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AN EVALUATION OF THE QUALITY OF NURSING RECEIVED BY PATIENTS IN SELECTED HOSPITAL WARDS

Geraldine Elizabeth Negroni Jackson

A Dissertation Submitted to the Faculty of Medicine, University of the Witwatersrand, Johannesburg, for the Degree of Master of Science in nursing.

Johannesburg 1985

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ABSTRACT

AN EVALUATION OF THE QUALITY OF NURSING RECEIVED BY PATIENTS IN SELECTED HOSPITAL WARDS.

JACKSON, Geraldine Elizabeth Negroni, B.A., D.N.Ed., D.N.Ad., University of the Witwatersrand, 1985.

This is a descriptive study of patient care in six selected adult wards of a 2000-bed academic hospital. The observational method was used, and the Quality Patient Care Scale (Qualpacs), designed to measure the quality of nursing received by patients while the care is in progress, was the instrument used.

The objectives of the study were:
(i) to accumulate quantitative and qualitative data in order to identify the nature of the patient care activities and to form an opinion about the quality of care;
(ii) to evaluate the measuring instrument.

The observations were carried out in 3 surgical and 3 medical wards over 6 weeks, with 3 consecutive midweek mornings spent in each ward. The 2 hour observation periods were 8h00-10h00 and 10h30-12h30. Altogether 54 patients were observed, and 11 repeat observations were carried out, giving a total of 65 observations. Co-observers concurrently observed 43 of them.

A considerable amount of data was collected. This was processed to produce information about the nature of the patient care activities, the time fluctuations of the activities, and the caregiver involvement in them. The Qualpacs scale yielded scores which were used to form an opinion about the standard of care. Computer analyses were included in this aspect of the data processing. In addition, tests were carried out to assess the reliability of the scale.

From the data the candidate was able to draw conclusions about the nature of the patient care activities, the time and caregiver dimensions of care, and the standard of care. She also evaluated the research instrument, and made recommendations for its future use in the hospital setting.

DECLARATION

I declare that this dissertation is my own, unaided work. It is being submitted for the degree of Master of Science in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other University.

---DAY OF---1985

PREFACE

As a nurse deeply interested in the vocation of nursing, the candidate has always been aware of the complex issues surrounding the profession. Over the years nursing practice has changed. Theories and models have been devised, philosophical issues debated, ideas discussed and discarded; but as quickly as answers are found, changing circumstances produce new questions requiring new solutions.

In this study the student has returned to the age old question: "What is nursing?" She has taken a primary factor in nursing, the patient. She has gone into a primary setting for nursing practice, the hospital ward run by the ward sister, where admission procedures transform people into patients. She has observed the patient, recorded the patient-centred activities and used a rating scale to measure the quality of patient care. Under the guidance of her supervisors, also nurses, she has attempted to find for herself some of the answers to the question, "What is nursing?"

Because of the limited scope of the research study the answers are incomplete. However, it was possible to identify the nature of some of the patient care activities, to form an opinion about the quality of care and to critically evaluate the measuring instrument. It is hoped that some of the findings in this project will be of use to others in the search for a deeper knowledge and understanding of the practice of nursing.

ACKNOWLEDGEMENTS

Besides the immeasurable support and encouragement of my husband and family, I want to thank my supervisors, Professor S.B. Williamson and Mrs. M. Marcovich, who spent many hours helping me to work through problems, and kept my endeavours firmly in the direction of progress.

For his skilled technical help my thanks to Dr. S.G. Reinach of the Institute of Biostatistics of the South African Medical Research Council who so competently organised the computer analysis of the data.

To my warm-hearted colleagues in the departments of nursing education, Val Rohland, Colleen Osler, Lesley Block, Linda Kloeck, Lynn Miller, Rayna Labe, Rita Howard and Pat McInerney, who freely gave of their own time to act as co-observers when I so desperately needed them, my deepest appreciation of their generous help.

And, last but certainly not least, to my daughter, Joy, who patiently plodded through the interminable typing and her husband, Chris, who helped us both, my sincere thanks for all their warmth, patience and support.

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Abbreviations:

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AN EVALUATION OF THE QUALITY OF NURSING RECEIVED BY PATIENTS IN SELECTED HOSPITAL WARDS

I INTRODUCTION

1.0 The Nature and Scope of this Study

This is a descriptive study of patient care in selected hospital wards carried out in order to identify the nature of that care and to determine its quality.

The method chosen was direct observation. A convenient and tested scale had been developed in America to evaluate the quality of patient care while the care was in progress. This seemed a suitable tool to use for this study, and at the same time to assess its usefulness as a measuring instrument for future use in establishing and maintaining standards of care.

There are many limitations to the study. There are the deficiencies of all observational studies, and the restrictions of insufficient time, money and assistants. There was also the researcher's own lack of knowledge and experience.

For these reasons it was decided to keep the research design small. The research boundaries were set close to the patient, and no attempt was made to examine such things as ward staffing, off duties, etc., etc. The research instrument enabled a value measurement to be ascribed to patient care activities and also yielded a considerable amount of quantitative data. It was expected that the findings would be of use in future research into patient care.

1.1 The Motivation for this Study

When the study was carried out there was no established system in the wards for measuring the care being received by patients.

In any large, busy modern hospital there is little time to stop and examine the system. Hundreds of people arrive at the hospital with a problem and are processed into becoming patients. They are numerically coded, assessed, examined, investigated and given a diagnostic label. Treatment is carried out and response to treatment monitored as they progress towards recovery, chronicity or death. In all this time, as patients, they are in the care of the hospital workers who direct, control and

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process them for their own ultimate benefit. As wage earners, taxpayers or merely as citizens of the state, the public ultimately bears the cost of this expensive service.

In recent years there has been an increasing awareness of the need to review the system constantly in terms of both cost and quality to ensure that it is rendering an efficient cost-effective service. Numerous ways of checking on the system have been devised in all fields of hospital work, including nursing.

Professional nurses have always striven to provide a high standard of care for their patients, no less in South Africa than in other parts of the world. But rapid changes have had their impact on nursing as on every other aspect of modern society. It has become necessary to review the nurse's role and to adjust nursing ideas and practice in keeping with the vast evolutionary changes that have taken place.

This has led to a whole new concept of nursing practice. Tasks which used to be important have become an insignificant part of the nurse's daily work. Concern with the essentially physical aspects of care has been broadened to accommodate psychological, social and philosophical aspects of the patient's being. More and more nurses are accepting a systems theory based problem-solving approach to nursing which is generally known as the Nursing Process.

At the time of this study nursing practice in the hospital had taken only a few tentative steps in this direction. It seemed to the researcher to be opportune to take an objective look at current nursing practice in the wards in order to identify its present state and to make recommendations for its future development.

1.2 The Objectives of the Study

1.2.1 The Primary Objective

The primary purpose of this study was to observe patient care in action in a hospital ward in order to accumulate data about that care. It was concerned with evaluating the quality of care.

Quality is defined as "the nature, character, property or kind" or "degree of excellence" of something, while to evaluate is "to ascertain the worth of " or "to find a numerical expression for". (1,2,3,4)

A great deal has been published in this field, and in a review of the literature Sheila Openshaw says: "...the measurement of health provision is by no means an easy undertaking...it may not be possible to measure the adequacy of care in an overall fashion for some considerable time...The challenge lies in identifying alternative ways of looking at the research question, in starting again right at the beginning, and asking what central component is common to all nursing care, and then tackling that question in a smaller design."(5)

There is little doubt that an important central component common to all nursing care is the patient. In this study the researcher has focused on the patient. She has observed the patient care activities and endeavoured to quantify them and to ascribe a quality rating to them in order to identify the nature of the activities and to determine their worth.

1.2.2 The Secondary Purpose of this Study

A secondary purpose was to assess the measuring instrument. It is claimed by its authors to have potential in several areas. They say:

"Qualpacs may be used to determine the level of quality of nursing care provided by any nursing program or subunit of a larger program.

Qualpacs may be used to serve administrative, supervisory, and educational purposes, many of which are suggested in the following:

For administration, it may be used at the levels of the board of directors, the agency administration, or director of nursing service:

To provide information about the level of quality of care being received by patients.

To account for the execution of a service responsibility to:

board of directors
agency administrator
payment agencies
accreditation agency
grantors
community served
etc.

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To account for the execution of a service responsibility to:

board of directors
agency administrator
payment agencies
accreditation agency
grantors
community served
etc.

For supervisors, it may be used:

To account to administration for the level of quality of the nursing program.

To identify strengths and weaknesses, which may be used as bases for providing inservice educational programs, supervisory assistance, modifications of programs, and improvements in equipment, facilities, and staff utilization.

To determine effectiveness of changes in program, staffing, or equipment.

For educators, it may be used:

To determine effectiveness of a teaching program.

To alert personnel to often-neglected elements of care.

As a teaching aid, to improve alertness in observations.

Essentially, Qualpacs serves the interests and purposes of persons concerned with the care of patients, at all levels of responsibility: the board of directors of the agency, the administrator, the director of nursing, and the staff members on individual patient-care areas.

Qualpacs has been demonstrated to be particularly useful to instructors in beginning nursing education programs, when used by students who are learning to observe patients in the patient-care setting. Students as well as instructors have reported enthusiasm for the effectiveness of the tool so used." (6)

In this study the researcher proposed to assess the practicability of using the scale for these or other purposes.

Chapter I

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II LITERATURE SURVEY

2.0 Introduction

A great deal has been written about quality assurance in the health care services, including nursing. For the purposes of this study the researcher has selected material which is relevant to the following aspects of the topic:

1. A brief historical survey of the development of quality assurance in nursing.
2. Recent literature on quality assurance in nursing.
3. Published reports on the Quality Patient Care Scale.
4. Theories and concepts relating to this study.

2.1 Historical Survey of the Development of Quality Assurance in Nursing.

Although the modern implications of the term "quality assurance" would probably be totally foreign to her, Florence Nightingale's concern when she went to the Crimea in 1854 was with the quality of health care there. Her written reports and her use of morbidity and mortality statistics helped "to persuade a national government to alter its health services."(1)

Originally performance appraisal was the main form of quality assurance. "It has been associated with work for centuries."(2) As early as 1000 BC the Chinese used an evaluation system for selecting civil service leaders.(3) In the developing West performance appraisal was associated with task performance and 'time and motion' studies, during the early part of the twentieth century, but gradually other dimensions were added.(4) Rating scales were introduced during World War I, and leadership skills were evaluated.(5) Personality and behavioural elements were added in the 1930's and 1940's.(6) During World War II John Flanagan introduced the use of the 'Critical Incident Technique'(7) and by the mid 1950's 'management by objectives' (MBO) was making an "impact on the performance evaluation system of many organizations."(8)

All these developments had their influence on quality assurance in nursing, but until the 1970's nursing retained "a relatively narrow perspective in the evaluative field."(9)

A working group of the World Health Organization, which met from 18th - 21st October, 1977 to evaluate inpatient nursing practice, reported (1979): "on review of the current status of evaluation of inpatient nursing practice in the various countries represented, it was agreed that it was inadequate."(10) The representatives were all from European countries.

In America, a few years later, Veninga (1982) said,"the health system .....is undergoing a series of revolutions .....(which) relate directly to the quality of life of every citizen."(11) The foundations of these changes were laid "in the 1950's when Paul A. Lembcke developed what he called medical auditing by scientific methods," a precursor "of the best patient care evaluation methodologies in use today."(12) At about the same time (in 1952) the Joint Commission on Accreditation of Hospitals (JCAH) was formed, "an organisation destined to have a profound impact on the delivery of health care in the United States."(13)

"In the 1960's the impact of JCAH standards grew" as hospitals sought accreditation in order to be eligible for medical aid reimbursements,(14) and in 1970 new JCAH standards were added in nursing and other health services.(15) Also in 1970 Professional Standards Review Organizations (PSRO) were established by Congress in each State "for the purpose of monitoring all medical services reimbursed under provisions of the Social Security Act.(16)

Thus, "the 1970's provided an atmosphere of rapid growth for various types of objective medical care evaluation"(17) and "the malpractice insurance crisis of 1974-1976" caused many hospitals to establish risk management programmes which are now seen as an integral part of quality assurance." (Monagle,1980)(18)

It can be seen, then, that "attempting to measure the effectiveness of care is a relatively recent activity"(19) in nursing, with its main impetus coming from the United States "where legislation concerned with accreditation of hospitals" caused hospitals to adopt "an organized policy for reviewing their professional performances"(20) and paving the way for American nurses to lead the world in developing systems for the evaluation of nursing care.

At present the accreditation system in America is under criticism. "Many states have begun to reform their credentialing practices."(21) In 1981 Congress decided to curtail PSRO activity(22) and Professional Review Organizations (PRO's) are being substituted in their place.(23) Computers are enabling complex new systems to be used such as a "Prospective Pricing System (PPS)"(24) which is being linked to a computer-based patient classification system "Diagnosis Related Groups (DRG's)"

(25) and nurses are moving into the computer world in all fields of health care.

Lee (1982) says:"No computer has ever cared for a patient or performed a nursing function."(26) But computers can process patient data and nursing information in a way that promotes the quality of care.(27) "New applications are being developed .....constantly so the picture changes daily."(28)

In a lecture delivered at the Royal College of Nursing, London, 6 June 1984, Susan Pembrey concluded with these words:

"We have so much good to build on as we now take the decisions about the patterns of nursing education that will lead us into the 21st Century."(29)

And from Phaneuf an American view: "Nursing can be the health profession that leads the way in earning a new, deeper, and well-founded public trust if it works ethically, morally, without fear or compromise of principle, and with high visibility in quality appraisal."(30)

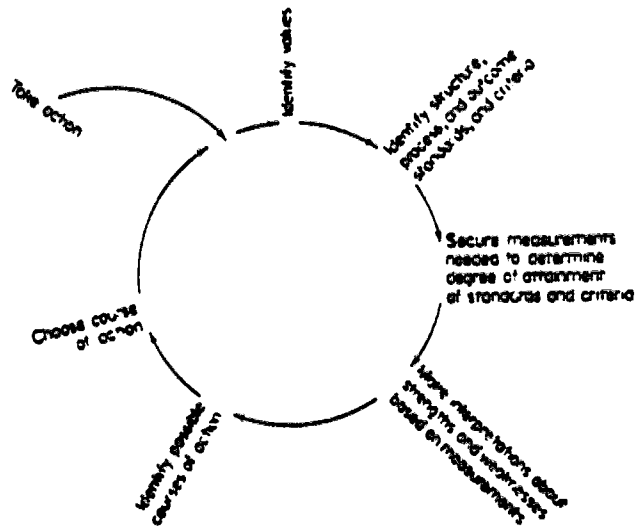
2.2 Recent Literature on Quality Assurance in Nursing

In 1976 and 1977 the editorial staff of the Journal of Nursing Administration published a set of 3 works entitled 'Quality Control and Performance Apraisal' volumes I, II and III. These contained 25 articles which had appeared in the Journal from 1971 to 1977(31,32,33) and represented the most promising of the current work on quality of care in nursing. Together with American Nursing Association publications on quality assurance(34) and a 'Quality Assurance Workbook' based on the Lang model(35) these writings have formed the basis for subsequent debate and research leading to present ideas on quality assurance, not only in America but also in Europe.

A survey of the literature shows that the volume of work on this topic has steadily increased since the 1950's, with some input from Europe but the bulk of the work coming from America.

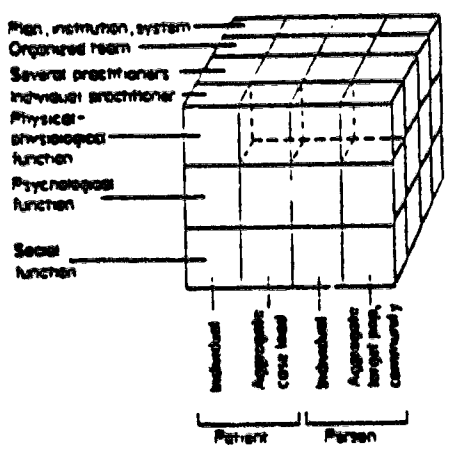
In 1979, Rebecca Bergman (Israel) spoke at the Second Conference of European Nurse Researchers in Copenhagen on the evaluation of nursing care. She believes that "the evaluation of nursing care is an expression of the accountability of individuals, agencies and professions for the nursing services that they have undertaken to provide." The four major beneficiaries are "the recipients of care, providers of care, sponsors of care (the agencies) and the profession."(36)

a)



Lang's model for quality assurance: implementation of standards. Adapted from Lang, N. *A Model for Quality Assurance in Nursing*, 1974. Reprinted from American Nurses' Association (1975), p. 15.

b)



Level and scope of concern as factors in the definition of quality. Cubical figure used by Avedis Donabedian as framework for discussing assessment of quality. On one side of the cube are three aspects in concept of health: physical–physiological, psychological and social functions. Another side shows aggregates of subjects of care, ranging from individual to community. Distinction is made between patient, who has access to some care, and person, who does not. The third side shows providers from individual practitioner to plan or system. Simplest to consider is shaded area of one patient, one practitioner, and physiological function.

