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Research Article

**A CROSS-SECTIONAL SURVEY ON PRACTICE ASSESSMENT  
OF THE MEDICAL SCHOLARS ABOUT POST CAESAREAN  
SECTION (C-S) INITIATION OF MATERNAL ORAL FEEDING****Dr. Hina Zahra, Dr. Ismara Liaqat, Dr. Sana Shafqat**  
Lahore General Hospital**Abstract:**

**Objective:** Globally, Cesarean Section (C-S) is in the repeated surgical procedure [1]. Post-operative recovery is dependent on nutrition and diet. We aimed at the assessment of the practice and trend for an in-time initiation of the oral feeding of the mothers after C-S under RA (Regional Anesthesia). We also analyzed in our research the perspective of EBM (Evidence Based Medicine).

**Methodology:** Our research was cross-sectional survey which was carried out on 398 participants through a close ended questionnaire at Mayo Hospital, Lahore (August 2016 to September 2017).

**Results:** Early initiation was favored by (31.3%) participants in the time duration of (2 – 4) hours; whereas, (6 – 12) hours delay was reported by (84.6%); 61.6% were of the view that solid diet in early stage can be adverse and may cause wound dehiscence and ileus; burst abdomen was feared by 3.4%; whereas, no effect on wound was stated by (35.1%). Early recovery can be gained by uncomplicated C-S early maternal ambulation by (57%) respondents; whereas, spinal headache, giddiness and hypotension may be the outcome was thought by (43%).

**Conclusion:** Old trends and fear is reflected in the response of the participants about early initiation of the maternal oral feeding post C-S under illustration of RA instead of scientific evidence and practice. Confidence and experience can be spread through awareness campaigns. Great maternal satisfaction can be secured through an early maternal oral intake including cost effective recovery process and reduced gastro intestinal complications.

**Key Words:** Cesarean Section (C-S), Maternal Feeding, Ileus, Wound complications, Maternal Satisfaction and Regional Anesthesia (RA).

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**INTRODUCTION:**

Globally, Cesarean Section (C-S) is in the repeated surgical procedure (5% – 15%) [1, 2]. However, annual rate is about 13 million cases of C-S performed in the surgical practice which means twenty-four cases in a minute and per day 34,560 cases. A huge number of women are involved and experience C-S as a major surgical intervention. Health is dependent on positive nitrogen levels, nutrition and balanced diet after delivery. The long-standing post-operative trend of feeding is to refuse food and fluid post C-S till flatus passage or bowel sound return. RA do not affect the function of bowel whereby minimum gut handling is there [3].

Pregnant women are not feed for longer durations in the labor wards; for instance, non-operative cases who end up with C-S as a result of failed labor trial. Various hospitals have various policies in vogue about the food or fluid intake in the pregnant cases which ranges in the time span of twelve hours to twenty-four hours. There is no question raised about this practice of delayed or early feeding practice. Without any evidence the procedure has become a thumb rule in many of the clinical practices. Conflicting evidence has been reported by Database of Cochrane, about maternal feeding in case of C-S under RA [4]. Local trends of the Ob/Gyn practice need exploration in terms of maternal feeding after C-S under RA. Awareness campaigns can be helpful in the perception and practice development in the providers of healthcare facility. Which would deal with the associated confidence, experience and fears related to the oral maternal feeding of food or fluid after C-S under RA.

We aimed at the assessment of the practice and trend for an in-time initiation of the oral feeding of the mothers after C-S under RA (Regional Anesthesia). We also analyzed in our research the perspective of EBM (Evidence Based Medicine).

**METHODOLOGY:**

Our research was cross-sectional survey which was carried out on 398 participants through a close ended questionnaire at Mayo Hospital, Lahore (August 2016 to September 2017). We assumed an equal probability for right and wrong repose of the participants with P-value, error margin and confidence interval respectively 0.5, 5% and 95% in the total sample population. Responses were taken on a close ended questionnaire. Residents and postgraduates were respectively 39.8% and 60%. Clinical experience was observed as 5 years, 6 – 10

years and 10 years restively in 80%, 12.4% and 7.5% with a mean practice period of  $(4.22 \pm 5.2)$  years. We included Ob/Gyn specialization with a minimum of one-year experience after consent of the participant. Ethical approval and informed consent was secured before research commencement. Appropriate data was entered and analyzed through SPSS. Outcomes were presented in percentage, frequency, mean and SD about the practice and experience of the participants.

