# PATIENTS WHO FALL IN HOSPITAL — CONTRIBUTING FACTORS

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#### **OPSOMMING**

Die faktore wat bydra tot beserings by pasiënte wat val is bestudeer. Hiervoor is die verslae oor insidente waarin pasiënte in 'n Blanke provinsiale hospitaal tussen 1 Januarie en 30 Junie 1982 geval het, ontleed.

Aan die hand van bevindings maak die navorsers aanbevelings oor wanneer en by watter tipe pasiënte verpleegkundiges meer waaksaam moet wees. Hulle beveel ook aan dat meer besonderhede oor insidente in die verslae aangeteken moet word.

#### INTRODUCTION

This is a retrospective study of the factors which contributed to accidental injuries sustained by those patients who fell in a White provincial hospital in die period 1 January to 30 June 1982.

The research study was undertaken by Diploma in Nursing Administration students during their 3-week hospital practica at a White provincial hospital.

#### **RESEARCH DESIGN**

#### Problem

In order to reduce the incidence of falls (and consequent accidental injuries) those factors which contribute to falls must be identified.

#### **Objectives**

- To determine the number of falling incidents involving patients who were in the hospital between 1 January and 30 June 1982.
- To identify any specific area(s) within the hospital which may be considered as *higher-risk* areas.
- To classify the types of patients who fell.
- To determine the age-groups of those patients who fell to identify *high-risk age-groups*.
- To determine the ratio of falls with regard to day and night duty.
- To draw conclusions and make

any recommendations if necessary.

#### **Definition of Criteria**

**Patients** — any persons in hospital for the purpose of medical treatment.

Accidental Injury — any non-intentional impairment, harm or hurt experienced by a patient as the result of a fall.

Fall — the situation whereby the patient either ceases to stand or becomes prostrate and actually reaches the floor.

**Hospital** — for the purpose of this study refers to the White provincial hospital where the study was undertaken.

#### **Collection of Data**

Statement forms (written by nursing staff and kept by the matron's office) will be perused to identify the patients who fell in the hospital during the period mentioned and to extract the relevant information.

Relevant literature will be obtained from the hospital librarian.

#### **Time Barriers**

- completion of perusal of statement forms 12.7.82
- compilation of comparative and quantitive charts 19.7.82
- interpretation of charts 20.7.82
- completion of project 23.7.82

#### Advancement of Study

Significant recommendations will be made and the complete study handed in to the Chief Matron of the hospital.

#### COMMENTS ON THE DATA COLLECTION

The policy of the hospital concerned requires that the details of each incident which involves a patient falling are recorded and reported in duplicate on a prescribed statement form.

These statements are completed by the nursing personnel. The nurse in charge of the ward at the time of the incident and the nurse who saw, heard of or who was involved in the incident, both sign this statement. The patient's doctor is notified and is required to endorse the statement as soon as possible after the incident.

The copy of the statement is filed with the patient's case-sheet. The original is submitted to the matron of the hospital for noting, possible comment and filing.

For the purpose of this study it was assumed that every incident was in fact reported in this manner. All the statement forms for the period mentioned were perused and those that did not pertain to incidents in which a patient had fallen were eliminated.

Fifty four statements were extracted and the following information was noted from each:

- the patient's name
- the patient's registered number
- the patient's age
- the medical diagnosis
- the ward in which the patient fell
- the time of the incident
- details as recorded by the nursing personnel
- injuries sustained (if any) by the patient.

CURATIONIS

The hospital librarian was asked to obtain any relevant literature pertaining to patient injuries in a hospital, and after several hours of searching managed to find only two references:

Chipman, C: What does it mean when a patient falls? PART 1: Pinpointing the cause. Geriatrics 36(9) Sept. 1981 p. 83-95.

Morris, E V: The prevention of falls in a geriatric hospital. Age Ageing 10(23) Aug. 1981 p. 165-168.

Unfortunately it was not possible to refer to these articles in this study because time did not permit them being obtained. The fact that very little documentation existed only served to provide a greater challenge.

It is also unfortunate that the case-sheets of those patients involved were not perused. Any important pre-disposing factors are not known and can only be presumed to be of some significance. This includes factors such as:

- medication
- night sedation
- post-anaesthetic physiological instability
- time of incident in relation to any procedure being performed.

The conclusions drawn and the recommendations made in this study are based only on the information obtained from the statement forms.