Doris Bloch's model (1975) emphasizes the interaction of structure, process and outcome. Specifically, Bloch is concerned with what outcomes are important and how to measure them; what processes are used and how to measure them; and the relationship between them.

c)



FIGURE 2.1: Models for the Evaluation of Patient Care (from Bergman (38))

She mentions the PRSO (Professional Review Standards Organization) in America which uses a systematic, audit approach. Critics of this system suggest that reviews should be more flexible in selection of topics and methods, and that audits should be concurrent rather than retrospective.(37)

She discusses three of the best known American models for the evaluation of nursing care - Norma Lang's ANA model (1975), Avedis Donabedian's model (1976) and that of Doris Bloch (1975)(38)(Figure 2.1), and describes some of the evaluation instruments saying: "I would strongly recommend that we carefully study these and other instruments, see if they meet our needs in general, and if so, adapt them to the European situation. There is no need to rediscover the wheel over and over again."(39)

Also from Europe, van Maanen of the Netherlands(1980) said:"If nurses want to review the quality of nursing care, they have to develop standards and criteria to be used as a yardstick for evaluation....Nurses....mostly use and refer to the standards and criteria published by the American Nurses' Asssociation."(40) The American system of Nursing Audit has also been followed in Europe with great interest and nurses there are beginning to work on these ideas. The Rush-Medicus(1979) evaluative instrument has been translated into the Norwegian language and researchers in Belgium, Britain and the Netherlands have been working on the development of their own evaluation tools.(41)

In Britain, Dominique Wright (1984) quotes a well-known passage from a WHO working group(1979) that ".....nursing per se has never really been identified and such nursing as is done is performed in a ritualistic and mechanical fashion. As a result little or no emphasis has been placed on the need to define objectives and measure outcomes in terms of patients progress."(42) However, Wright says, "nursing has been defined and redefined over the years" and several models of nursing care have been published.(43)

On quality assurance, Wright quotes the same three models as Bergman(38) - the Lang/ANA model, Bloch and Donabedian - and mentions that the Lang model was further developed in Canada.(44) She also describes the best known American evaluative instruments - the Phaneuf Audit, the Slater and Qualpacs scales and RUSH-Medicus.(45)

In 1970 the Royal College of Nursing, London, published the work of Jean McFarlane who reviewed 54 methods of criteria development and considered them all to be invalid.(46) The 'process' methods were rejected because there was no consensus between the experts who judged them, and the 'outcome' methods because it was assumed in

them "that patient welfare was solely due to nursing care."(47)

Dealing with the evaluative instruments, Wright criticises the Phaneuf Audit because, while good recording may correlate with good care in America, where good record keeping is a legal requirement, it is doubtful whether this would apply in Britain.(48) She describes the use of Qualpacs at Burford Hospital in England, and concludes that Qualpacs "could be used as a basis for constructive criticism and praise." The accounts show that this American instrument can be used in Britain.(49) On RUSH-Medicus she mentions that an 'Anglicized' version has been developed by Goldstone and Collier, 1982.(50)

Other major developments in Britain discussed by Wright were concerned with Nursing Management Audit (NMA). In Doncaster an audit was developed over 10 years and evaluated by Huczynki for 2 years. Although she found the audit was useful(1977) other nurses have found it too specific to be used in their own areas.(51) Other audits were the 'Nursing Audit of Basic Care (ABC)' in Blackpool (Wiseman,1976) and the Exeter system (Elliot and Fisher, 1979). In Birmingham a ward appraisal system was described by Oxby and Davies in 1975.(52).

These three articles (Bergman, Van Maanen and Wright) show clearly the strong American influence on the work being done on evaluation of nursing care, and the progress that has been made during the 1970's. The evidence is less clear in South Africa.

In 1978 an article by Mellish called "Evaluating the Quality of Care" was published in the South African Nursing Journal.(53) She discussed "three forms of evaluation methods which have already been developed".(54) They were a utilisation review which measures the extent to which facilities are used, concurrent quality monitoring, and the nursing or patient care audit.(55)

She described a workbook which had been recently developed, entitled 'Check the Quality of Care', saying "(this) seems to me to be a very useful means of concurrent quality care monitoring.....If every responsible registered nurse in charge of a unit were to work through such a check book only once a year, she would be able to evaluate the type of care she is ensuring in her unit."(56)

Mellish paid particular attention to the nursing audit, describing it in some detail and concluding that "it is very dependent on good record-keeping (but).....by pointing out deficiencies in care it is a valuable tool in initiating corrective action, and later in evaluating the effectiveness of that corrective action."(57)

In conclusion, she said nursing has "a long and proud tradition of service.....geared to care....(and) directed to QUALITY care. Let us all then look for means of evaluating that care, so that nurses can continue to strive constantly to improve it. Excellence of care should be at the summit of the mountain, which every nurse is striving to climb in her nursing practice."(58)

Later in 1978, in the new South African nursing journal called Curationis, Bergman discussed evaluation, using the Donabedian model of structure, process and outcome.(59)

However, six years later, in 1984, van Huyssteen said: "The only guideline published by the South African Nursing Association on quality assurance is a workbook "Check the Quality of Care."(60) This is widely used by students in nursing administration. A policy statement on quality assurance has also been formulated by the Association. However, very little [illegible]arch has been done in this field and it should be se[illegible] priority for the future."(61)

On 25 June 1985 the s[illegible]nt visited the South African Nursing Association headquarters in Pretoria. She found that the policy statement on quality assurance had not yet been finalised. In the library only 3 local studies on quality assurance were listed and only one of these, an unpublished thesis, had been printed.(62)

Perhaps an explanation for this l[illegible]progress may be found in the UNISA study guide for [illegible] year students in nursing administration which says, in a chapter on the problem of quality assurance programmes in nursing: "Many matrons, ward sisters and tutors in South African hospitals used 'check lists' to teach senior student nurses how to control the quality of the care they gave."(63) "Instruments for checking the quality of care employed at present in South Africa are not derived from the Slater instrument, but from the pre-World War II check lists and from the instrument prepared by the 1952 class of Diploma in Nursing Administration students."(64) "Our nurse teachers in the early thirties had the right idea about quality control and assessment."(65)

It appears that quality of patient care in this country has been largely related to check lists and, more recently, to the nursing audit. A recent major work on the Nursing Process describes the nursing audit as "the ultimate aspect of evaluation" in the Nursing Process(66). It quotes: "Although good records are not proof of good patient care there is a relationship between the quality of the record and the quality of the care. Good charting (and recording) is often a sign of good nursing"(67) and advocates a movement away from "the old task-centred 'traditional' approach to nursing."(68)

2.3 The Quality Patient Care Scale

"Many methods have been used to evaluate health care, in general, and nursing care, in particular. Some have concerned themselves with identifying those elements in the setting which are thought to influence performance. Others have measured the outcomes of care defined as states of health or well-being. Still others have examined the process of care itself in search for evidence that bears on professional judgement and performance. The debate on which of these approaches is the more appropriate is largely academic. Surely, all are needed if one is to understand the many aspects of health care in a given situation and to take corrective or preventive action."(69)

From all the literature that was produced on evaluation of nursing care during the 1970's, four methods of evaluating the process of care have received the most attention.(70) These are the Phaneuf Audit, the Slater scale, Qualpacs and RUSH-Medicus. The Phaneuf Audit is "a retrospective examination of nursing records by a nursing audit committee using audit schedules."(71) The Slater nursing competencies rating scale is "designed to measure the competencies displayed by a nurse as she performs nurse actions in providing care to patients."(72) The scale may be used for on-the-spot ratings or for retrospective rating of past performance.(73) The Quality Patient Care Scale was derived from the Slater scale, and was designed to rate the care received by the patient as it occurs.(74) RUSH-Medicus consists of 220 criteria, some patient specific and some unit specific, randomly distributed across days and times of the day.(75)

In 1972 Wandelt and Phaneuf published an article in Hospital Topics publicizing the Slater Scale, Qualpacs and the Phaneuf audit. They described each tool, its advantages and the 'commonalities' of the three.(76) They concluded by saying "there are many questions about any instrument that purports to provide measurements of quality of care."(77) There are questions about audit evidence, about the Qualpacs and Slater standards of measurement, about validity and rater subjectivity in all three.(78)

But, they say, "either some subjectivity will be accepted, or there will be no attempt to measure."(79) "Data from thousands of evaluations with each tool have been analyzed.....Tests show each to be a reliable, valid, stable, discriminating instrument for providing quantitative measurements of the quality of nursing care."(80)

In her letter to the researcher Dr. Wandelt adds, about the standard of measurement used in Qualpacs: "This is a new concept to nurses in measurement and it is rather difficult for some nurses to be convinced that that is the feasible way to go." (Appendix F)

Because of the continued interest shown in the use of Qualpacs by a number of researchers, Ventura and Crosby, in 1978, developed a programme to prepare nurses to act as observers. An adequate level of interrater agreement is an important requirement for using the scale and little work had been done in this area.(81) The researchers developed a videotape programme, with a training manual. The course consists of five 2-hour seminars, followed by two simulated experiences. After 5-8 4 hour practice sessions by each trainee, they participate in a series of fixed paired observation sessions to determine whether each of the participants has reached an adequate level of interrater reliability.(82)

In 1976 Weinstein with some colleagues attempted to devise a measuring tool at The Hospital for Sick Children in Toronto, which they called 'Selected Attribute Variable Evaluation' or 'SAVE'. They used Qualpacs to check the concurrent validity of SAVE and found that "SAVE did not match well with Qualpacs."(83) They finally discarded 75% of the SAVE items, and combined the remaining 25% with 25% of the Qualpacs items to develop a 22 item instrument "that satisfies almost everyone concerned."(84)

A number of interesting articles by various authors have been published from the Children's Hospital National Medical Centre (CHNMC) in Washington,D.C. In 1972 the nursing department there planned to change the nursing system in the hospital and to introduce a new system which they called 'primary nursing', with "the goal of improved nursing care."(85) They decided to monitor the effects of the change and an outside nurse researcher was invited to conduct an evaluation using three instruments, Qualpacs, the Slater scale and the Phaneuf Nursing Audit. Over the years these articles have described the planning and implementation of change (86), an assessment of the quality of nursing care resulting from the change (87) and an evaluation of the 'primary nursing' system which had been introduced.(88)

In one of these articles Felton described her use of the three instruments to assess the change in the quality of nursing. She reported no significant change when measured with the Phaneuf Audit, some change on the Slater scale, and a significantly higher Qualpacs score.(89) "With this indication that Qualpacs could be used to appraise the effectiveness of the new system, a decision was made to conduct a prospective study, using the Qualpacs, on four nursing units before and after the implementation of

primary nursing."(90) The same group of raters evaluated the care. There were many variables which could not be controlled, but it was hoped to be able to "quantitatively evaluate trends and broad changes in the overall quality of nursing care."(91)

Using Qualpacs they were able to show pre- and postprimary nursing differences, not only in the overall score, but between surgical, medical and burns patients as well as in different subsections of the scale. They concluded that "the Qualpacs evaluation instrument can be a valuable tool in a quality assurance programme which stresses evaluation and, particularly, quantitative measurement of the nursing care that patients receive."(92)

In England a similar study was carried out at Burford Hospital, but on a much smaller scale. Five patients were observed in September 1981, before the arrival of a new nursing officer in charge of the hospital, and repeated in November 1982, by the same two observers. There was a significant increase in the overall mean score from 2,6 to 4,1 with the observers "showing remarkably close agreement in their judgements."(93) However, there appears to be a strong element of subjectivity in the report,viz. "it was obvious to both observers....this was not the same hospital that they had observed....(the) year before.....The actual interpretation of the differences between the two years must be left to the staff at Burford."(94) The editors of the Nursing Times received a number of letters in response to these articles, asking about Qualpacs. In their reply Wiles and Wood concluded by saying: "The use of USA scales by British nurses is questionable, although these are all we have at present. Tools more suitable to our own nursing culture could both increase the validity of quality assurance and make it more acceptable to British nurses."(95)

Not all studies have found Qualpacs an effective me ire. Describing a study in Buffalo, New York comparing Qualpacs and the Phaneuf Audit, Ventura says the Intraclass Correlation Coefficient (ICC) "values for subscales and total scale score for Qualpacs were less than anticipated and less than acceptable"....."Applying the criteria (established for this project by the researchers) revealed that Qualpacs did not meet the criteria in any one of 28 instances." On the other hand "the Phaneuf Audit met the criteria in seven out of eight instances."(96) The Pearson product moment correlation between the two instruments for 97 cases was poor(0,01).(97)

In a second study, with Fox,(1984) the internal psychometric characteristics of Qualpacs were examined. Using analysis of variables they found the patient differences accounted for 46,2% of the variance, while observer inconsistency only accounted for 1,6% of the variance. This suggested that observer standards were

adequate. The subscales were also examined and appeared "to possess adequate discriminant validity."(98) The authors conclude: "(However) there is a need for further validation of this instrument against other indicators of the quality of nursing care.... When assessment of the process of care is more finely focussed and similar improvements in structure and outcome measurements are made, attention can turn to untangling the web of interrelationships among the structures, processes, and outcomes of the delivery of nursing care."(99)

2.4 The Conceptual Framework of this Study

2.4.1 Definitions of Nursing and the Function of the Nurse

Under this heading Henderson and Nite discuss a wide variety of definitions, ranging from that of Florence Nightingale in 1860: Nursing has to "put the patient in the best condition for nature to act upon him" (100) to that of Shirley Chater in 1976: "Nursing is a process through which CARE is provided to individuals, families, or community groups PRIMARILY around circumstances and situations that arise from health-related problems."(101)

There have been a great many other definitions over the years of varying content and complexity, and probably the most widely known is that of Henderson and Nite themselves: "Nursing is primarily helping people (sick or well) in the performance of those activities contributing to health, or its recovery (or to a peaceful death) that they would perform unaided if they had the necessary strength, will, or knowledge. It is likewise the unique function of nursing to help people to be independent of such assistance as soon as possible." (102)

The theme running through all is the helping function of the nurse. The question is how she carries it out, and there have been many attempts to answer this too.

A number of nursing theories and models have been developed over the years, with gradual changes in trend and emphasis.(103) Earlier models were those of Peplau(1952) who focused on interpersonal relationships and Orlando(1961) who used communication theory. Johnson's model(1961) identified equilibrium as important and Roger(1970) based her model on adaptation to the environment.(104)

In 1971 Orem described a self-care model(105). Roy, in 1974, a stimulus-response model(106) and in 1976 Roper described the "activities of living" (AL) model.(107)

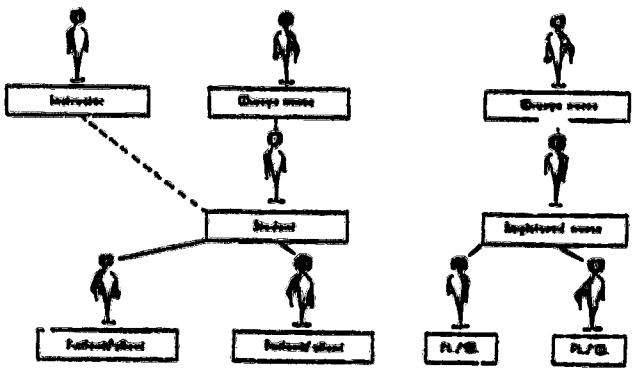
In discussing conceptual models, Riehl and Roy "take the position that many of the current nursing models present a similar view of the human and the environment."(108) They say: "A unified nursing conceptual framework to the recipient of nursing care may be stated as follows: A person is a unified whole composed of subsystems, with a flexible and normal line of defense; his internal regulating mechanisms help him to cope with a changing environment; he functions by the principles of homeodynamics."(109) "The goal of nursing is to maintain the system of the person and to help this individual realize his maximum potential."(110) This is done through a problem-solving process.(111) This problem-solving process is known as the Nursing Process. It has its roots in the problem-oriented medical record (POMR) which was "developed by Lawrence Weed as a means of organizing the patient's chart on the basis of the PATIENT'S problems rather than on the source of data about them.(112) Nurses in many countries who are using the Nursing Process "are finding it a very practical way of individualising nursing for each patient,"(113) but it is strongly record-based and problem-oriented and nurses are currently seeking ways of making it more relevant to the PRACTICE of nursing.(114)

While these definitions and trends in nursing are important to the broader contextual framework of this study, at the time of the study nursing in the hospital had not reached these levels of development. Nursing was still task-centred and concepts relevant to the setting are concerned with the patient and patterns of care, levels of care and the process model of quality evaluation.