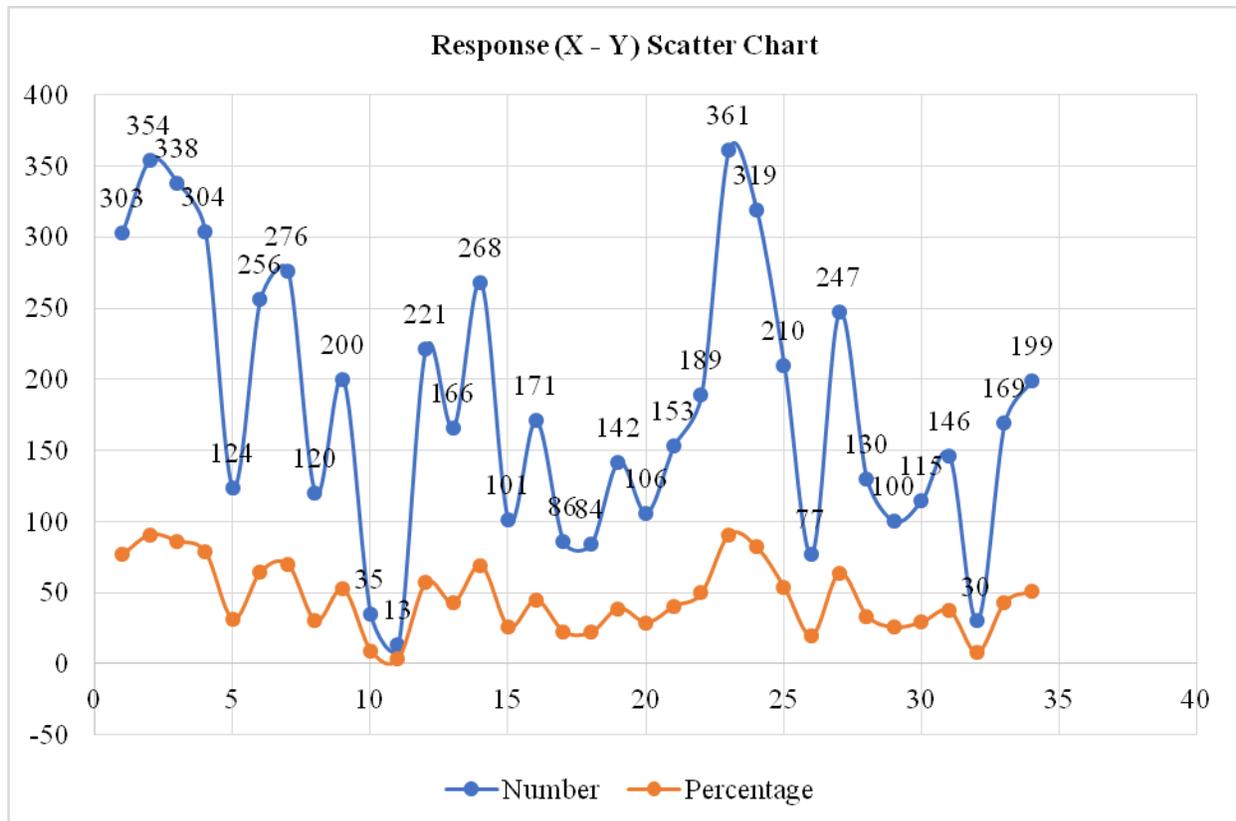
**RESULTS:**

Early initiation was favored by 124 respondents (31.3%) in the time duration of (2 – 4) hours; whereas, 6 – 12 hours delay was reported by 256 respondents (84.6%); 61.6% were of the view that solid diet in early stage can be adverse and may cause wound dehiscence and ileus; burst abdomen was feared by 3.4%; whereas, no effect on wound was stated by (35.1%). Early recovery can be gained by uncomplicated C-S early maternal ambulation by (57%) respondents; whereas, spinal headache, giddiness and hypotension may be the outcome was thought by (43%). We also asked about the spinal anesthesia level, 303 described it as L3 – L4 (76.9%); whereas, 354 disturbed lower limb nerve supply by SA (90.8%). According to 338 respondents (86.4%) postoperative ileus mild degree refers to complete bowel paralysis with complete bowel function absence. Breastfeeding can be helped by early feeding was reported by 304 respondents (78.6%). Abdominal distention and ileus was considered by 276 respondents (69.7%) in case of early liquid intake; whereas, 120 respondents (30.3%) reported no such effect.

Ileus may be a cause of solid intake in first four hours as proposed by 200 respondents (52.4%); whereas, wound dehiscence (9.2%), 13 respondents had burst abdomen fear (3.4%). Early ambulation was in consideration of 221 respondents (57%) through in time maternal feeding; whereas, 166 respondents (43.0%) related early ambulation with giddiness, spinal headache and hypotension. Nausea and vomiting was reported by 268 participants (69%) in the 2 – 4 hours fluid intake; whereas, 101 participants (26%) encouraged intake of food. Maternal satisfaction was reported by 71 participants (44.8%) in case of early diet initiation; whereas, 86 participants (22.5%) considered it as a discomfort and also a reason of delayed bowel functions recovery. Detailed outcomes analysis has been made in the given table and correspondent figure.

