

**The myth of superfluous pre-operative NPO after midnight**Eman Alamgir<sup>1</sup>, Unsa Alamgir<sup>2</sup>, Iqra Alamgir<sup>3</sup>

*Madam*, Pre-operative nil per os or nothing by mouth from midnight practice has been in work since 1960s.<sup>1</sup> Its indiscriminate use is believed to prevent perioperative aspiration causing pneumonia,<sup>2</sup> respiratory failure, morbidity and mortality. In almost every hospital in Pakistan and globally, the fasting orders from midnight are excessively used in case of morning elective surgical and medical procedures using general or regional anaesthesia.<sup>3</sup> These do not take into account the duration and type of surgery, type of sedation, choice of airway, risk stratification for increased chances of aspiration such as obesity, age, esophageal disorders.<sup>4</sup>

However, the revolutionised current guidelines for pre-operative fasting by ASA<sup>5,6</sup> suggest the much shorter **"2-4-6" hour rule** with NPO for two hours for clear liquids, four hours for breast milk and six hours for solids. Hence, the awareness about this myth needs to change in Pakistani healthcare centres.

Recent studies have led to a more sophisticated understanding of gastric emptying and pH of gastric contents. For instance, a cochrane review showed no statistical difference in gastric volumes or stomach pH in patients on a prolonged standard fast vs shortened (<180 minute) liquid fast.<sup>7</sup> Furthermore, the 2-4-6 rule minimises the risk of dehydration, electrolyte imbalance, patient discomfort (thirst, hunger, nausea, vomiting, anxiety),<sup>8</sup> hypoglycaemia, intraoperative haemodynamic instability, post-operative dehydration and extended hospital stay. In this way patient cooperation and satisfaction can be increased.

Therefore, it is high time to change the highly controversial NPO policy to reach the international healthcare standard.

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