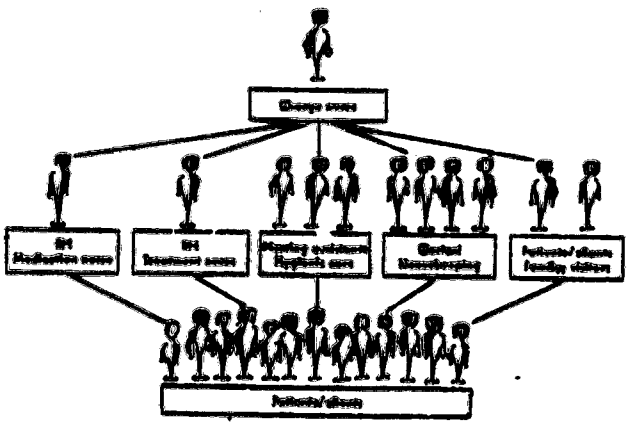
2.4.2 Patterns of Nursing Care

"A pattern of nursing care is defined as that system used for the delivery of nursing care to patients/clients."(115) These patterns vary according to the orgarisational structure of the agency. There are 4 basic patterns in nursing services, according to Douglass. (Figure 2.2)

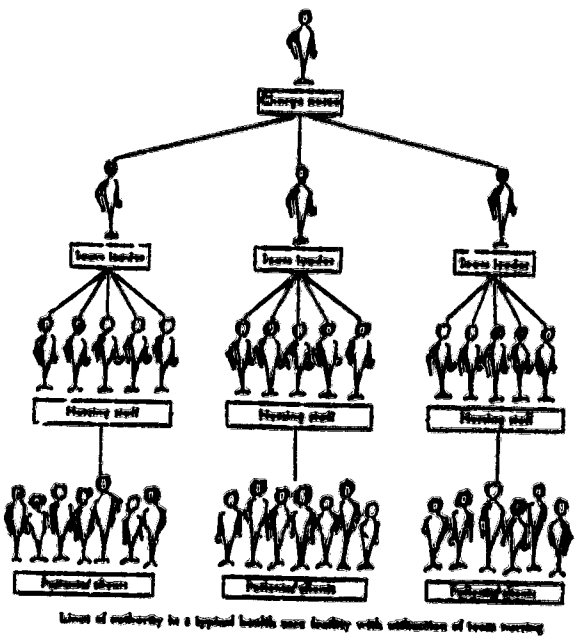
a) Case System



b) Functional



c) Team Nursing



d) Primary Nursing

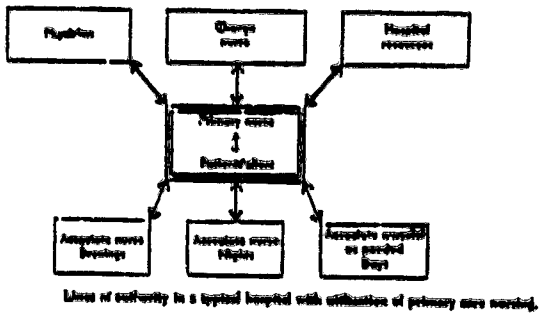


FIGURE 2.2: Patterns of Nursing Care

(from Douglass (115))

Case nursing (Figure 2.2(a)) is the oldest of the systems. One nurse is assigned to one patient for the delivery of total care, functioning within the system of nursing care used by all the staff. It is a method frequently used for teaching student nurses, under the supervision of a clinical tutor.(116)

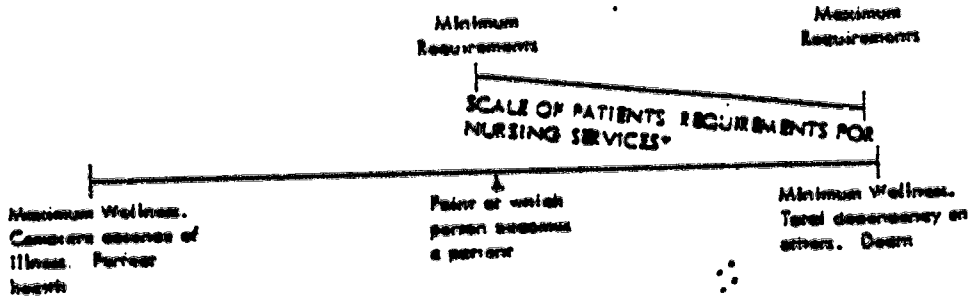
Functional nursing (Figure 2.2(b)) is a task centred approach. The charge nurse delegates duties to members of the work group. It is an authoritarian system, using established protocol and procedural manuals, in which the ward sister carries responsibility for staff control, patient care, and ward administration. It is considered by many to be the most economical way to deliver nursing services.(117)

In team nursing (Figure 2.2(c)) a professional nurse is the leader of a group of health care workers. The ward sister delegates responsibility to the team leader for a specific group of patients, and acts as coordinator of the teams' efforts. In most hospitals using this method a 3-5 man team can care for 10-20 patients.(118)

Primary nursing (Figure 2.2(d)) is the fourth basic pattern described by Douglass. It is defined as "a continuous and coordinated nursing process in which a primary nurse provides the initial patient/client care assessment and assumes accountability for planning comprehensive twenty-four hour care for an individual patient/client for the length of hospitalization or for the duration of care needed."(119) Primary nursing is still in an early stage of development, and while there have been enthusiastic reports about it its merits have still to be confirmed.

The patterns of nursing care apply to several aspects of the present study. Of particular interest is the functional pattern because this was the system in use in the wards when the observations were carried out. Case nursing was also used in the wards on occasion for teaching student nurses, and the writer believes it would lend itself to the use of Qualpacs as a teaching tool.

While primary nursing was not practiced in this setting, it is an important variable in a research study conducted by Felton et al using Qualpacs as one of the research instruments, and is described earlier in this chapter (2.3).



WELLNESS SCALE

A patient classification scale in relation to a level of wellness scale.

* *Note:* The relationship between "wellness" and "requirements for nursing services" is not a perfect one. A patient with maximum wellness may not necessarily have maximum requirements for nursing services and vice versa. Thus, a terminal cancer patient (low level of wellness) may have fewer needs for nursing services than an otherwise healthy patient with a fractured leg (moderate level of wellness). In general, however, the two scales are correlated with each other.

FIGURE 2.3: Level of Wellness Continuum

(Abdellah and Levine (122))

2.4.3 Patient Classification Systems and Levels of Care

Hegvary and Haussmann(1975) describe how, in trying to identify criteria to evaluate aspects of nursing care, they found categorisation by type of ward or by disease entity were not satisfactory. Eventually they found that criteria based on the intensity of the patient's illness were the most meaningful(120). Abdellah and Levine discuss this concept in some detail.(121)

They describe 'patient classification' as "a scaling system in which the underlying continuum can be conceptualized as expressing a quantitative statement of a patient's requirements for nursing services," ranging from maximum self-help ability to minumum self-help ability. It fits into a "level of wellness" continuum in which at a certain point the person seeks medical help and becomes a patient(122). (Figure 2.3)

Patient classification is centuries old. It ranges from a broad division into hospitals according to the type of patient, eg. psychiatric hospitals, acute general hospitals, etc., through classification within the hospital according to sex or illness groups, to classification within the unit according to level of care requirements.(123) The "progressive patient care" concept of hospital organisation is based upon "grouping patients according to their medical and nursing needs."(124)

Many methods of patient classification have been developed over the years. Abdellah and Levine describe several of them(125), while in the more recent American literature, articles describing PCT, a patient classification tool used to measure productivity(126), DRG (diagnostic related groups) and computerization of patient activity and nursing care planning(127) represent the current trend towards using classification with computers to streamline the health services and make them more cost-effective.

Abdellah and Levine say that the attention given to patient classification systems in nursing and patient care is probably because inpatient care, which represents the largest consumer of nursing skills, has so many uses for them. They "represent a methodological approach tailor made to the field of nursing"(128). "Because of its distinctive and authentic nursing flavor, much interest has been engendered in pursuing the development of patient classification and patient needs methodology."(129)

The concepts attached to patient classification have several applications to this study.

In the research setting, patients were already classified by coming to a general hospital. They were allocated to the wards according to sex and diagnosis. The progressive patient care system in the hospital ensured that none of them required intensive care, nor did they require long term care in this setting.

Another application relates to the "level of wellness continuum" described by Abdellah and Levine. They say that there is a point in the continuum when a person becomes a patient. For the patients in this study, not only had they reached this point in the continuum, but their patient status was reinforced by admission into the hospital setting. Hardy says "a social organization such as a hospital may be defined as a system of roles."(130) Thus, the patient role with all its connotations, is part of the focus of this study, together with the complimentary caregiver role. Riehl and Roy refer to this patient role as "patiency".(131)

A third application of patient classification to this study involves the 'Levels of Care' table which was included among the adjunct materials of the Quality Patient Care Scale(132). The student used a modified version for this work and found patterns emerging from the data, which led her to believe that this could be a promising area for future research.

2.4.4 The Process Model and Quality of Care

Much has been written about what should be assesed in the evaluation of the quality of care. Generally the following 5 areas are included:

1. Outcome - alteration in health status of the individual.
2. Content - nursing care given to the individual.
3. Process - the nature and sequence of patient care activities.
4. Structure - unit and hospital staff and resources.
5. Efficiency - the cost-benefit ratio. (133)

Nursing audit is frequently carried out as an outcome model using chart review.

A survey of 108 quality assurance studies carried out in a Pennysylvania hospital over 7 years (1975-1982) showed that 86,1% were retrospective chart reviews.(134) While "the literature abounds with references to quality assurance," the effectiveness of quality assurance programmes is in question.(135) Retrospective quality assurance studies based on chart reviews are NOT evaluations of the quality of care delivered, but of the quality of documentation.(136) While evaluation in all 5 dimensions is ideal, it is not always practicable and there is a trend towards advocating more utilization of the process model and less of the chart review.

"In 1970 the National Commission for the Study of Nursing and Nursing Education put forward, as its first recommended priority, the study of nursing practice problems..... They advocated the position that the essence of research is in everyday nursing practice and that the business of research is to examine, describe, define, explain and predict that practice and the environment in which it takes place."(. .)

Five years later Hegvary and Haussmann said that "the most valid measure of the quality of nursing care is that which focuses on the nursing activities performed in the actual delivery of nursing care to the individual patient: the process model of patient care."(138)

In this study the process model of patient care appraisal was used. The researcher focused on the patient and the patient care activities. She found that the patient care activities contained two major components - the activities themselves and the care element in the activities. The activities were relatively easy to observe, record and subsequently quantify. The care element which is fundamental to quality assessment in Qualpacs, was less easy to identify.

Bottorff and D'Cruz describe nursing as an interactive, social-relational process, shared with other health professionals. Some aspects are unique to nursing. Nurses are "licensed to touch, to share health and illness experiences, and to maintain an intensity and duration of contact rarely experienced by any other....The possibilities for knowing, caring and sharing are limitless....through caring nurse and patient help each other to grow."(139)

A PERSON may be ill, dying, dead, without calling for the presence of another person. A PATIENT suggests the caring, service and skills of health workers, NURSING when a certain kind of service is needed.(140) Nursing is concerned with helping the patient to maintain everyday functioning and cope with illness.(141) Studies confirm that nursing responsive to patients rather than to their illness, is more effective in helping patients to cope with ill health.(142)

Thus, while the patient care ACTIVITIES are important to the well-being of the patient, the unique CARING function of the nurse, which is so difficult to measure, is at least as important. Instruments designed to measure the quality of patient care must take into account both these components of patient care. Bergman says: "I believe, and I am sure you agree, that evaluation in nursing is a combination of .....objective measurement of concrete phenomena, as well as subjective perceptions and opinions of the "feeling" of care...."(143)

In this study the adjunct materials of the Quality Patient Care Scale(vide Chapter III, 3.5.9) were the source of the quantitative data collected while the scale itself, designed to rate the CARE component the patient care activities, produced the scores from which a value opinion was formed about the quality of patient care.

Chapter II

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III THE INSTRUMENT

3.0 Introduction

The following is a descriptive summary of the Quality Patient Care Scale manual, emphasising those aspects which are of particular relevance to this research project.

3.1 The Background of Qualpacs

The Quality Patient Care Scale(1) was developed from the Slater Nursing Performance Rating Scale(2). Together with the Phaneuf Audit(3) these nursing publications represent a major movement in America in the early 1970's towards finding a system for measuring and evaluating the quality of nursing care. The Slater Scale looks at the nurse's performance, the Phaneuf Audit is a retrospective review of patients' nursing care records and Qualpacs is designed to observe and evaluate patient care while it is in progress.

Other tests and scales have been devised and tried out, but these three have achieved prominence. Considerable work has gone into their development and testing.

3.2 The Choice of Qualpacs

Qualpacs was the instrument chosen for this project for several reasons. It is readily available in printed form, with comprehensive directions and suggestions for its use. It has been extensively tried and tested in a variety of situations.(4) It is particularly comfortable to use because it focuses attention on the patients rather than the staff, so it constitutes less of a threat for ward staff, and can be used without interrupting nursing care procedures in a busy ward.

It appears to be an efficient tool, being relatively simple to use and claimed to produce a reliable measurement from the scores of as few as 5-6 patients in 4-6 hours of observation.

3.3 The Scale (Appendix A)

Qualpacs contains 68 items arranged into 6 categories:

Subsection I: PSYCHOSOCIAL - INDIVIDUAL 15 items

Actions directed towards meeting the psychosocial needs of individual patients.

Subsection II: PSYCHOSOCIAL - GROUP 8 items

Actions directed towards meeting the psychosocial needs of patients as members of a group.

Subsection III: PHYSICAL 15 items

Actions directed towards meeting the physical needs of patients.

Subsection IV: GENERAL 15 items

Actions that may be directed towards meeting either psychosocial or physical needs of the patient or both at the same time.

Subsection V: COMMUNICATION 8 items

Communication on behalf of the patient.

Subsection VI: PROFESSIONAL IMPLICATIONS 7 items

Care given to patient reflects initiative and responsibility indicative of professional expectations.(5)

Each item is rated on a 5 point scale, 'Best Care' to 'Poorest Care' with additional columns for 'Not Applicable' and 'Not Observed'.

Extensive suggestions for the use of the scale are given in the manual, including a 'Cue Sheet' containing examples to illustrate each of the 68 items, directions for rating, for scoring, for observing, approach to the ward, etc.

The subsections are divided into two major groups. Subsections I-IV refer to care given directly to the patient and deal with physical and psychological aspects of this care.

Subsections V and VI deal with the therapeutic structure of the ward in terms of assessing, planning, evaluating, referring and communicating for the benefit of the patient.

The instrument does not define the standards of the measurement, and these are open to the interpretation of the individual observer/rater. The scoring system converts the item ratings into item scores, subsection scores, patient scores and ward scores.

3.4 A Word from the Author

Although permission is granted in the manual to use the scale and its adjunct materials, "either in exact copy or as modified to meet local interests and needs" (6) the authors were approached as matter of courtesy. In her reply Dr Wandelt said "....I have no additional (hints or suggestions) outside of those in the book. We did test the scale extensively and it was used over at least a three year period before the final writing of the instructions." (Appendix F)

3.5 The Design and Use of the Scale

3.5.1 The Design of Qualpacs

Qualpacs has been designed to measure the quality of care received by patients in any setting, regardless of the category of caregiver, while the care is in progress.(7) The standard of measurement is described as "the quality of care expected to be provided by a first-level staff nurse"(8) and first-level staff nurse is defined as "a nurse who traditionally is charged with providing care that is safe, adequate, therapeutic and supportive for meeting nursing care needs of patients" and who has been prepared for her responsibilities by a nursing education programme which leads to state licensure as a registered nurse. (9)

3.5.2 The Observer-Raters

These should be suitably qualified nurses who are competent to judge the quality of nurse actions.(10) There should be at least two observers who should work, together and individually, to familiarise themselves with the scale, and to

practice and evaluate each other until they feel comfortable and use the scale reliably.(11) They can ther work separately in rating patient care, but can give each other guidance, advice and moral support.

