依 NANDA、NOC、NIC 標準建置護理過程知識基礎決策支援系統

－以國內精神衛生為例

Building a Knowledge-Based Decision Support System according to NANDA, NOC, and NIC Standard in Nursing Process for Psychiatric Mental Health Department

中文摘要

自民國八十一年國內開始發展護理資訊至今，多是以內外科及其相近科別為主軸，對於照護作業具有極大差異之精神衛生護理僅能勉強套用不合身的系統，不只臨床護理人員無法展現其特有的專業護理能力，病人亦無法獲得最適切的照護。現今護理人員已覺知並致力擺脫於大眾心目中「By order（依醫囑執業）」的形象，強調展現自主性專業能力。

「護理過程」是護理人員執業中最重要的一項工具，係以科學與哲學為基礎，有組織、有系統問題解決及決策的方法，經由以為個案計畫，並依據所擬定照護實務架構提供動態連續性個別化照護之過程。目前國內護理界一致認同護理過程之流程架構，但在內容部份卻無共識，各醫療機構自行發展，導致護理作業缺乏系統性及標準化，對病人照護是一種危機，就護理資訊發展亦是一大阻礙。因此，護理領域迫切需要建立將診斷、成果及措施相互聯結的護理資料庫，提供適切照護以達最佳的病人結果。

本研究秉持發展精神衛生護理過程資訊系統之宗旨，結合護理專家、臨床護理專家及臨床護理人員共同合作，藉由電腦資訊推論歸納技術及強大運算能力建構知識基礎模型輔助擬定決策，使護理過程可被以正確執行。研究系統應用護理標準 NANDA 護理診斷手冊、NOC 護理成果分類及 NIC 護理措施分類及精神衛生護理學業認可之護理評估能力指標－五大層面整體性護理評估，採用臨床效度測試法驗證護理決策資料，以推論引擎轉換為權重指標，建置知識基礎資料庫以輔助臨床護理決策得以正確執行。運用系統呈現之介面文字，無形中將護理標準引入日常照護活動中，推翻缺乏共通性及以口耳相傳成就之經驗法則的現況，協助護理人員改採行符合規範及國際標準模式進行護理過程。

根據滿意度問卷調查，反應使用者滿意並願意於臨床工作中接受本研究系統且認同以系統設定之護理標準進行護理作業，對於系統提供之決策支援輔助可協助適切、快速進行連續性個別化護理過程感到滿意，在縮短不必要之護理活動時間上，平均執行每位新入院病人入院照護最多節省 12 分鐘以上；另外，護理人員決策能力之靈感度及特異度，在八項精神科急性病房常見護理診斷呈現普遍成長至九成之上。由此可知，本研究系統已達成輔助護理作業之進行，並確實為臨床照護帶來實質效益。

英文摘要

The nursing informatics system has been developed in medical and surgical nursing and other similar departments since 1992 in Taiwan. The care system of the psychiatric mental health nursing is very different from others. If nurses use the existing system, patients will not be able to access the appropriate care, and clinical nurses can't demonstrate their unique nursing professional abilities. Today the nursing profession has made an agreement on the frame of nursing process; however, its content is unclear and varies by different institutes/ hospitals. This phenomenon has become a major obstacle in caring patients and information development.

The purpose of the study was to focus on using the inference and computing ability of computer and professional opinions as a reference to build a knowledge-based model which met the standard of "North American Nursing Diagnosis Association Nursing Diagnosis Handbook", "Nursing Outcomes Classification", "Nursing Interventions Classification". The guideless of clinical competencies for mental health nursing assessments developed by the Psychiatric Mental Health Nurses Association was allowed to assist making decision process in assuring the clinical diagnosis validity executed properly. The results indicated that, nurse staff was satisfied with the interface of the system and took proper actions to save twelve minutes. Within this system, the decision making ability of nurse staff also showed the increased sensitivity and specificity beyond ninety percent. Consequently, this informatics system of psychiatric mental health could assist nurses making nursing process to improve the quality of nursing care.