Development of bilirubin jaundice (*BiliDice*) device for neonates

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ABSTRACT

In Malaysia, generally the blood samples are taken and various laboratory experiments are performed to determine the exact jaundice level for newborn. As the process is repetitive, it causes trauma to infants and also requires experts to perform the test. In this paper, the bilirubin jaundice so-called *BiliDice* device is proposed. The device consists of three main components: RGB colour sensor, microcontroller, and LCD display. The advantage of this prototype is affordable and portable. This device is simple, easy to handle, fast and accurate readings for the bilirubin level of the newborn.

KEYWORDS

Neonatal jaundice; bilirubin; color sensor; Arduino uno; phototherapy

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