesarean sections. The ten diverse cases, each representing a distinct Robson group, clearly illustrate how the classification system highlights the heterogeneity within the C-section population. As the results show, nursing interventions were not uniform but rather varied across groups, directly reflecting the differing risk profiles, obstetric histories, and specific needs of mothers categorized by Robson's criteria.

The common thread of nursing interventions observed across all cases – pain management, wound care, mobility assistance, breastfeeding support, emotional support, and education – represents the fundamental pillars of postpartum nursing care following a C-section.

However, the study goes further to emphasize the *nuanced* application of these interventions based on the Robson group. For instance, in Robson Group 1 (nulliparous, spontaneous labor), the nursing focus shifted to managing the transition from anticipated vaginal birth to unplanned C-section and addressing potential emotional distress related to unmet birth expectations. Conversely, in Robson Group 2 (elective C-section for tokophobia), the nursing emphasis was on pre-operative psychosocial support, addressing anxiety, and reinforcing informed consent. Groups with prior C-sections (Group 5, 7, 9, 10) necessitated heightened vigilance for complications like uterine rupture and postpartum hemorrhage, alongside counseling regarding future pregnancy options and VBAC. Cases involving malpresentation (Groups 6, 7, 9) and preterm labor (Group 10) underscored the need for specific fetal monitoring, neonatal team coordination, and specialized infant care considerations.

These variations in nursing care underscore the power of Robson's Classification to move beyond a generalized approach to C-section aftercare. By categorizing women into clinically relevant groups, nurses can proactively anticipate potential challenges, prioritize specific interventions, and deliver more patient-centered care. This targeted approach is particularly crucial in an era of rising C-section rates, where efficient and effective resource allocation is paramount. Utilizing Robson's Classification can facilitate better communication within the multidisciplinary team, enabling obstetricians, nurses, and other healthcare providers to have a shared understanding of the patient's risk profile and tailored care plan.

This case series, while limited by its small sample size and retrospective nature, provides valuable preliminary evidence supporting the integration of Robson's Classification into nursing practice. It serves as a practical illustration of how a globally recognized obstetric classification system can be translated into actionable nursing strategies. The detailed nursing care considerations outlined for each Robson group can serve as a starting point for developing standardized nursing protocols and educational resources tailored to specific C-section populations.

Implications for Nursing Practice:

- Argue for the integration of Robson's Classification into routine nursing assessment and care planning for postpartum C-section mothers.
- Suggest practical ways nurses can utilize Robson's framework:
 - During admission assessments to identify patient's Robson group and anticipate potential needs.
 - In care planning to prioritize interventions based on Robson group characteristics.
 - In communication and handover to ensure continuity of tailored care.
- Discuss the potential benefits of Robson-informed nursing care:
 - Improved patient satisfaction.
 - More efficient resource allocation (e.g., targeted breastfeeding support, pain management strategies).
 - Potential for better postpartum outcomes

Strengths and Limitations of the Case Series

- **Strengths:** Provides rich, descriptive data on nursing care in diverse C-section populations, highlights the practical application of Robson's Classification, generates hypotheses for future research.
- **Limitations:** Small sample size (n=10), retrospective design, potential for selection bias in case selection, findings may not be generalizable to other settings.

Recommendations for Future Research

- Suggest larger, quantitative studies to investigate the impact of Robson-informed nursing care on postpartum outcomes.
- Explore the development of specific nursing care protocols or guidelines tailored to each Robson group.
- Investigate nurses' perspectives and experiences in using Robson's Classification in their daily practice.

V. Conclusion

This case series provides compelling evidence for the practical utility of Robson's Classification in enhancing nursing care for mothers undergoing Caesarean sections. By demonstrating the diverse nursing needs across different Robson groups and highlighting tailored interventions, this study underscores the system's potential to move beyond its traditional role as an audit tool to become an integral part of patient-centred nursing practice.

Integrating Robson's Classification into nursing assessment, planning, and intervention strategies can lead to:

- **Improved Nursing Assessment:** Providing a structured framework for understanding the patient's obstetric risk profile and anticipating potential needs.
- **Tailored Nursing Care Plans:** Enabling the development of individualized care plans that address the specific needs of each Robson group.
- **Enhanced Communication:** Facilitating clearer communication within the multidisciplinary team regarding patient risk and care strategies.
- **Potentially Improved Patient Outcomes:** Contributing to more effective pain management, wound care, breastfeeding support, emotional well-being, and overall postpartum recovery.
- **Standardization of Nursing Practice:** Providing a basis for developing evidence-informed nursing protocols and guidelines specific to Robson categories.

References:

- [1]. Oliphant SS, Jones KA, Wang L, Et Al. Trends Over Time With Commonly Performed Obstetric And Gynecologic Inpatient Procedures. *Obstet Gynecol* 2010;116(4):926–931. DOI: 10.1097/AOG.0b013e3181f38599.
- [2]. Bhatia M, Banerjee K, Dixit P. A Cross-Sectional Study On Assessment Of Variation In Caesarean Delivery Rates Between Public And Private Health Facilities In India From 2005 To 2016. *National Library Of Medicine*. 2020;3(8):E2015022.
- [3]. O'Sullivan JF. Caesarean Birth. *Ulster Med J* 1990;59(1):1–10.
- [4]. Lanneau GS, Muffley P, Magann EF. Chapter 74. Caesarean Births: Surgical Techniques, Vol. 2. In: *Gynecology And Obstetrics*. Lippincott; 2004.
- [5]. Vallejos Parás A, Espino S, Jaimes Betancourt L, Et Al. Obstetrician's Attitudes About Delivery Through Caesarean Section: A Study In Hospitals At Mexico City. *Perinatol Reprod Hum* 2018;32(1):19–26. DOI: 10.1016/J.Rph.2018.03.012.
- [6]. Tognon F, Borghero A, Putoto G, Et Al. Analysis Of Caesarean Section And Neonatal Outcome Using The Robson Classification In A Rural District Hospital In Tanzania: An Observational Retrospective Study. *BMJ Open* 2019;9(12):E033348. DOI: 10.1136/Bmjopen-2019-033348.
- [7]. American College Of Obstetricians And Gynecologists (ACOG). (2019). Obstetric Care Consensus No. 1: Safe Prevention Of The Primary Caesarean Delivery. *Obstetrics & Gynecology*, 133(4), E294-E307. (Used For FTP, TOLAC)
- [8]. American College Of Obstetricians And Gynecologists (ACOG). (2017). Committee Opinion No. 713: Antenatal Corticosteroid Therapy For Fetal Maturation. *Obstetrics & Gynecology*, 130(2), E102-E109. (Used For Preterm/Steroids)
- [9]. American College Of Obstetricians And Gynecologists (ACOG). (2020). Practice Bulletin No. 205: Vaginal Birth After Caesarean Delivery. *Obstetrics & Gynecology*, 133(2), E110-E127. (Reaffirmed 2021). (Used For TOLAC)
- [10]. American College Of Obstetricians And Gynecologists (ACOG). (2020). Committee Opinion No. 761: Caesarean Delivery On Maternal Request. *Obstetrics & Gynecology*, 133(1), E73-E77. (Used For Group 2/Tokophobia Context)