3.5.3 The Standard of Measurement

The authors say "a difficulty frequently identified ....in evaluating the clincical competence of nurses is concern about subjectivity in measurement."(12) They deal at some length with this concern and suggests that nurses should have the confidence "to realize that they are capable of making informed judgements based on observed facts."(13) They regard 'standard of measurement' as a concept too complex to be precisely defined in this context, as each observer-rater will have her own 'yardstick' by which she will judge and measure the quality of care in the observed nursing care activities.(14)

However, various testings of the scale have shown a high level of inter-rater agreement in a variety of situations.(15) It has been found "that nurses competent to judge the quality of nursing care displayed in nurse-patient interactions hold common conceptions of care expected of a first-level staff nurse."(16)

3.5.4 Frame of Reference

A "frame of reference"(17) is included in the manual to help the observer-rater to conceptualise her standard of measurement concretely and thus more readily keep her 'yardstick' constant.

3.5.5 Using the Scale

The 68 items in the scale can each be rated through from '5 - BEST CARE' to '1 - POOREST CARE' with columns for items 'not observed' or 'not applicable'.(18) There are detailed guidelines for using the instrument including a 'Cue Sheet' with concrete examples to illustrate each of the items.(19)

3.5.6 Rating the Activities

The manual states that observers should rate observed patient care activities in terms of the CARE elements in each interaction and their appropriateness to the patients needs. Thus, observers will focus not on the qualities of individual caregivers, nor on their performance, but on the CARE factor in the interaction.(20)

If care is given by persons other than nursing staff, it is still included in the rating if it is considered to meet the nursing care needs of the patient or can be regarded as part of the nursing care plan for the patient.(21)

3.5.6.1 Rating when care is omitted:

If there are omissions of care, the manual states: "When particular care and interventions and appropriate parts of the care provided for the patient are not performed, the pertinent items should be rated in the 'Poorest Care' column."(22) These omissions may be noted during the observation period or inferred from the records or confirmed by questioning the nursing staff.

3.5.6.2 'Not Observed' and 'Not Applicable' items:

The 'Not Observed' (N/O) column should be used if the care was given but not observed by the evaluator and so could not be rated.(23) Where appropriate, interactions which were not directly observed may be inferred from the records or from information given by patient, staff or family.(24)

The 'Not Applicable'(N/A) column refers "to situations...in which certain actions itemized would not be likely to take place."(25) For instance, item 10 (vide Appendix A) would not apply to a premature infant. N/O and N/A items are NOT counted in calculating the scores.

3.5.6.3 Interactions/Interventions

The patient care activities which are observed and rated in Qualpacs the authors call

"nurse-patient interactions" or "nurse interventions".(26) Their terminology here is not clearly defined, but the major points made in this regard are as follows:-

Single episodes of care may contain a variety of care components, involve a number of patient care activities, several staff-patient interactions and be carried out by more than one caregiver.

A rating may be ascribed to an item each time an appropriate interaction takes place, and one interaction may permit ratings to be ascribed to several different items on the score sheet.(27) Thus, to quote the authors, "as few as four nurse-patient interactions may provide ample observations to allow rating a sufficient number of items to provide a reliable score" and "ratings of as few as 30 items will yield a reliable measurement ....." (28)

3.5.7 Calculating the Score

Detailed directions are given for calculating the score. The score for each item is the average of the ratings in all the columns of that item. The mean score for each category of items is also calculated and the total mean score for each patient. (29)

The figures thus derived can be used to compare item scores, category scores, total mean scores of individual patients, and ward scores.

3.5.8 The Patients under Observation

The authors say that "since the observations are a part of the nursing service program and can in no way be expected directly to influence the care of the patient who is subject to observation, there is no need to secure the patient's permission for the procedure."(30)

3.5.9 Adjunct Materials

An "Information Face Sheet" is included in the manual as a guide to the sort of information the observer may require about the patient and his condition which may be pertinent to his care needs, or affect the findings.(31) This includes personal

details about the patient, diagnosis and condition, and position in the ward. It also includes a "Level of Care" table which may be modified or omitted depending upon the requirements of the particular project being carried out.(32)

Provision is also made on the face sheet for a personnel code and census.(33) This enables the researcher to accumulate data about the categories of staff involved in the care of the observed patients. By coding the ratings as they are recorded, scores can be linked to the caregivers, producing an evaluation of the quality of care given by the various categories of staff.

3.6 Carrying out a Ward Evaluation

There are suggestions for carrying out an evaluation project in the ward.

3.6.1 Planning the Project

The authors say that evaluation of as few as 5 patients will yield a valid and reliable measurement.(34) Each patient observed requires 3 hours of observer time - 1 hour for pre- and postobservational records and 2 hours for direct observation. However one observer can observe and rate up to 3 patients at once if they are "within ready view and earshot." (35)

Observation sessions should take place when there are likely to be numerous nurse-patient interactions. Extending them beyond 2 hours "seldom results in ratings for additional items." (36)

In summary, it is suggested that two-hour observation periods on 2-3 patients during a fairly busy period of the day may be carried out on 2-3 consecutive days. At least 5 or 15% of the patients should be observed in a unit, to yield a "valid and reliable measurement."(37)

3.6.2 Selecting the Patients for Observation

The manual recommends modified random selection as complete randomisation is uneconomical. This is because 2-3 patients who are near enough to one another to be seen and heard by one strategically

placed observer can be rated during a single observation session. A guide is included in the book for identifying eligible patients and randomly selecting those for observation.

3.6.3 Approach to the Ward

A "Fact Sheet About Qualpacs"(38) contains information intended for distribution to ward staff. The authors say that both staff and patients should be told about the proposed study and be given relevant information about the "plan, purpose and process of the evaluation."(39) They should be reassured about their anonymity in the study and be given opportunities to ask questions about it.(40) Staff should also be reassured that this is not a personal efficiency rating.(41)

The observers should be as inconspicuous as possible in the ward.(42) They will get relevant information about the patients from the Kardex and files, and may request help from staff in obtaining any further details they need.(43) They should be introduced to all the patients in the ward, without any indication of which patient(s) will be under observation.(44) They will select an unobtrusive observation position, and will remain uninvolved in patient care. Ward staff should ignore their presence in the ward.(45)

3.7 Tests Carried Out on the Quality Patient Care Scale

A chapter by J.W. Ager, co-author of the manual, deals with the statistical testing carried out on the scale.(46)

3.7.1 Reliability

Inter-rater agreement was tested in 3 different studies using the intraclass correlation as the index of agreement.

3.7.2 Intraclass Correlation

At Harper Hospital, Detroit, 8 raters were randomly paired and randomly assigned in pairs to independently observe 96 patients in 21 wards of the hospital. The intraclass correlation of the observers for the 96 patients was 0,74.

A smaller study in another hospital produced an intraclass correlation of 0,91 for 6 patients.

In a third study of 11 patients the intraclass correlation was 0,64.

3.7.3 Time Sampling

In the Harper study (above) each pair of raters was assigned to watch 5 patients for half a day on a time sampling basis. Their time schedules did not coincide so they observed different acts of care. For 55 pairs of ratings the intraclass correlation was only 0,39, considerably less than that for continuous observation.

3.7.4 Internal Consistency Reliability

Using 88 observations from the Harper study, item, subscale and total score variances and covariances were computed for 55 items (out of the 68) which had been rated for at least 20 of the patients. The Kuder-Richardson reliability score was 0,96, showing a high degree of correlation.

Of these 55 items, 40 correlated higher with items in their own subscales than with the other items.

3.7.5 Stability

In the Harper study 5 of the patients were rated by one observer on two consecutive days. The correlation for the successive ratings was 0,98, showing a high degree of stability.

3.7.6 Concurrent Validity

At Harper Hospital, the ranked order of 21 wards using 8 senior staff as judges was compared with the ranked order of the same wards from the Qualpacs study.

The average rank-order correlation among pairs of judges was 0,24. Reliability of ward ranks averaged over the 8 judges was 0,56. Correlation between these and Qualpacs scores was 0,44. Corrected for attenuation with 0,56 as estimated reliability the correlation became 0,52.

It is apparent from this chapter of the manual that extensive tests have been carried out on the scale, and the authors express the hope that more will be carried out, mentioning particularly cross validation studies with the Phaneuf Audit. Throughout they are generous in their readiness to encourage any research that will add to the authenticity of the scale.

Chapter III

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IV THE RESEARCH DESIGN

4.0 Objectives of the Study

The primary objective of this study was to observe patient care in a hospital ward while it was taking place in order to accumulate data about that care. It was expected to be able to identify the nature of the patient care activities and to form an opinion about the quality of care.

A secondary objective was to critically evaluate the measuring instrument.

4.1 The Setting

"Qualpacs measures the quality of nursing care received by patients in any setting where nurse patient interactions occur."(1)

In this study it was used in the adult wards of a 2000-bed academic general hospital. Restrictions on the observer's time limited the number of wards to 6, and it was decided to use 3 medical and 3 surgical wards.

Hospital records showed that there were 13 suitable 31-bed adult wards, 6 surgical and 7 medical. The hospital was not full and the bed state at the time was 28 or 31 in the surgical wards and 25 in all the medical wards. (See Table 4.1)

TABLE 4.1: Ward Selection

Available Wards	Number of beds	Selected Wards	Number of beds	Available Wards	Number of beds	Selected Wards	Number of beds
Surgery 1	31			Medical 1	25	M III	25
" 2	31	S II	31	" 2	25		
" 3	31			" 3	25	M II	25
" 4	31			" 4	25		
" 5	28	S I	28	" 5	25		
" 6	28	S III	28	" 6	25		
				" 7	25	MI	25
Surgical	180		87	Medical	175		75

Three surgical and three medical wards were randomly selected by the supervisors and randomly ordered SI, MI, MII, SII, SIII, and MIII. Permission was obtained from the university and the hospital authorities to carry out the study, but neither the researcher nor the ward staff knew beforehand which of the wards had been selected. The

student sought approval from the zone matron concerned before she approached the selected ward.

4.2 The Observer-raters

For economic reasons the research student was the main observer throughout. It was hoped that by using a single observer a relatively stable standard of measurement would be obtained. To avoid observer bias she did not discuss the standard of care observed with anyone.

To test her rater reliability at least half the observations in each ward were concurrently observed and rated by co-observers. Authority to train the co-observers was refused so no attempt could be made to work towards an interrater correlation of scores. Instead, all ratings were left to the independent judgement of each rater.

Nine registered nurses from the hospital and university departments of nursing education volunteered to act as independent co-observers.

Test-retest reliability was tested by repeating an observation at the same time the following day at least once in every ward.

4.2.1 Qualifications of the Observer-raters

According to Qualpacs they should be suitably qualified nurses competent to judge the quality of nursing care.(2) The observer and all the co-observers were qualified nurses registered with the South African Nursing Council. Some were registered tutors and all were involved in clinical teaching with experience in assessing student nurse performance.

4.2.2 Preparation of Observer-raters

In accordance with the Qualpacs directions the main observer familiarised herself with the scale and established for herself a standard of measurement, using the Qualpacs frame of reference.(Appendix B.2)

Co-observers were each issued with a folder containing copies of the cue sheets, the observation recording and rating forms, the check list and the frame of reference.(Appendix B) The

procedure was explained to each individually and they were asked to familiarise themselves with the scale. Each was asked to determine her own standard of judgement. Any questions asked were answered.

The following points were made:

i. Each co-observer would use her own judgement in rating the activities.
ii. The observations would be highly confidential and should be discussed with no one other than the researcher.
iii. The co-observer's ratings would be used as a comparison to test those of the observer and the standard of care observed should not be discussed with anyone.
iv. The co-observer should be as inconspicuous as possible in the ward and take no part in patient care activities.

4.2.3 Standard of Measurement

In Qualpacs the standard of measurement is defined as "the quality of care expected to be provided by a first-level staff-nurse." (3) In this study it was defined as 'the quality of care expected to be provided by a registered nurse.'

4.3. The Data Collection Instrument

For each observation session each observer was issued with a folder containing copies of the cue sheets, check list and frame of reference; the recording sheets and a set of Qualpacs rating sheets for each patient under observation; and information about the patient(s) to be observed. Each observer had previously been given a set of the forms, and was familiar with them. Examples of completed recording and rating sheets are shown in Appendix C.

4.3.1 The Cue Sheet (Appendix B)

In addition to the printed copy of the Qualpacs cue sheet (Appendix B.1), the observer drew up a modified version for this project. In this version the cues were simplified and adapted to the local situation and 'Poorest Care' cues were included for each of the 68 items.(Appendix B.3)

It was believed that the introduction of 'Poorest Care' cues would clarify the standard of measurement for the observers, and that the adapted cues would be easier to use. Each observer received a copy of each set of cue sheets to study before participating in the observations, as well as a copy for each observation session, to serve as a guide and reference source while carrying out the observations. A check list was also included.(Appendix B.4)

4.3.2 The Frame of Reference (Appendix B.2)

A simplified version of the Qualpacs "Frame of Reference" was included to serve as a guide to the rating system to be used.

4.3.3 The Recording Sheet (Appendix B.5)

This was an adaptation of the adjunct materials presented in the manual. In the present study the recording sheet was used to record the date and time of the observation period, the identity of the observer, and information about the patient including ward, room and bed position, diagnosis and level of care. The concept 'levels of care' is described more fully in Appendix E (Definition of Terms).

It was originally intended to attach the patient's sticker to the recording sheet, but this idea was discarded as these personal details were of little significance to the present study and represented an unnecessary intrusion into the patient's privacy.

Below these base line data there was provision for recording the patient care activities observed. These were ordinally numbered with columns for noting down the time of each activity, the categories of persons involved and the purpose of the activity observed. Specimens of completed recording sheets are included in Appendix C.3.

4.3.4 Qualpacs Rating Sheets (Appendix B.6)

Qualpacs items were copied on to 6 loose rating sheets, one for each subsection. This arrangement made it easier for observers to find their way among the 68 items.

There were 5 columns for evaluating patient care labelled "Best Care", "Between", "Average", "Between" and "Poorest Care", and 2 additional columns headed "Not Applicable" and "Not Observed". For greater clarity all the titles were repeated at the foot of the appropriate columns. There were no numerical indices given to these headings but the "Frame of Reference" indicated the numerical values of the standards of care. (See Appendix C4 for a sample of a completed rating sheet.)

4.4 The Observation Schedule

Qualpacs states that observation sessions should be carried out on 2-3 consecutive days(4) and should take place during busy periods(5). Extending them beyond 2 hours seldom results in ratings for additional items.(6)

The two-hour observation periods were scheduled for 8h00-10h00 and 10h30-12h30 on Tuesday, Wednesday and Thursday each week, for 6 consecutive weeks, one week in each ward.

Each of the nine independent co-observers volunteered to participate in as many of the two-hour observation sessions as possible. They slotted into the schedule whenever they had the time. Thus 43 of the 65 observations carried out by the student were concurrently co-observed.

4.5 Approach to the Ward

Each Friday morning the researcher found out which ward had been randomly selected for the following week. She contacted the zone matron, then took a letter to the ward sister giving brief details about the project. (See Appendix C.1) She explained the project to her in more detail, answered questions about it and asked for her help in carrying it out.

Having received the ward sister's consent, the observer went through the Kardex on Monday morning and made brief notes about all the patients in the ward. She then went round the ward introducing herself to patients and staff and explaining that she would be carrying out a nursing care study, and answering questions about it.

The observer also attended the 13h00 nursing staff handover report. At this stage patients had not been selected for observation.

4.6 Selection of Patients for Observation

Modified random selection was carried out in accordance with Qualpacs procedure. All patients were regarded as eligible. Each patient in the ward was assigned his own bed position number, A3, B4 etc. Eight patients were selected for initial observation. The order of their selection was adhered to. Random selection was continued until there were at least 12 numbers available.

Patients were observed in the order of their random selection. Where a second observation could be carried out in the same room the random list was consulted for the identity of the second patient. If the bed was empty, the patient in the next bed was observed.

When a patient was moved to another room during the course of the observation the observers moved with the patient. However, if there were two patients under observation they remained and continued to observe the remaining patient. Likewise, if a patient was taken to theatre or left the ward, they remained in the room. Patient care activities usually continued in the patient's absence, such as making the bed, putting lunch aside, etc. These were recorded and the observers continued the observations when the patient returned.

Where a repeat observation was carried out the observers went into the room of the patient regardless of where the initial observation had taken place.

If a selected bed number was empty the next randomly selected number was used.

