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AN OCCUPATIONAL HEALTH AND SAFETY INTERACTIVE SYSTEMS MODEL EXPLICATING ACCIDENT/INJURY CAUSATION

A thesis submitted in fulfilment of the requirements for the award of the degree of

DOCTOR OF PHILOSOPHY

from

THE UNIVERSITY OF WOLLONGONG

by

Jan Pincombe RN, RM, RIN, BA (University of Western Australia),
Post Grad Dip. (UWA), M. Appl. Sci. (WAIT).

DEPARTMENT OF NURSING

I certify that the work contained in this thesis has not been submitted for a degree to any other university or institution. The thesis contains my work entirely.
Signed

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ABSTRACT

This study is concerned with the development of an occupational health and safety model, which provides an explanation for accident/injury causation in nurses. A multiple causation theoretical approach was adopted. The model shows that there are four input determinants, (namely, educational, environmental, management and social) that contribute towards accident/injury causation. Three main processes also contribute, specifically client/patient centred, organisational and nurse centred processes.

The model was developed using both qualitative and quantitative methods. The first stage of the study consisted of collecting data from nurses using an open-ended interview (technique). Content analysis was applied to the resultant responses from which a data gathering instrument was developed. A pilot study was conducted to enunciate specific hypotheses, test the content validity of the instrument and to develop a nursing model.

The main research instrument, designated as The Occupational Health and Safety Nursing Instrument (OH&SNI) was administered to registered nurses from four hospitals and three groups of nursing students from one tertiary institution. Two hundred and sixty seven registered nurses from a defined area health service, and from hospitals associated with the clinical teaching of the tertiary nursing programme were involved in the study. One hundred and eighty-four nursing students participated in the study.

One general research question and seven hypotheses were postulated to investigate the applicability of inputs and processes articulated in the model. Chi-square results revealed attitudinal trends for the four groups of registered nurses and three groups of nursing students in the study. Registered nurses' and nursing students' responses were reduced to a two by two contingency table to check differences in acceptance ("strongly agree/agree") and rejection ("disagree/strongly disagree") levels. The factors in the

model were supported when each question from the respondents was tested on an acceptance or rejection level (tested in each case by the chi-squared goodness of fit statistic). Case history data collected from a small number of injured nurses also gave further support to the model.

The model showed inputs and processes interacted to explain accident/injury causation and demonstrated support for a multiple causation theory explanation. The model showed that certain preventive measures can be effected to help prevent accident/injury causation.

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