植基於RFID的可移動式病人緊急呼叫機制之設計與實作

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摘 要

RFID被IT趨勢專家譽為影響未來的十大技術之一，其應用層面已擴展到物流、醫療、運輸以及產品管理等多項領域，尤其是2004年的SARS疫情，更加速推動了RFID興起與應用的快速發展。 在病人發生意外的4分鐘內是救人的黃金時間，尤其是在浴室、陽台、電梯以及樓梯間等較為隱秘或是偏僻的地點發生意外時的求援及救援，就必須要把握這4分鐘的黃金時間。而現有醫療環境的緊急呼叫機制大多使用傳統電子式呼叫系統，固定於特定位置才能呼叫，但病人發生緊急事件時不一定會剛好在這些位置，此時便容易錯失急救的黃金時間。由美國醫療評鑑單位JCAHO所提出的2006年14項目標之目標六—提升臨床警示系統的有效性，可以知道在臨床上的警示系統極具重要性，故本研究採用RFID來建立一個可移動式緊急呼叫系統，讓病人不再侷限於固定位置才能求援，只要在醫院內部皆可以發出緊急呼叫訊號，警報系統在收到緊急呼叫訊號後會立即通知相關單位救援。相信藉由這樣的一個可移動式緊急呼救機制必可提高醫療服務品質，以降低人為疏失所導致醫療過失的發生機率。本研究最後亦實際模擬測試，以驗證所提機制之效益。

關鍵詞 : RFID ; 醫療品質 ; 病人警訊系統 ; 可移動式

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