Neuraxial blockade is well recognised as the gold standard in the provision of labour analgesia. However, it may not always be available or accepted by women, particularly in those with contraindications.

Alternatives such as pethidine and nitrous oxide suffer from inadequate analgesia and adverse effects. IV remfentanil has emerged as one of these options. The unique pharmacology of remifentanil behoves a rapid elimination from circulation and renders it suitable to be administered intravenously in a patient controlled manner.

Remifentanil has been found to produce modest analgesia in the first stage of labour and some relief in the second stage. It has been found to be more effective than nitrous oxide and most of the other opioids, though inferior to neuraxial block.

There are gaps in terms of safety and effectiveness of analgesia with remifentanil. Remifentanil has been shown to result in inadvertent cardiorespiratory collapse and patients who receive this mode of analgesia require very close monitoring.

Recently, the RemiPCA network has been establish to enhance safety and refine the delivery of PCA remifentanil. The regimen of PCA remifentanil remains controversial in terms of bolus size and the need for continuous infusion.

The establishment of vital signs-controlled patient assisted analgesia entails close maternal arterial oxygen saturation to control the dosages required, which are in turn modified according to patients' history of use.

Vital signs-controlled patient assisted analgesia has been shown to provide satisfactory analgesia in early labour; the use of vital signs-controlled patient assisted analgesia could potentially enhance safety apart from affording individualised treatment for our patients.