

# QUANTIFYING DEVIATION FROM PRE-OPERATIVE FASTING GUIDELINES FOR ELECTIVE CAESAREAN SECTIONS AT MATER DEI HOSPITAL

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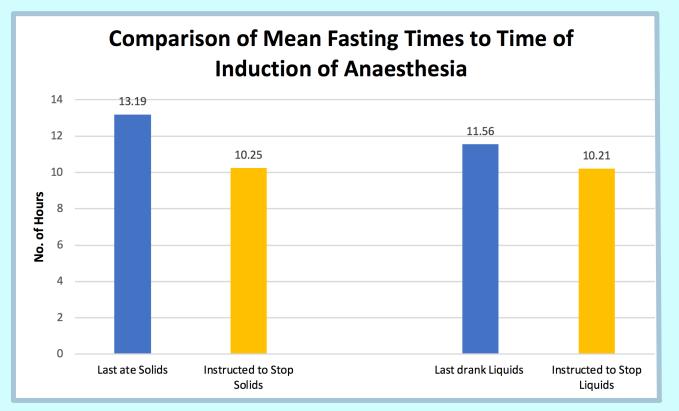
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### Introduction:

Prolonged preoperative fasting times may result in dehydration, hypoglycaemia, ketoacidosis and protracted recovery<sup>1</sup>.

## Method:

- Prospective audit.
- Identifying deviation from local Mater Dei Hospital (MDH) guidelines regarding pre-operative fasting times prior to elective Caesarean sections.
- Inclusion criteria: females above 18 years of age, who gave birth between September 2021 and December 2021.
- Data collected through patient interviews using a standard questionnaire.
- Data regarding time of induction was collected from anaesthetic sheets and obstetric operating theatre records.
- Microsoft Excel<sup>®</sup> was used to input and analyse data.



# <u>Results:</u>

Data collected from 135 participants shows that:

- Patients last ate a **mean** of **13.2 hours** prior to elective C-section versus a **mean** of **11.6 hours** for last having clear fluids.
- Mothers fasted x2.2 longer than required time of 6 hours for solid food, and x5.8 longer the required time of 2 hours for clear fluids, (Figure 1).
- Majority of patients were instructed to stop both eating and drinking at **midnight**, at **99.3%** and **98.5%** respectively.
- Earliest recorded time of induction of anaesthesia was
  8.30am, seen for 3% of patients.
- Mothers were instructed by healthcare professionals to stop eating solids for a mean of 10.3 hours, from midnight to time of induction, compared to 6 hours as per guideline. Thus mothers were instructed to fast x1.7 longer than standard, (Figure 1).
- Mothers were instructed by healthcare professionals to stop drinking clear fluids for a mean of 10.2 hours from midnight to time of induction, compared to 2 hours as per guideline. Thus mothers were instructed to fast x5.1 longer than standard, (Figure 1).
- **92.6%** of patients would have preferred to be given the **option** to keep drinking clear fluids for up to 2 hours before the C-section, (Figure 2).
- 81.5% of mothers would have taken clear fluids up to 2 hours

Figure 1. Comparison of Mean Fasting Times to Time of Induction of Anaesthesia



before the C-section had they been appropriately informed, (Figure 2).

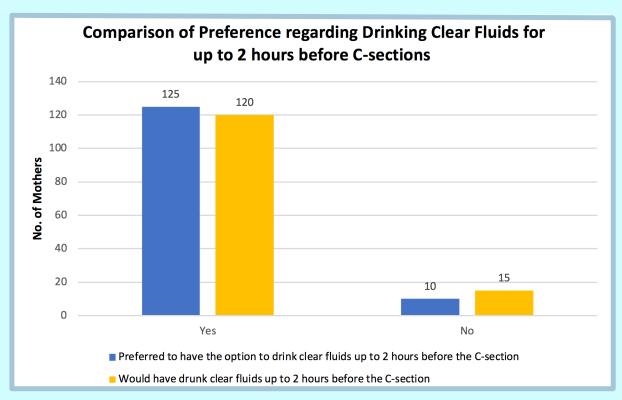


Figure 2. Comparison of Preference regarding drinking Clear Fluids for up to 2 hours before C-sections

#### **Recommendations:**

- 1. **Fasting times** can be **reduced** for both solids and liquids, with particular emphasis to liquids. Patients are admitted to general obstetric wards accommodating pre- and post-partum mothers and their newborns, possibly even sharing rooms. This results in frequent disturbances throughout the night and pre-operative mothers who wake up should be allowed to drink water after midnight up until two hours of the first scheduled time slot for elective C-sections.
- 2. **Better reinforcement** of the Mater Dei Hospital pre-operative fasting guideline with respect to stopping intake of clear fluids/water from 5.30am onwards of the day of procedure instead of midnight is therefore required.

3. Implementing the above is a change which the majority of patients agree with and thus would also **improve patient satisfaction**.

#### **REFERENCES:**

 YURASHEVICH, M., CHOW, A., KOWALCZYK, J. J., TRAYNOR, A. J., & CARVALHO, B. (2019). PREOPERATIVE FASTING TIMES FOR PATIENTS UNDERGOING CAESAREAN DELIVERY: BEFORE AND AFTER A PATIENT EDUCATIONAL INITIATIVE. TURKISH JOURNAL OF ANAESTHESIOLOGY AND REANIMATION, 47(4), 282–286. HTTPS://DOI.ORG/10.5152/TJAR.2019.95770
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