4.7 The Pilot Study

A pilot study was carried out in an atypical medical ward. This led to the following modifications of the original design:

4.7.1 It had been intended to use a tape recorder as an additional aid. However, it proved awkward to set up and caused disproportionate anxiety among the staff. As it did not add much to the information gained through observation, the idea was abandoned.

4.7.2 It had been intended to use a stop watch to time the interactions taking place. Once again, the stop watch was difficult to handle while recording observations. The presence of another observer to

time the transactions would have made the observers more conspicuous. In addition, it was found that most of the interactions were extremely brief, rarely as long as a minute, so it was decided simply to record the time each activity occurred.

4.7.3 It was found that the Not Applicable (N/A) and Not Observed (N/O) observations could not be recorded without discussion and agreement among the observers. As this may have influenced co-observer objectivity it was decided to record only observed interactions in this study and to ignore the 'N/A' and 'N/O' columns, particularly as these items are not counted in calculating Qualpac scores.

4.7.4 The recording sheet was redrafted slightly so that the order of the activities was automatically recorded. This ordinal number was then used in the ratings making it possible later to trace the various activities on the rating sheets and thus provide additional useful data.

4.8 Processing the Data Collected

Forms were designed for processing the data collected by the observers.(Appendix D) These were:
1. Timetables
2. Activity Records
3. Qualpacs Score Sheets

4.8.1 Timetables (Appendix D.3)

These recorded the time of each activity, the type of activity and the persons involved. Observer and co-observer recordings were set alongside each other in the form of a timetable for clearer visual comparison of their observations. From these forms information was gained about the times of the activities, and observer/co-observer discrepancies in the observations.

4.8.2 Activity Records (Appendix D.2)

These recorded the item ratings of each activity using the activity ordinal numbers. They generated

information about the nature of the caregivers' activities and their ratings.

4.8.3 Qualpacs Score Sheets (Appendix D.4)

All item ratings were entered on these score sheets and the scores calculated in accordance with Qualpacs directions. The data thus obtained produced information with several uses.

They included the total of the ratings of each item and the number of times each was rated. From this could be calculated the mean rating of each item, subsection scores, patient scores and ward scores.

Used in combination with the activity records the data produced additional information about the the caregivers' activities and the quality of their care.

From these score sheets it was also possible to derive numerical data about the items and the observer and co-observer perceptions of them.

4.9 Application of Qualpacs Guidelines to this Project

The authors provide guidelines for using the scale and the adjunct materials(7), and make it clear that these may be adapted according to local interests and needs. The following is a summary of the ways in which the Qualpacs guidelines were adapted and used for this project:

APPLICATION OF QUALPACS GUIDELINES TO THIS PROJECT

QUALPACS RECOMMENDATIONS	RESEARCH PROJECT ADAPTIONS
1. Design	1. Design
a) Designed to measure care received in any setting	a) Used in 3 medical and 3 surgical wards of a general hospital
b) ... regardless of the category of the caregiver.	b) All care was recorded regardless of the caregiver but the category of the caregiver was recorded. This included other patients, visitors and selfcare where appropriate.
c) The standard of measurement is the quality of care expected of a 'first-level staff-nurse' - "one who traditionally is charged with providing care that is safe, adequate, therapeutic and supportive for meeting nursing care needs of patients" and has been prepared for her responsibilities by a nursing education programme which leads to "state licensure as a registered nurse".	c) The standard of care expected of a qualified nurse who is registered with the South African Nursing Council.
2. Observer-Raters	2. Observer-Raters
a) These should be suitably qualified nurses ...	a) All the observers were registered nurses ...
b) who are competent to judge the quality of nursing care.	b) who were all involved in clinical teaching and assessment of student nurses.
c) There should be at least two observers.	c) For economic reasons there was only one observer. However, there were 9 registered nurses who acted as independent co-observers where possible.

3. The Standard of Measurement

a) Subjectivity - "nurses must realize that they are capable of making informed judgements based on observed facts".

b) A 'Frame of Reference' is provided.

c) Nurses competent to judge the quality of nursing care ... have shown a high level of inter-rater agreement.

4. Using the Scale

a) A 'Cue Sheet' is supplied in the manual.

b) Observed patient care activities should be rated in terms of the CARE elements and of their appropriateness to the patient's needs.

c) The 'Not Observed' column is for care given but not observed and the 'Not Applicable' column for items which do not apply to this particular case.

d) Interactions may be inferred from records or information given by patient, staff or family.

5. Interactions/Interventions

a) These were the terms used for activities observed and rated. Episodes of care may contain several interactions/interventions.

b) One interaction may permit ratings to be ascribed to several relevant items.

6. Calculating the Score

Detailed directions are included in the manual for calculating the scores.

7. The Patients for Observation

a) The patient's permission does not need to be secured.

b) An 'Information Face Sheet' is included in the manual, as a model for the collection of the following information:

i) Patient data.

ii) Room accommodation.

iii) Diagnosis and condition of the patient.

iv) 'Level of Care' is defined.

v) Information about the unit.

vi) Personnel code and census.

3. The Standard of Measurement

a) The single observer made an effort to remain impartial and unbiased. She did not discuss the standard of care with anyone, and tried to keep her measurement constant.

b) The observer established her own frame of reference, using the Qualpacs form as a guide. Co-observers were issued with a copy of the frame of reference.

c) Independent co-observers co-rated at least half the observations in each ward. The inter-rater agreement will form one of the investigations in this study.

4. Using the Scale

a) A copy of the Cue Sheet was issued to each observer. In addition, the observer drew up a modified version of the cue sheet and issued a copy to each co-observer to study and use for reference. She also made herself familiar with the cues, and referred to them whenever necessary. She enclosed an item check list in the Observation Folder.

b) All the activities were recorded and those with CARE components were rated on the Qualpacs scale.

c) The 'Not Observed' and 'Not Applicable' columns were not used because they would have required observer co-observer concurrence which was not feasible in this study. These columns were ignored.

d) Only observed interactions were recorded and rated by the observers.

5. Interactions/Interventions

a) For the purposes of this study the following terms were used:

i) 'PATIENT CARE ACTIVITIES' for the actions involving the patient which may or may not contain a rateable care component.

ii) 'TRANSACTIONS' for patient care activities when referring to the caregiver aspects.

iii) 'INTERACTIONS/INTERVENTIONS' for activities which include a care component and are rateable.

b) One interaction often allowed several ratings, which could also vary from 'best care' to 'poorest care'.

6. Calculating the Score

Directions for calculating the scores were followed, and the scores compared as suggested.

7. The Patients for Observation

a) Patients were told about the nursing care study and asked if they would mind taking part. There were no objections.

b) The following information was recorded on the 'Recording Sheet':

i) Patient's name was not recorded, but other relevant data were included.

ii) Room accommodation, ward and bed number were all part of the patient's identifying data.

iii) Diagnosis was included and other pertinent facts such as 'patient confused' or 'for theatre at 10h00', etc.

iv) 'Level of Care' definition was modified - see 'Definition of Terms'.

v) Relevant unit information was obtained.

vi) Personnel involved in care were identified on the activity recording sheet.

8. Carrying out a Ward Evaluation

a) As few as 5 patients will yield a valid and reliable measurement.

b) About 1 hour is required for pre- and post-observation records for each patient.

c) Observation sessions should take place during busy periods ...

d) Extending them beyond 2 hours seldom results in ratings for additional items.

e) Observations should be carried out on 2-3 consecutive days.

f) At least 5-6 patients should be rated in each unit.

9. Selecting the Patients for Observation

The manual recommends modified random selection of patients and includes directions for carrying this out.

10. Approach to the Ward Staff

A 'Fact Sheet About Qualpacs' is included in the manual, as a model containing the information that should be given to the ward staff. The following information is included:

i) Staff and patients should be told about the proposed study and about the 'plan, purpose and process of the evaluation'.

ii) Staff and patients should be reassured about anonymity.

iii) Observers should be as unobtrusive as possible.

iv) Observers should remain uninvolved in patient care and should be ignored.

v) Staff should introduce observers to all the patients without any indication of which patients will be under observation.

8. Carrying out a Ward Evaluation

a) The intention was to rate 6 patients in each ward. With increasing confidence in using the scale and the help of the co-observers, up to 11 patients were rated in a ward and an average of 18 patient observations per ward were carried out.

b) It was found that about 6 hours pre- and post-observation time per ward was required.

c) Observation sessions took place from 8h00-10h00 and 10h30-12h30 on 3 consecutive mid-week mornings.

d) The observation periods were all 2 hours each.

e) The observations in each ward were carried out on consecutive Tuesday, Wednesday and Thursday mornings.

f) Six patients were rated in the first ward, thereafter 9-11.

9. Selecting the Patients for Observation

Modified random selection was carried out in accordance with the directions.

10. Approach to the Ward Staff

A brief descriptive note was given to the ward sister and the proposed study discussed with her. Once her permission was granted:

i) The researcher explained that a nursing care study was to be carried out, its purpose and aims, and answered questions about it.

ii) Staff and patients were reassured about confidentiality and anonymity.

iii) Observers chose an inconspicuous place to sit and appeared to be engrossed in paperwork.

iv) Observers were uninvolved in patient care and staff and patients paid them very little attention.

v) Neither staff nor patients knew which patients were being observed. Observers introduced themselves to each of the patients in the ward.

Chapter IV

References:

1. Wandelt,M.A. and Ager, J.W.: Quality Patient Care Scale. New York. Appleton-Century-Crofts, 1974,p.xii

2. Ibid. p.46

3. Ibid. p.44

4. Ibid. p.82

5. Ibid. p.52

6. Ibid. p.5

7. Ibid. p.33-54 and 71-82

V THE RESEARCH DATA

5.0 Introduction:

"The primary objective of this study was to observe patient care in a hospital ward while it was taking place in order to accumulate data about that care."(Chapter IV,4.0)

It was found that a great deal of material was collected from the study. This was processed and selected information concerning the patients and their setting, the observers and the observations is presented below.

5.1 The Patients

TABLE 5.1: The Patient Sample

WARD	BED STATE	BED OCCUPANCY Mon	Th	NUMBER OF PATIENTS OBSERVED
SI	28	23	22	6
SII	31	21	14	10
SIII	28	24	19	9
SURGICAL	87	68	57	25
MI	25	25	24	9
MII	25	21	21	11
MIII	25	25	19	9
MEDICAL	75	71	64	29
S & M	162	139	121	54

From Table 5.1 it can be seen that out of a total bed state in the 6 selected wards of 162, there was a bed occupancy at the time of the study of 139 (68 surgical and 71 medical patients). However, between the initial Monday count and the final Thursday observations there were usually several discharges resulting in a final figure of 121 (57 surgical and 64 medical patients). This trend was particularly marked during the last 3 weeks of the study when SII, SIII and MIII discharged 5, 5 and 6 patients respectively in these few days.

Observations were carried out on 54 of the patients, 25 in the surgical wards and 29 in the medical wards.

Thus using only the initial Monday figures, 49% of the patient population was in the surgical wards and 51% in the medical wards. Almost 39% of the patients were observed, 46% of them in the surgical wards and 54% in the medical wards.

5.1.1 Room Accommodation

Table 5.2 shows the dispersion of the patients in the wards. Once again using the Monday census, (Total=139) it can be seen that the patients were usually nursed in Room B (36) followed by C (3?) and A (28). Thus, 71% of the patients were nursed in these 3 rooms, 14% in Room D and 15% in wards E, F, G and H together.

TABLE 5.7: Room Accommodation

ROOM	SURGICAL WARDS				MEDICAL WARDS				SURGICAL + MEDICAL WARDS		
	NUMBER OF BEDS	NUMBER OF PATIENTS Mon	Thur	NUMBER OF PATIENTS OBSERVED	NUMBER OF BEDS	NUMBER OF PATIENTS Mon	Thur	NUMBER OF PATIENTS OBSERVED	NUMBER OF PATIENTS Mon	Thur	NUMBER OF PATIENTS OBSERVED
A	6	13	13	6	6	15	13	8	28	26	14
B	6	18	13	6	6	18	17	8	36	30	14
C	6	17	14	6	6	17	14	8	34	28	14
D	6	10	8	3	-	10	9	4	20	17	7
E	-/2	3	3	1	2	2	2	-	5	5	1
F	2	1	2	2	2	4	4	-	5	6	2
G	2	3	1	-	2	2	2	1	5	3	1
H	-/1	3	3	1	1	3	3	-	6	6	1
	28/31	68	57	25	25	71	64	29	139	121	54

Of the 54 patients observed, 42 of the initial observations were in rooms A, B and C (14 in each), 7 in room D and 5 in rooms E, F, G and H. This gives percentages of 78% in A, B and C, 13% in D and 9% in the side wards.

5.1.2 Personal Details

Although the name, age, sex and diagnosis of each patient were recorded at the time of the observations these details have not been included in this analysis. Because of the nature of the hospital, patients were distributed among the wards according to sex and diagnostic category. With so few wards to choose from the random selection of the wards was not controlled for either of these factors. However, approximately half the patients in the study group were male (69) and half female (70).

5.1.3 Condition of the Patient

The diagnosis/sex distribution of patients resulted in clusters of patients in the wards with the same diagnosis, although at different stages of the condition. Thus, while sharing a common diagnosis the care needs of each patient were highly individual.

For this study the researcher used the concept of 'level of care' as provided in the Quality Patient Care Scale manual(1) but modified it.(Appendix E) Before each observation she assessed the level of care requirements of each patient from Kardex, handover report and personal observation, and each patient was designated either TC (total care), MC (medium care) or SC (selfcare).

5.1.4 Level of Care

The researcher found that 'level of care' influenced the patient population in 2 ways:

a) It played a part in determining room accommodation. Patients requiring increased care were moved into rooms A or B and then moved back to rooms C or D when their care needs lessened. Occasionally, they were moved to a side ward for 'specialling'.

b) It affected the 'repeatability' of observations, because a patient requiring one level of care during the initial observation may have a totally different set of care requirements the following day. Thus, a young man requiring total care post operatively one morning, was up and ready to go home the following morning. For this reason the level of care table includes repeat observations as independent observations.

TABLE 5.3: Level of Care and Room Accommodation

LEVEL OF CARE	WARD	ROOMS A	B	C	D	E	F	G	H	TOTAL PER WARD
TOTAL CARE	SI	/R	/R				/		/	4
	SII	/	/							3
	SIII	/								1
	MI	/	/	/						3
	MII	/	/							2
	MIII	/	/R							3
TOTAL PER ROOM		5	5	1	0	-	1	0	1	19
MEDIUM CARE	SI	/	/R		/					4
	SII			/			/			2
	SIII	/	/R	//		/				6
	MI	/	/R	/R	//					5
	MII	///	/	///						7
	MIII			/	//					2
TOTAL PER ROOM		5	5	7	3	2	2	0	0	29
SELF CARE	SI			/R/						1
	SII	//	/							6
	SIII				//					2
	MI		/	/	R					3
	MII		/R	/						3
	MIII									0
TOTAL PER ROOM		2	5	7	3	0	0	0	0	17
TOTAL		12	15	15	6	2	3	0	1	65

/ = initial observation
R = repeat observation

The level of care table (Table 5.3) deals only with the observer's observation sessions. It shows that of 65 observations 29 (45%) required medium care, 19 (29%) total care and 17 (26%) were able to care for themselves.

Most of the 'total care' patients were cared for in A and B (7 and 8 respectively) 1 in C and 3 in side wards F,G and H.

'Medium Care' patients were more evenly spread, 9 in B, 7 in C, 6 in A and 5 in C, with only 2 in side wards E and F.

Most 'Selfcare' patients were in C (7) followed by B (5), 3 in D and 2 in A. There were none in the side wards.

5.2 The Observers (Table 5.4)

There was one observer and 9 co-observers. All were registered nurses who were engaged in nursing education, and the observer and 3 of the co-observers were registered nursing tutors. All had experience in the clinical evaluation of student nurses. Altogether they carried out 108 observations.