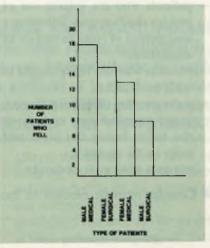
#### FINDINGS

• A total of 54 patients fell in the hospital during the period 1 January to 30 June 1982. These can be subdivided as follows:

- 26 fell out of bed or while trying to get out of bed (48,2%)
- 10 slipped (18,5 %)
- 8 fell while trying to stand up from the commode (14,8%)
- 6 fell while trying to stand up from a chair (11,1 %)
- 4 collapsed while standing or walking (7,4 %)
- 18 male medical patients fell (33.3%)
- 15 female surgical patients fell (27,8%)
- 13 female medical patients fell (24, 1%)
- 8 male surgical patients fell (14,8%) (see also figure 1)

**MAART 1983** 

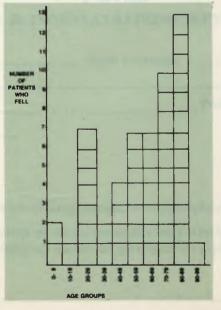
FIGURE 1: GRAPH ILLUSTRAT-ING THE INCIDENCE OF FALLS ACCORDING TO SEX AND TYPE OF PATIENTS WHO FELL IN A WHITE PROVINCIAL HOSPITAL **IN THE PERIOD 1 JANUARY 1982** TO 30 JUNE 1982.



 The following information was extracted regarding the age groups of patients who fell (see also figure 2):

80-89 years	13
70-79 years	10
20-29 years	7 in each
50-59 years	group
60-69 years	
40-49 years	4
0-9 years (	2 in each
30-39 years J	group
10-19 years	1 in each
90-99 years ?	group

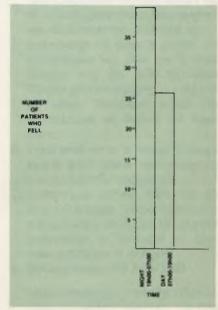
FIGURE 2: GRAPH ILLUSTRAT-ING THE INCIDENCE OF FALLS ACCORDING TO THE AGE OF PATIENTS WHO FELL IN A WHITE PROVINCIAL HOSPITAL **IN THE PERIOD 1 JANUARY 1982** TO 30 JUNE 1982.



• The number of falls on day duty and night duty were as follows (see also figure 3):

- 34 fell between 19h00 07h00 (night duty) 62,9 %
- 20 fell between 07h00 19h00 (day duty) 37,1 %
- The injuries sustained included
- a fractured leg in one patient,
- lacerations.
- contusions.
- abrasions.
- slight localised swelling,
- small cuts not requiring suturing.

FIGURE 3: GRAPH ILLUSTRAT-ING THE TIME OF DAY AT WHICH PATIENTS FELL IN A WHITE PROVINCIAL HOSPITAL **IN THE PERIOD 1 JANUARY 1982 TO 30 JUNE 1982** 



- After effects included
- headache
- shock
- confusion in one patient.

Thirty-three patients suffered no ill-effects or did not sustain any injuries at all.

• The medical diagnoses did not appear to be of any contributory significance, the only diagnoses worth noting being:

- diabetes in four patients
- cerebro-vascular accident in five patients.

• There is a low occurrence of patients falling in wards that consist of single rooms compared to the general wards.

• The statement forms did not always give enough information regarding the predisposing causes or factors which may have contributed to the patients' falls, for example

- night sedations/medications given were not mentioned
- post-operative day was not included in surgical cases
- all staff on duty at the time of the incident were not adequately accounter for
- the mental state of patients was not mentioned.

## RECOMMENDATIONS AND CONCLUSIONS

• Increased vigilance and supervision must be implemented in the following instances:

- male medical patients
- female medical patients

- patients in the age-groups 20-29 years, above 50 years of age and especially above 70 years.
- on night duty (seven falls above the average of 27).

• Nursing personnel must be aware of the vulnerability of the following:

- patients who are getting out of bed for the first time following a long period of lying in bed or an anaesthetic
- patients who are being taught to walk on crutches
- patients who have been given a sedative and who get up to go to the toilet during the night and early in the morning
- patients who wear bedsocks.
- Cotsides must be erected on the

bed of any patient who is disorientated and confused. Where absolutely necessary a large, soft covering net could be used over the cotside.

• Statements must be more detailed as it was difficult to ascertain by the information given in some instances how the patient came to be on the floor.

#### ACKNOWLEDGEMENTS

The participants in this study would like to express their gratitude to the Chief Nursing Officer of Natal, the Deputy Chief Nursing Officer and the Chief Matron of the hospital where the study was undertaken. Without their enthusiasm and support, this experience would never have been possible.