**Table:** Detailed Responses with Number and Percentage of Close Ended Questionnaire

Early Maternal Oral Feeding Initiation Responses	Number	Percentage
Spinal Anesthesia L3 - L4	303	76.9
Spinal Anesthesia Lower Limb Nerve Supply	354	90.8
Mild Degree Bowel Complete Paralysis	338	86.4
Breast Feeding Facilitation	304	78.6
2 - 4 Hours Preference	124	31.3
6 - 12 Hours Preference	256	64.6
Abdominal Distention and Ileus (Yes)	276	69.7
Abdominal Distention and Ileus (No)	120	30.3
First Four Hours Initiation: Ileus	200	52.4
First Four Hours Initiation: Wound Dehiscence	35	9.2
First Four Hours Initiation: Burst Abdomen	13	3.4
Early Ambulation	221	57
Early Ambulation Hypotension, Spinal Headache and Giddiness	166	43
Post-Operative Fluids (2 - 4 Hours) Vomiting, Nausea	268	69
Post-Operative Fluids (2 - 4 Hours) Encouraged	101	26
Maternal Satisfaction	171	44.8
Maternal Discomfort	86	22.5
Bowel Function delayed Recovery	84	22
Cost Effectiveness due to Recovery	142	38.9
Cost Enhancements due to Complications	106	29
Intense Thrust and Hunger Complaint	153	40.3
Oral Water and Clear Liquid Intake	189	49.7
Liquid as First Diet	361	90.9
Gut Sound as Marker	319	82
Intravenous (IV) Hydration	210	53.7
Intravenous (IV) Hydration to counter Hypotension	77	19.7
Non-complicated case discharge in 48 Hours	247	63.7
Three Days Stay	130	33.5
4 - 6 Hours Catheter Retention	100	25.5
12 Hours Catheter Retention	115	29.3
Catheter Retention till Next Day	146	37.2
2 - 4 Hours Catheter Removal	30	7.7
Intravenous (IV) Medication Continuation (24 Hours)	169	43.2
Oral Medications after 12 Hours	199	50.9



### DISCUSSION:

According to WHO no factors were compelling for normal or delayed food intake in the post C-S cases [5]. Present outcomes also support an early initiation of diet after C-S [6]. Early initiation has wide variation in its policy in various hospitals and clinical practice.

Sweet considers fluid intake after procedure and light diet intake as patient is ready [7]. Tolerance can be extended to fluids in flatus passage and bowel sound absence, oral food is restricted in case of sepsis or an extensive intra-abdominal manipulations (Gabbe) [8].

Gut sound presence is important for the initiation of oral diet, which is not compliant with the traditional viewpoint. Ileus can be prevented or reduced through SA as per the physiological facts review because of the prolonged Inhibitory Spinal Reflex arc [9 – 11]. Furthermore, an actual bowel function restoration leads clinical identifiable gut function symptoms by a minimum of twenty-four hours [12 – 14].

Six hours delay to the next day gap was favored by the number of conventional practices. One trial reported thirty minutes delay in the oral fluid intake initiation post C-S that resulted in earlier flatus passage and 1<sup>st</sup> stool without ileus increase.

Immediate offered intake is of fluids which is found in the obstetrician practice and confidence.

Liquid diet was preferred in our research by 90.9% respondents as initial feed after C-S procedure; whereas, regular diet is suggested by retrospective research studies [16, 17]. No evidence-based argument has supported the perception of nausea and vomiting. Studies show that food consumption in the post procedure time may initiate bowel peristalsis and earlier gut function restoration, which explains the early feeding reduced nausea [10]. Improved patient state can be observed in the one-hour fluid intake with improved thirst and hunger [18].

Numerous clinical investigations do not favor the incidence of wound dehiscence, abdominal distention and burst abdomen after C-S procedure [4, 5, 19 – 21]. Wound healing process is favored by delayed feeding and starvation [10, 19 – 21]. An early feeding is safe in the bowel resection cases and it has no relation with the post-operative increased gastrointestinal complications [22 – 24]. Maternal satisfaction is associated with the early imitation of maternal feeding [15, 20].

Postoperative giddiness, hypotension, urinary retention and spinal headache under RA may be

associated with prolonged patients' immobilization, intravenous fluids (I/V) continuation and catheter retention more than forty-eight hours after C-S procedure. Whereas, earlier ambulation was seen in early feeding cases which required low level of fluid and in time discontinuation of I/V fluids which is safe and beneficial for the mother and neonate [25 – 27].

### CONCLUSION:

Old trends and fear is reflected in the response of the participants about early initiation of the maternal oral feeding post C-S under illustration of RA instead of scientific evidence and practice. Confidence and experience can be spread through awareness campaigns. Great maternal satisfaction can be secured through an early maternal oral intake including cost effective recovery process and reduced gastro intestinal complications.

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