TABLE 5.4: The Observers

COOBSERVERS	DNED	ID	NO. OF SESSIONS	SESSION I INITIAL	SESSION I REPEAT	SESSION I TOTAL	SESSION II INITIAL	SESSION II REPEAT	SESSION II TOTAL	TOTAL INITIAL	TOTAL REPEAT	COMBINED
	-	A	2	3	-	3	-	-	-	3	-	3
	-	B	4	2	-	2	3	2	5	5	2	7
	/	C	1	-	2	2	-	-	-	-	2	2
	-	D	5	2	-	2	7	-	7	9	-	9
	-	E	2	2	-	2	-	1	1	2	1	3
	-	F	5	7	-	7	2	-	2	9	-	9
	-	G	4	-	-	-	3	2	5	3	2	5
	/	H	2	2	1	3	-	-	-	2	1	3
	/	I	2	-	-	-	1	1	2	1	1	2
COOBSERVER TOTALS	3	9	27	18	3	21	16	6	22	34	9	43
OBSERVER TOTALS	1	1	36	39	4	34	24	7	31	54	11	65
COMBINED TOTALS	4	10	63	48	7	55	40	13	53	88	20	108

In 36 observation sessions the observer carried out 65 observations, 43 (66%) of them concurrently observed by the co-observers. Fifty four (83%) were initial observations, 34 (63%) of them co-observed, and 11 (17%) were repeat observations, 9 (82%) of them co-observed.

The co-observers were volunteers who gave their time whenever they could fit it in. Two of them gave 5 sessions each, two 4, four gave 2 sessions each and one gave one session. Thus, between them they participated in 27 observation sessions (54 hours) over the 6 weeks of the study. In this time two of them carried out observations on 9 patients each, one on 7, one on 5, three on 3 and two on 2 patients each, a combined total of 43 patient observations.

5.3 The Observations (Table 5.5)

Table 5.5 is a descriptive summary of the observations carried out.

TABLE 5.5: The Observations

WARD	NO. PTS. OBSERVED	OBSERVATIONS OB.	OBSERVATIONS CCOB	REPEATS OB.	REPEATS CCOB	TUESDAYS OB.	TUESDAYS CCOB	WEDNESDAYS OB.	WEDNESDAYS CCOB	THURSDAYS OB.	THURSDAYS CCOB	SESSION I OB.	SESSION I CCOB	SESSION II OB.	SESSION II CCOB	LEVEL OF CARE TC	LEVEL OF CARE MC	LEVEL OF CARE BC	NOON A	NOON B	ABSORPTION C	ABSORPTION D	ABSORPTION E	NUMBER OF ACTIVITIES OB.	NUMBER OF ACTIVITIES CCOB
SI	6	6	3	3	3	2	2	3	-	4	4	5	3	4	3	4	4	1	3	4	1	1		188	78
SII	10	10	7	1	1	4	4	3	2	4	2	6	6	5	2	3	2	6	2	2	4		3	137	69
SIII	9	9	8	2	1	3	2	4	1	4	3	5	2	6	4	1	8	2	3	4	2	2	1	121	49
	25	25	18	6	5	9	8	10	3	12	9	16	11	15	9	8	14	9	7	10	7	3	4	386	196
		43		11		17		13		21		27		24		31			31					581	
MI	9	9	4	2	1	3	3	4	1	4	1	6	2	5	3	3	5	3	3	4	2	3		137	62
MII	11	11	8	1	1	4	4	4	2	4	3	6	4	6	5	2	7	3	4	4	4			119	101
MIII	9	9	7	3	3	4	3	4	4	3	3	5	4	5	5	6	3	3	2	4	3	3	1	165	102
	29	29	19	6	5	11	10	12	7	11	7	18	10	16	13	11	15	8	9	12	9	6	1	412	265
		48		11		21		19		18		28		29		34			34					677	
	54	34	27	11	9	20	17	22	16	23	16	34	21	31	23	19	29	17	16	22	16	9	5	778	461
		61		20		37		38		39		55		54		65			65					1239	
		108				108						109													

From this table it can be seen that:

5.3.1 Fifty-four patients were observed, 25 in surgical and 29 in medical wards. Thirty-four of them were concurrently co-observed and there were 11 repeat observations, 9 of them with a co-observer.

Thus, there were 108 observations carried out altogether, 88 (81%) of them initial observations and 20 (19%) repeats. Sixty-five (60%) were observer observations and 43 (40%) were carried out by the co-observers.

5.3.2 Fifty one (47%) of the observations were carried out in the surgical wards and 57 (53%) in the medical wards.

5.3.3 Thirty seven (34%) of the observations were carried out on Tuesdays, 32 (30%) on Wednesdays and 39 (36%) on Thursdays.

5.3.4 Fifty-five (51%) were observed during the early sessions (Session I) and 53 (49%) during the later sessions (Session II). Session I observations consisted of 27 (49%) surgical and 28 (51%) medical ward patients and Session II of 24 (45%) surgical and 29 (55%) medical ward patients.

5.3.5 Counting repeat observations as independent observations (a total of 65 observations), 19 (29%) of the observed patients required 'total care' (TC), 29 (45%) 'medium care' (MC) and 17 (26%0 were able to care for themselves (SC). Eleven (58%) of the 'total care' patients were in the medical wards and 8 (42%) in surgical wards, while medium and self care patients were fairly evenly divided between the two.

5.3.6 Once again regarding repeat observations as independent observations, 22 (34%) of the observed patients were in Room B, 15 (23%) each in Rooms A and C, 8 (12%) in D and the remaining 5 (8%) in the side wards.

5.4 The Patient Care Activities (Table 5.6)

TABLE 5.6: The Number of Activities Recorded

WARD	NO. OF PATIENTS	NUMBER OF OBSERVATIONS SESSION I			SESSION II			TOTALS			NUMBER OF ACTIVITIES RECORDED OBSERVER			CO-OBSERVERS			TOTALS		
		OB	COOB	TOTAL	OB	COOB	TOTAL	OB	COOB	TOTAL	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL
BI	6	5	3	8	4	3	7	9	6	15	50	50	100	25	48	75	85	98	175
BII	10	6	6	12	5	2	7	11	8	19	77	60	137	64	5	69	141	65	206
BIII	9	5	3	7	6	4	10	11	6	17	68	53	121	23	26	49	91	79	170
SURGICAL	25	16	11	27	15	9	24	31	20	51	195	163	358	122	71	193	317	234	551
HI	9	6	2	8	5	3	8	12	5	16	83	54	137	28	34	62	111	88	199
HII	11	6	4	10	6	5	11	12	8	21	74	45	119	60	41	101	134	86	220
HIII	9	7	4	10	5	5	10	11	9	20	83	73	156	37	65	102	120	138	258
MEDICAL	29	18	10	28	16	13	29	34	23	57	240	172	412	125	140	265	365	312	677
G A N	54	34	21	55	31	22	53	65	43	108	435	335	770	247	211	458	682	546	1228

The number of activities observed and recorded over the 108 observation periods was 1228, an average of 11,37 per period. Of these, 770 were recorded by the observer over 65 observation periods (an average per period of 11,85) and 458 by the co-observers over 43 periods (10,65 per period).

In the surgical wards 551 activities over 51 observation periods shows an average of 10,8 per period, and 677 in 57 medical ward observations gives an average of 11,88 per period. Of these, the observer recorded 358 over 31 periods (11,55) in surgical and 412 over 34 (12,12) in medical wards, while co-observers recorded 193 in 20 observation periods (9,65) surgical and 265 in 23 (11,52) medical ward observation periods.

Table 5.6 also shows that in the Session I observation periods, 682 activities were recorded over 55 periods, an average of 12,4 per period. The observer averaged 12,79 (435 activities in 34 periods) and the co-observers 11,76 (247/21).

In Session II the total average was 10,3 (546 activities in 53 periods) with the observer's average 10,8 (335/31) and the co-observers' 9,59 (211/22).

From these data it can be seen that the observer consistently recorded more activities per observation period than the co-observers. There were also consistently fewer activities per observation period in Session II than in Session I.

5.5 Further Analysis of the Patient Care Activities

Using only the observer's records, Table 5.7 shows a further break down of the patient care activities.

Table 5.7(a) shows that the most activities were recorded in ward MIII(156) and the least in SI(100), showing a range of 56. The mode was 137(SII and MI), the median 129 and the mean 128.

The medical wards were noticeably more active than the surgical, the medical ward range being 119-156, while the surgical ward was 100-137, although the range in both cases was the same (37). The medical ward median and mean were both 137, the same as the highest surgical figure, while the surgical median was 121, and the mean, at 119, was the same as the lowest medical ward total.

TABLE 5.7: Number of Patient Care Activities Observed

a) In each ward:

WARD	RANK	NO	HIGH - LOW	RANGE	MEDIAN	MEAN
SURGICAL			SURGICAL			
SII	1	137	137 - 100	37	121	119
SIII	2	121				
SI	3	100				
	TOTAL	358				
MEDICAL			MEDICAL			
MIII	1	156	156 - 119	37	137	137
MI	2	137				
MII	3	119				
	TOTAL	412				
SURGICAL & MEDICAL			SURGICAL & MEDICAL			
MIII	1	156	156 - 100	56	129	128
SII]	2	137				
MI]	3	137				
SIII	4	121				
MII	5	119				
SI	6	100				
	TOTAL	770				

b) In each observation period:

WARD	HIGH - LOW	RANGE	NUMBER OF OBS. PERIODS	NUMBER OF ACTIVITIES	MEAN	MEDIAN	MODE
SI	16 - 9	7	9	100	11.11	11	12 9
SII	16 - 10	6	11	137	12.45	12	12 10
SIII	18 - 7	11	11	121	11.00	10	8 7
SURGICAL	18 - 7	11	11	358	11.55	12	12
MI	16 - 9	7	11	137	12.45	13	13
MII	17 - 5	12	12	119	9.92	9.5	7
MIII	19 - 6	13	11	156	14.18	13	13
MEDICAL	30 - 5	25	34	412	12.12	13	13
S I S COMBINED	30 - 5	25	23	770	11.85	12	12

Table 5.7(b) shows that the number of activities in each two hour observation period ranged from 5 to 30, with an average of 11,85 per period. The medical ward range (25) was greater than the surgical range (13) and the medical ward average (12,12) was higher than the surgical (11,55) although MII had the lowest ward mean of 9,92.

5.6 Interactions (Table 5.8)

The Qualpacs manual refers to the rated patient care activities as "interactions/interventions". The rated activities will be referred to here as interactions.

TABLE 5.8: The Number of Activities Rated (Interactions)

WARD	NO OF PATIENTS	NO. OF OBSERVATIONS OB	COOB	TOTAL	NO. OF ACTIVITIES OB	COOB	TOTAL	NO. OF INTERACTIONS OB	COOB	TOTAL
SI	6	9	6	15	100	75	175	88	69	154
SII	10	11	8	19	137	69	206	119	66	185
SIII	9	11	6	17	121	49	170	115	47	162
	25	31	20	51	358	193	551	322	182	504
MI	9	11	5	16	137	62	199	122	47	169
MII	11	12	9	21	119	101	220	101	85	186
MIII	9	11	9	20	156	102	258	148	81	229
	29	34	23	57	412	265	677	371	213	584
SURGICAL	25	31	20	51	358	193	551	322	182	504
MEDICAL	29	34	23	57	412	265	677	371	213	584
	54	65	43	108	770	458	1228	693	395	1088

Table 5.8 shows that out of 1228 patient care activities recorded by all the observers, 1088 (89%) were rated. In the surgical wards 504 (91%) of the activities were rated, and in the medical wards 584 (86%).

The observer consistently rated 90% of the activities she observed, 322 surgical, 371 medical and a total of 693 of the 770 activities she recorded.

The co-observers rated 395 (86%) of the observed activities, 182 (94%) surgical ward activities and 213 (80%) medical.

5.7 Conclusion

Chapter V dealt with the descriptive data collected. It shows quantitative information about the patient sample, the setting, the observers and the observations.

Examination of the data revealed a discrepancy between the number of activities recorded and the number rated. It was evident that none of the observers rated all the activities recorded. The main observer rated 90% of the recorded activities while the co-observers rated, on average, 86% of them.

In the following chapters the 2 sets of figures will be dealt with separately.

1) The Patient Care Activities: These are all the activities recorded. They will be examined further in order to identify the nature of the activities and to derive quantitative information about them. (Chapter VI)

2) The Interactions/Interventions (the rated activities): They will be processed in accordance with the Qualpacs directions in order to evaluate the quality of care. (Chapter VII)

Chapter V

References:

1. Wandelt, M.A. and Ager, J.W.: Quality Patient Care Scale. New York: Appleton-Century-Crofts, 1974. p.74

TABLE 6.1: Tne Number of Patient Care Activities

WARD	NO. OF OBS			NO. OF ACTIVITIES			NUMBER OF COMPONENTS		
	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL
SI	5	4	9	50	50	100	66	65	131
SII	6	5	11	77	60	137	93	80	173
SIII	5	6	11	68	53	121	89	63	152
SURGICAL	16	15	31	195	163	358	248	208	456
MI	6	5	11	83	54	137	121	66	187
MII	6	6	12	74	45	119	101	53	154
MIII	6	5	11	83	73	156	105	85	190
MEDICAL	18	16	34	240	172	412	327	204	531
S & M	34	31	65	435	335	770	575	412	987
	PERCENTAGES						58%	42%	100%

TABLE 6.2: The Nature of the Patient Care Activities

WARD	1. MONITORING OBS/INVESTIGATE			2. COMFORT & SAFETY			3. CLEANING			4.CONVERSATION			5. FOOD & FLUIDS			6. CLEANING & TIDYING			7. REST & EXERCISE			8. TREATMENT		
	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL
SI	15	14	29	2	9	11	11	7	18	5	5	10	9	4	13	3	6	9	12	9	21	9	11	20
SII	12	22	34	8	17	25	10	6	16	21	8	29	13	4	17	16	6	22	11	2	13	2	15	17
SIII	13	5	18	13	6	19	13	6	19	8	13	21	6	2	8	20	7	27	10	7	17	6	17	23
SURG	40	41	81	23	32	55	34	19	53	34	26	60	28	10	38	39	19	58	33	18	51	17	43	60
MI	28	20	48	19	7	26	11	6	17	16	7	23	21	8	29	13	6	19	12	9	21	1	3	4
MII	22	6	28	19	9	28	21	5	26	10	3	13	10	10	20	9	8	17	4	5	9	6	7	13
MIII	13	19	32	24	11	35	13	12	25	12	12	24	19	8	27	13	8	20	9	3	12	3	12	15
MED	63	45	108	62	27	89	45	23	68	38	22	60	58	26	76	34	22	56	25	17	42	10	22	32
TOTALS	103	86	189	85	59	144	79	42	121	72	48	120	86	28	114	73	41	111	58	35	93	27	65	92
PERCENTAGES	54%	46%	189	59%	41%	189	65%	35%	121	60%	40%	121	68%	32%	11,5%	64%	36%	11,5%	62%	38%	93	29%	71%	92

VI THE NATURE OF THE PATIENT CARE ACTIVITIES

6.0 Introduction

"It was expected to be able to identify the nature of the patient care activities...."(Chapter IV,4.0)

The patient care activities recorded by the observer over 65 observation sessions were broken down further into their constituent elements.When she analyzed them the researcher found that one patient care activity recorded sometimes had more than one component. For example, a sister checked the patient's chart when she gave an injection. Another sister renewed a dressing and made the patient comfortable at the same time. On another occasion the sister discussed the patient's diet as she gave her her medication. Thus, it was found that the 770 patient care activities produced 987 components . (See Table 6.1)

6.1 Identifying the Nature of the Patient Care Activities

When the patient care activities were grouped homogeneously, they were found to fall into 8 broad categories, as shown in Table 6.2.

From the table it can be seen that 'Monitoring and Observation/ Investigation' formed the largest part of patient care activities. Together with 'Charting' they made up almost one third (31,4%) of all the activities.

The nature of the activities and the number of times they occurred in Session I and Session II are described in more detail below. The caregiver involvement in each group of patient care activities, included in these descriptions, is extracted from the Tables 6.3, 6.4, 6.5 and 6.6.

6.1.1 Monitoring/Observation/Investigation: 189 Components (19%)

Session I : 103(54%)
Session II: 86(46%)

Within this category, checking on the patient's condition by observation and enquiry was the most frequent activity recorded(57 - 30%).

Temperature, pulse and respiration were monitored 26 times (14%) and blood pressure 19 (10%). The observed patient was included in a ward round 25 times (13%). The intravenous drip was checked 22 times (12%).

Intake and output checks were made 9 times, blood specimens taken 8 times, and doctors carried out a medical examination on the patient 7 times. Three times each, dressings were checked, oxygen and suction checked and electrocardiographs carried out on observed patients.

Twice the focus was on the pain the patient was suffering.

Once only activities in this category were: collection of a urine specimen; aspiration of bone marrow; checking on level of consciousness; weighing a patient; checking drainage.

1.

