ABSTRACT

This paper presents the findings from two studies of the PartoPen system – a digital pen software application that enhances the partograph, a paper-based labor-monitoring tool used in developing regions. Previous studies have shown that correct use of the partograph significantly reduces pregnancy complications; however, partographs are not always correctly completed due to resource and training challenges. The PartoPen addresses these challenges by providing real-time decision support, instructions, and patient-specific reminders. The preliminary studies described in this paper examine how the PartoPen system affects classroom-based partograph training among nursing students at the University of Nairobi, and partograph completion in labor theater use by nurse midwives at Kenyatta National Hospital in Nairobi, Kenya. Initial results indicate that using the PartoPen system enhances student performance on partograph worksheets, and that use of the PartoPen system in labor wards positively affects partograph completion rates and nurses' level of expertise using the partograph form.