MONITOR/OBSERVATION INVESTIGATION	SESSION	
	I	II
CHECK PATIENT	31	26
T.P.R.	21	5
B/P	15	4
WARD ROUND	15	10
CHECK IV THERAPY	10	12
INTAKE/OUTPUT	-	9
BLOODS	8	-
MEDICAL EXAMINATION	1	6
DRESSINGS	-	3
OXYGEN & SUCTION	-	3
E.C.G.	-	3
PAIN	-	2
SSU	-	1
MARROW ASPIRATE	1	-
LEVEL OF CONSCIOUSNESS	-	1
WEIGHT	-	1
CHECK DRAINAGE	1	-
	101	88
	189	

The staff most involved in these activities were student nurses (92 transactions) and it was their most common activity after comfort activities. Sisters were also highly involved (64 transactions) and it was their major activity after 'treatment'. It was the major activity of doctors 46(66%) on their rounds.

Observing the patient's welfare was also a major task of the zone matron (9 - 90% of her care activities) and investigating the cardiac condition the only task of the electrocardiographist (3 - 100%).

The ward clerk checked on the patient's condition once and on 3 occasions the observers became involved in the activity. Ward maids were seen to be involved on 2 occasions.

6.1.2 Comfort, Privacy and Safety: 144 Components (15%)

Session I : 85 (59%)
Session II: 59 (41%)

The patients' toilet needs were the main group of activities observed under this heading (45-31%). They included using the bedpan or urinal, going to the toilet and on two occasions receiving care when vomiting. On 2 occasions air freshener was sprayed after bedpan use.

2. COMFORT AND PRIVACY	SESSION I	SESSION II
BEDPAN	11	7
URINAL	7	7
TOILET	5	4
VOMITING	2	-
SPRAY	2	-
BEDMAKING	6	4
CHANGE LINEN	-	5
ARRANGE PILLOWS	1	3
MAKE COMFORTABLE	7	8
RIPPLE MATTRESS	-	1
CHANGE GOWN	-	1
WASHBASIN	2	1
SHAVING	4	-
FINGERNAILS	-	1
BATH	6	-
BEDBATH	7	2
DRAWING CURTAINS	17	4
COTSIDES	2	-
BACK CARE	3	4
BANDAGE	1	1
PAIN	-	3
READING	2	1
RADIO	-	2
	85	59
	144	

Another large group of comfort activities (35 -24%) revolved around making the patient comfortable in bed. They included changing linen, arranging pillows and on one occasion connecting up a ripple mattress.

The third largest group of activities in this category involved personal cleanliness (23-16%) mostly using a wash basin or having a bedbath(12), or going to the bath or shower (6). A patient was shaved or shaved himself 4 times, and once a patient's fingernails were cut and cleaned.

Included in this category was patient privacy through screening (21 times - 15%) and safety through erecting cotsides (2). Other comfort activities included back care,(7) adjusting an uncomfortable bandage (2) and dealing with a patient's pain (3).

Recreational activities were also included here and involved reading (3 times) and listening to a radio(2).

Comfort activities were the major concern of student nurses (107 transactions). Sisters were sometimes involved (24 transactions) and ward maids occasionally (7 transactions).

On 3 occasions a doctor was involved in this group of activities, a physiotherapist twice and a clincial sister twice.

The patients looked after their own comfort on 28 occasions and each other's twice. The observer was once involved in a comfort activity on behalf of the observed patient.

6.1.3 Charting: 121 Components (12%)

Session I : 79 (65%)
Session II: 42 (35%)

This included all activities in which staff members checked or recorded items in the file or chart. The commonest activity observed was checking the records (69 - 57%) and replacing forms (15 - 12%). Intake and output was recorded 14 times (11%), temperature, pulse and respiration 9 times (7%) and blood pressure 5 times (4%).

3. CHECKING AND CHARTING FILES	SESSION	
	I	II
CHECK RECORDS	41	28
REPLACE FORMS	13	2
RECORD I/O	9	5
" TPR	9	-
" B/P	5	-
" IV THERAPY	-	4
" INJECTIONS	1	1
" URINE TEST	-	2
" BLOODS	1	-
	79	42
	121	

Intravenous therapy records were entered 4 times, injections twice, urine specimens twice and a blood specimen once.

Those involved in this activity were mainly sisters (63 transactions) followed by student nurses (51 transactions). Ward maids were never involved.

Doctors were involved 5 times, the pharmacist and the ward clerk 4 times each.

A physiotherapist was involved on one occasion and once a patient filled in his/her own chart.

6.1.4 Conversation: 120 Components (12%)

Session I : 72 (60%)
Session II: 48 (40%)

Verbal communication accompanied most of the activities observed and was not recorded in these cases. However, there were many occasions when verbal communication was the sole identifiable activity in which the observed patient was participating. It was recorded as such and was subsequently found to make up the fourth largest category of patient activities.

4.

VERBAL COMMUNICATION	SESSION	
	I	II
SOCIAL CONVERSATION	32	30
INFORMAT d	17	7
ENQUIRIEs/INSTRUCTIONS	12	3
GREETINGS	6	3
REASSURANCE, COMFORT	5	5
	72	48
	120	

Social exchange was the commonest form of communication (62 - 52%). It usually occurred among the patients but staff members were occasionally involved.

Giving information (24 - 20%), and making enquiries or requests or giving directions (15 - 12,5%) formed a further one third of the verbal communication.

Greetings, introductions and saying goodbye were 9 (7,5% of this category) and reassuring, encouraging and comforting the observed patients were 10(8%).

Most of these verbal exchanges were fairly brief, but there was one professional counselling session with a social worker which lasted almost 15 minutes.

Conversation was the major transaction contributed by other patients (42 transactions) and the only one of visitors (11 transactions). On 5 occasions observed patients were talking audibly to themselves.

Of the staff, student nurses were involved in conversation with the observed patient 36 times, sisters 16, doctors 12 and the physiotherapists 8 times. The observers were drawn into conversation with patients under observation 4 times.

Ward maids, although they worked quite closely to the patients, were never seen to enter into verbal communication with them, and the black nursing assistants contributed almost nothing to this category of care.

6.1.5 Food and Fluids: 114 Components (11,5%)

Session I : 78 (68%)
Session II: 36 (32%)

There was a major meal in each session, breakfast at about 8h00 and lunch at 12h00 and these two meals accounted for 57(50%) of the activities in this category.

Tea/coffee was served after breakfast and again about an hour later (9h30) and accounted for a further 39 (34%) of the food/fluid activities.

5.
FOOD AND FLUID INTAKE

	SESSION I	SESSION II
BREAKFAST	30	27
LUNCH		
TEA/COFFEE	39	6
WATER/FRUIT JUICE	3	2
SWEETS	1	1
FRUIT	-	-
NIL PER MOUTH	2	-
FEEDING	2	-
CHECK DIET	1	-
	78	36
	114	

The other activities of the patient under observation were drinking water or fruit juice (9), and eating sweets (3) or fruit (1).

Twice an observed patient was fed by staff, and twice was 'nil per mouth'. The patient's diet was the subject of another observed activity.

Student nurses had the highest involvement in this aspect of patient care (59 transactions) followed by ward maids (38 transactions) and sisters (15 transactions).

Patients attended to their own food/fluid needs (selfcare) 12 times and helped each other once. An observer was brought in to this aspect of patient care once.

6.1.6 Cleaning and Tidying: 114 Components (11,5%)

Session I : 73 (64%)
Session II: 41 (36%)

The main activity observed was cleaning and tidying the area around the patient's bed (47 - 41%). This included the bedside locker, the cardiac table and the bed itself. On 4 occasions the washbasin beside the bed was included, and the en suite bathroom once.

6. CLEANING AND TIDYING	SESSION I	SESSION II
LOCKER	10	8
BED	16	11
CARDIAC TRAY	-	2
REMOVE TRAYS	21	9
" CUPS	2	-
" WASH BASINS	1	-
" RECEIVERS	1	1
" BEDPANS	3	-
CLEAN FLOOR	15	6
" WASH BASIN	2	2
" BATHROOM	1	-
FRESH CARAFES	1	-
CLEAN THERMOMETERS	-	2
	73	41
	114	

The next most common activity was removing used articles (38 - 33%) usually the breakfast or lunch tray, but also cups, washbasins, receivers and bedpans.

Carafes and thermometers were cleaned and replaced on 3 occasions.

Cleaning the floor around the bed of the observed patient occurred 21 times (18%).

The staff most commonly involved in this category of activities were the maids (63 transactions) followed by student nurses (54 transactions). Sisters were sometimes involved (18 transactions) and on one occasion the patient (selfcare). No one else was seen to carry out these activities.

6.1.7 Rest and Exercise: 93 Components (9%)

Session I : 58 (62%)
Session II: 35 (38%)

7. REST, MOVEMENT, EXERCISE	SESSION I	SESSION II
GETTING UP	5	3
INTO A CHAIR	5	3
WALKING AROUND	13	9
GETTING INTO BED	14	5
LEGS OVER SIDE	-	2
LEAVING THE WARD	-	4
" WHEELCHAIR	6	1
" STRETCHER	2	2
RETURNING TO WARD	-	3
GETTING DRESSED	8	1
PACKING SUITCASE	3	-
BREATHING EXERCISES	1	1
MONKEY CHAIN	1	1
	58	35
	93	

The main activities under this heading (59-63%) were getting up out of bed, getting into a chair, walking around the ward and getting back into bed. On 2 occasions the observed patient sat up with his legs over the side of the bed.

A smaller group of activities included under this heading were leaving the ward or returning to it. This occurred 18 times, 7 times in a wheelchair and 4 times on a stretcher and 4 times on foot.

Other activities included in this category were getting dressed (9) and packing a suitcase to go home (3). Supervised breathing exercises were done twice and the patient was shown how to use the 'monkey chain' twice.

Most of these activities were 'selfcare' activities (54). The student nurses helped 32 times, sisters on 9 occasions and ward maids twice. Physiotherapists were involved 5 times.

On 9 occasions a porter helped with transporting the patient in a wheelchair or stretcher.

6.1.8 Treatment: 92 Components (9%)

Session I : 27 (29%)
Session II: 65 (71%)

Under this heading were included taking medication (29 - 31%) receiving an injection (13 - 14%) and receiving intravenous therapy (19-20%),which together accounted for over two-thirds (65%) of these activities.

Dressings were done 12 times (13%).

Bladder and bowel procedures (10) included bladder drainage, bladder wash out, catheterisation and an enema.

8.
TREATMENT MEDICATION

	SESSION I	SESSION II
ORAL MEDICATION	7	22
INJECTIONS	11	2
IV THERAPY	3	16
DRESSINGS	3	9
BLADDER DRAINAGE	-	3
BLADDER WO	-	2
CATHETERISATION	-	2
ENEMA	-	3
OXYGEN	2	2
SUCTIONING	-	3
NASO GASTRIC TUBE	1	-
HALTER	-	1
	27	65
	92	

Other treatment procedures (9) included oxygen administration, suctioning, passing a naso-gastric tube and fitting a halter.

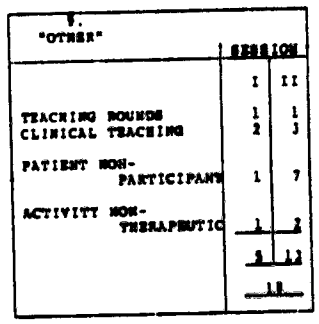
This was the only group of activities which took place more often in Session II (65) than Session I (27).

The sisters were the main caregivers in this category (69) followed by student nurses (31). Physiotherapists carried out 5 treatment activities and doc[illegible] 4.

Twice a patient carried out his/[illegible] own treatment procedure, and a pharmacist, a zone matron, a clinical sister, and a stomatherapist were each involved once in one or other aspect of an observed patient's treatment.

6.2 Items Not Included in the Patient Care Activities ("Other")

Session I : 5 items
Session II: 13 items



"OTHER"	SESSION I	SESSION II
TEACHING ROUNDS	1	1
CLINICAL TEACHING	2	3
PATIENT NON-PARTICIPANT	1	7
ACTIVITY NON-THERAPEUTIC	1	2
	5	13
	18	

These were activities in which, the presence of the observed patient was coincidental. They could not, in the opinion of the observer, be seen to be directed to the patient in a meaningful way.

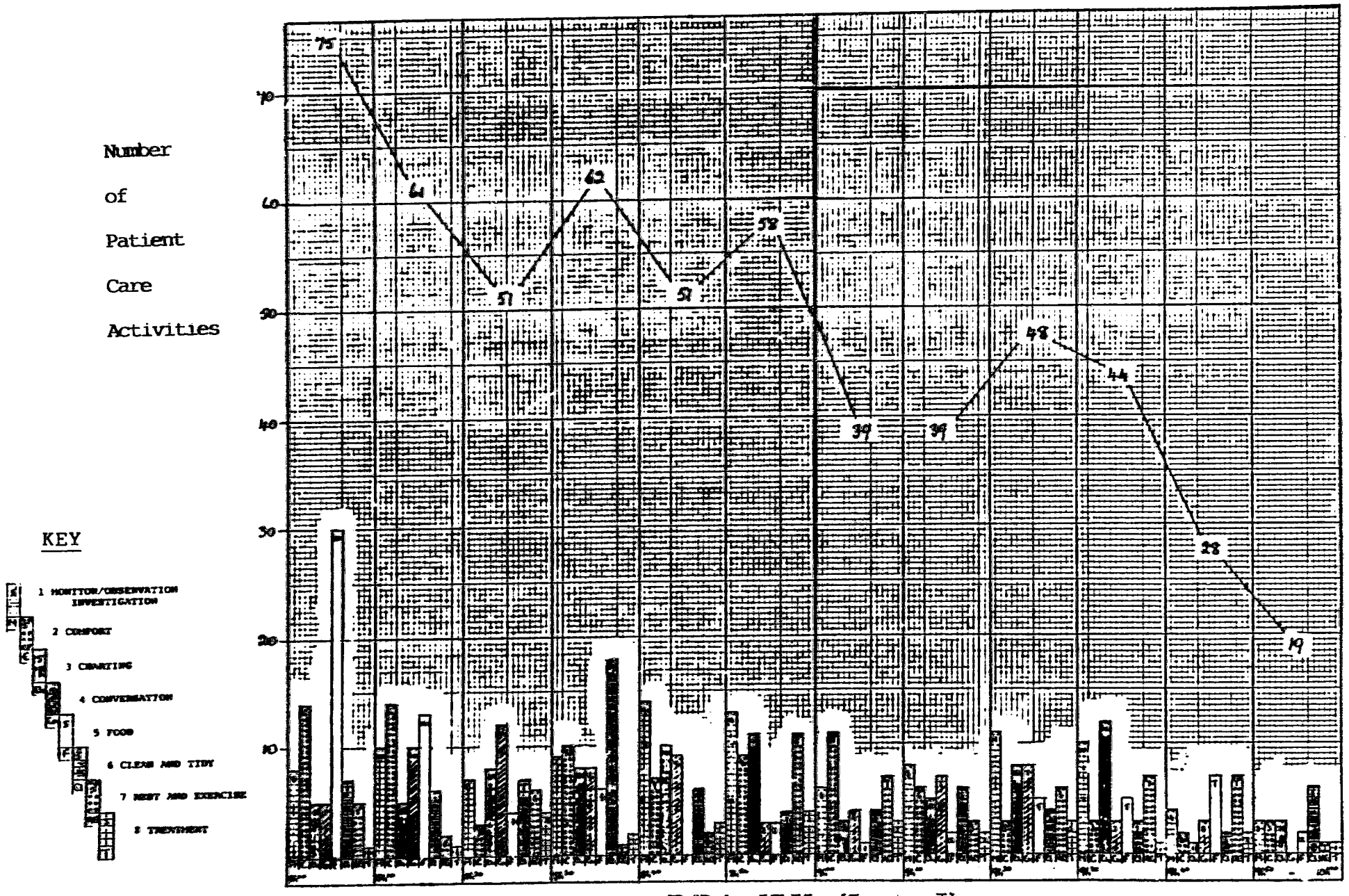
The main group (11) were activities directed at the patient in which the patient was unable to participate. They included the arrival of a visitor when the patient was out of the ward, the delivery of flowers which, in the patient's absence, were left lying beside the bed. On another occasion voluntary workers offered snacks which the patient was incapable of accepting, and on another a stretcher was wheeled in and left beside the patient's bed.

A second group of activities under this heading (7) related to staff education and ranged from a group of doctors discussing symptoms to 2 sisters checking a student nurse's dressing. In these and the other related incidents the focus was on the clinical teaching and not on the health care needs of the patient.

6.3 The Time Factor

Initially it was intended to time the patient care activities taking place and a stopwatch was obtained for this purpose. However, the pilot study showed clearly that this was impracticable because most of the patient care activities were very brief and it was impossible to observe and record activities accurately and manage the stopwatch as well. The research design had to be modified and it was decided to record instead the time of each activity and the order in which they occurred. From this information a timetable was developed which showed which activities occurred in each 10 minute subdivision of each 2-hour observation period.

Using this information together with the data contained in the foregoing analysis of the nature of the patient care



Time in 10 Minute Intervals - 8h00 to 10h00 (Session I)

FIGURE 6.1: The Time Factor - Session I

activities, graphs were drawn up showing the number of components of patient care activities in each category during each 10 minute period. From these graphs (Figures 6.1 and 6.2) a composite description was developed of the activities involving the observed patients during the observation sessions. (See Figures 6.1 and 6.2)

6.3.1 The Chronological Sequence of Patient Care Activities (The number of components are shown in brackets)

Session 1 (575 Components)

8h00 - 8h10 (75):
This was the busiest time of the day, with food by far the most important activity (30). Comfort activities (14) were also high, with some patients finishing off their washing and shaving and a couple using bedpans.

Monitoring activities (8) had started with some doctors and sisters checking up on patients. There was a little cleaning and tidying (7) after the washes, but that hadn't yet reached its peak.

8h10 - 8h20 (61):
Breakfast activities had subsided (13), with tea or coffee being offered around. Comfort activities were still going on at the same level (14). There was a little more monitoring (10) and people were beginning to talk to each other more (10) cleaning and tidying was still carrying on (at 6).

8h20 - 8h30 (51):
Conversation had risen to peak level (12) with an increase in charting activities (8). Monitoring and cleaning were still going on (7 each) and patients were getting out of bed and moving around (6). Food was down to 5.

8h30 - 8h40 (62):
Cleaning and tidying had become the major activity (18) with comfort (10), monitoring (9), charting and conversation (8 each) fairly active. Food had moved up slightly again to 6.

8h40 - 8h50 (51):
Monitoring had reached top position (14), with charting activities next (10). Conversation was fairly high (9), but comfort and cleaning have dropped to 7 and 6 respectively. Food interactions had stopped altogether (0).

8h50 - 9h00 (58):
Monitoring had dropped to 13 but was still the main activity, followed by charting (11). A steep rise in patient activity from 2 to 11 showed that patients were getting up and moving around. Comfort activities were moving up as patients went to the toilet, etc.

9h00 - 9h10 (39):
Comfort activities had reached a peak (11) and patient activity was at 7. Monitoring activities have come down to the lowest yet (6), and food was still very low at one. There was a relative lull.

9h10 - 9h20 (39):
This was still a relatively quiet period, with monitoring the highest, at 8. Patients were becoming more talkative (7), comfort and cleaning activities were continuing, at 6 each and there was still some interest in the charts and files (5).

9h20 - 9h30 (48):
There was a slight resurgence of activity. Monitoring had risen to 11, and the conversation level had risen to 9, with charting close behind at 8. Patients were moving around more (6) and food activities had risen as patients were offered tea (5). Cleaning and tidying activities were steadily diminishing (4).

9h30 - 9h40 (44):
Apart from monitoring and charting (10 and 12) things were quietening down again. Patients were moving around a bit (7) and food activities were still at 5.

9h40 - 9h50 (28):
Patient care activities were subsiding further. Food activities reached a small peak at 7, and patient movement was at the same level, but the other activities were at a very low level (1 to 4).

9h50 - 10h00 (19):
There was a small upsurge in cleaning to 6, but all the other activities were at 3 or less. There was no conversation and the ward was quiet.

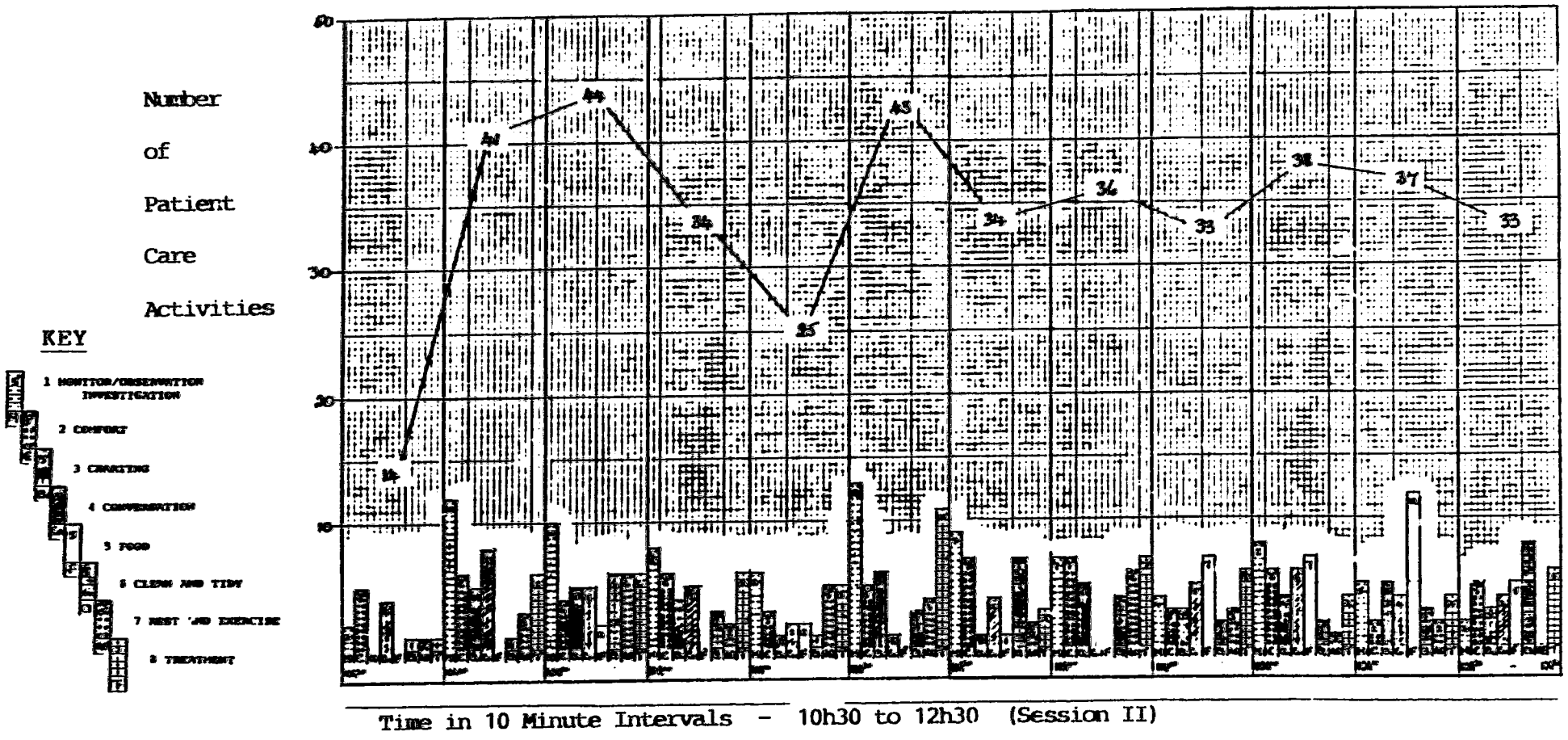


FIGURE 6.2: The Time Factor - Session II

Session II (412 Components)

This was a much quieter part of the day than Session I, with no activity reaching higher than 13. The predominant activity in this session was monitoring the patient.

10h30 - 10h40 (14):
This was still a very quiet period, with comfort activities the highest, at 5, and some conversation going on (4). Charting and food activities were at zero.

10h40 - 10h50 (41):
Food activities remained at zero, and cleaning was still low (1) but the other activities were beginning to rise. For the first time treatment activities began to feature (6). Monitoring reached a peak at 12 and more conversation was taking place (8). There was a fair amount of comfort activity (6) and charting had risen to 5.

10h50 - 11h00 (44):
Things were still fairly busy, with monitoring the main activity, at 10. Treatment was still at 6, and cleaning was going on at the same level. Patients were moving around (6). Charting remained at 5 and the conversation level was the same. Comfort activities had dropped to 4, and food was still low at 2.

11h00 - 11h10 (34):
Things were quietening down again, with monitoring down to 8. Treatment activities went on steadily at 6, and there were comfort activities at the same level. Conversation remained at 5, charting down to 4 and the other activities remained low with food once more down to zero.

11h10 - 11h20 (25):
Very quiet now, monitoring had dropped to 6, treatment was down to 5, and patient activity was the same. All the remaining activities were low.

11h20 - 11h30 (43):
Monitoring had risen suddenly to its highest peak at 13, and treatment had also peaked to 11. Charting had risen to 6 and comfort activities to 5. Food activities were at zero, and there was hardly any conversation (1).

11h30 - 11h40 (34):
Activities were subsiding again with monitoring down to 9. Treatment had dropped to 3, while comfort and cleaning activities had both risen to 7. Charting had joined food activities at the low level of 1.

11h40 - 11h50 (36):
A subdued level of activity continued, with monitoring, comfort and treatment activities all taking place at level 7. Patients were moving around again (6), charting was taking place (at 5) and there was some cleaning and tidying (at 4). There was no conversation and food activities were also at zero.

11h50 - 12h00 (33):
A sudden upsurge of food activities to 7 heralded the lunch-time peak. Treatment activities subsided a little to 6, conversation had swung up to 5. The other activities had all subsided to a fairly low level, with monitoring down below 5 for the first time since this session started.

12h00 - 12h10 (38):
Monitoring had swung up again to 8, food activities remained at 7. Comfort and conversation were fairly active at 6. Charting and treatment were still going on, at level 4. Patients had stopped moving around (1).

12h10 - 12h20 (37):
Food had swung up to the top, at 12, with all the other activities at a fairly low level - monitoring and charting were going on at 5, treatment at 4, and there was some conversation at the same level.

12h20 - 12h30 (33):
Patient activity had dropped to zero, and monitoring back to its initial level (at 10h30) of 2. Tidying and cleaning had risen to 8, with the removal of trays beginning, although there were still some food activities at 5. Treatment activities were still fairly active (at 6) and comfort activities had risen to 5. There was a little charting (at 3) and the conversation level remained at 4.

6.3.2 Summary

From these figures it can be seen that there was a distinct time element to the patient care activities.

Predictably, the food related activities reached a peak at meal times and plunged, sometimes to zero, in between.

At 8h00 both food and comfort activities were at their highest as breakfast coincided with the last of the morning bedbath and toilet activities, to create the highest activity level of the morning.

Monitoring activities never ceased and maintained a relatively high level throughout. Comfort activities also continued throughout, although at a somewhat lower level than monitoring.

There was a general lull in the activities at 9h50 (19), just before observation Session I ended, and this dropped even lower to 14 at 10h30 when Session II commenced, producing the lowest activity level of the morning.

Session I activity levels averaged 48 per 10 minute period, while Session II levels averaged only 34. The overall average was 41 per 10 minute period.

All the activities in Session II showed an average drop of 29 from the Session I levels except for treatment activities which showed a 38 point rise from 27 in Session I to 65 in Session II.

6.4 The Patient Care Activities and the Caregivers

Using the observer's records of 65 observation periods, those participating in patient care activities were identified and the figures analyzed.

There were 20 categories of persons who were involved in patient care activities:

a) Constant Caregivers

1. Student nurses (462 transactions)
2. Sisters (278 transactions)
3. Ward maids (112 transactions)

b) Regular Caregivers

4. Doctors (70 transactions)
5. Physiotherapists (24 transactions)
6. Porters (11 transactions)
7. Zone nurses (10 transactions)
8. Ward clerks (5 transactions)
9. Pharmacists (5 transactions)
10. Clinical sisters (3 transactions)

c) Occasional Caregivers

11. ECG technicians (3 transactions)
12. Stomatherapists (1 transaction)
13. Social Workers (1 transaction)
14. Radiographers (1 transaction)
15. Librarians (2 transactions)
16. Voluntary workers (1 transaction)

d) Outsiders who were involved in Patient Care Activities

17. Selfcare (103 transactions)
18. Other patients (45 transactions)
19. Visitors (11 transactions)
20. The observers (9 transactions)

TABLE 6.3: The Constant Caregivers

CONSTANT CAREGIVERS	SURGICAL I	SURGICAL II	SURGICAL TOTAL	MEDICAL I	MEDICAL II	MEDICAL TOTAL	S & M I	S & M II	S & M TOTAL
1. STUDENT NURSES									
1. Monitor/OBS	19	17	36	28	28	56	47	45	92
2. Comfort	24	21	45	40	22	62	64	43	107
3. Charting	18	2	20	21	10	31	39	12	51
4. Conversation	10	4	14	12	10	22	22	14	36
5. Food	15	5	20	21	18	39	36	23	59
6. Clean & Tidy	18	6	24	23	7	30	41	13	54
7. Rest & Exercise	18	3	21	6	5	11	24	8	32
8. Treatment	4	15	19	1	11	12	5	26	31
	126	73	199	152	111	263	278	184	462
2. SISTERS									
1. Monitor/OBS	15	25	40	13	11	24	28	36	64
2. Comfort	1	9	10	7	7	14	8	16	24
3. Charting	16	14	30	19	14	33	35	28	63
4. Conversation	5	3	8	7	1	8	12	4	16
5. Food	1	-	1	14	-	14	15	-	15
6. Clean & Tidy	4	4	8	3	7	10	7	11	18
7. Rest & Exercise	3	2	5	3	1	4	6	3	9
8. Treatment	11	16	49	7	13	20	20	49	69
	56	93	154	73	54	127	131	147	278
3. WARD MAIDS									
1. Monitor/OBS	-	-	-	-	2	2	-	2	2
2. Comfort	1	1	2	5	-	5	6	1	7
5. Food	14	2	16	16	6	22	30	8	38
6. Clean & Tidy	25	10	35	13	15	28	38	25	63
7. Rest & Exercise	-	-	-	2	-	2	2	-	2
	40	13	53	36	23	59	76	36	112

RANK ORDER	STUDENT NURSES NUMBER	STUDENT NURSES NATURE	SISTERS NUMBER	SISTERS NATURE	WARD MAIDS NUMBER	WARD MAIDS NATURE
1	107	Comfort	69	Treatment	61	Clean & Tidy
2	92	Monitor/Obs	64	Monitor/Obs	38	Food
3	59	Food	63	Charting	7	Comfort
4	54	Clean & Tidy	24	Comfort	2	Monitor/Obs
5	51	Charting	18	Clean & Tidy	2	Rest & Ex
6	36	Conversation	16	Conversation		
7	32	Rest & Ex	15	Food		
8	31	Treatment	9	Rest & Ex		

In the analysis of these figures, the researcher found that there were 1157 caregiver actions in the 770 patient care activities. On examination it appeared that there were frequently 2 or 3 caregivers involved in a single or a sequence of patient care activities. This was particularly so with nursing staff, who often functioned as a team. For example, on one occasion a student nurse, a scholar nurse and a ward maid together helped a patient out of bed and into a chair. On another a sister and a physiotherapist helped a patient to move higher in the bed. Getting a patient ready for theatre, getting a blocked intravenous infusion running again, changing a dressing, are all instances of the many examples of cooperative action. To avoid confusion, the caregiver actions will be called transactions in this study.

Tables 6.3, 6.4, 6.5 and 6.6 summarise the data collected. They show the number of transactions in each category of care for each group of caregivers. They include the Session I and Session II figures in the surgical and the medical groups of wards and the combined totals. The ranked order indicates which the tasks were most often carried out by each caregiver group

6.4.1 The Constant Caregivers (See Table 6.3)

Student nurses, ward sisters and ward maids were the caregivers most constantly involved in patient care activities.

The student nurses frequently worked in groups of 2 or 3, sometimes with a sister, sharing out activities or helping each other with them. In terms of the number of transactions, this has produced a student nurse total of 462, 40% of the 1157 caregiver transactions.

The sisters also shared tasks with other caregivers, usually with student nurses, but sometimes with other sisters, a doctor, a physiotherapist etc. They were involved in the second highest number of transactions, (278 or 24%).

The ward maids sometimes worked in teams, particularly in their cleaning activities. They accounted for 112 (10%) of the transactions.

Together these 3 groups were involved in almost 74% of the caregiver transactions.

6.4.1.1 Student Nurses: 462 (40% of the transactions)

Session I : 278 (60%)
Session II: 184 (40%)

This group was composed of all categories of student nurse, including college and university students who were working in the hospital for their holidays.

In 2 wards, one surgical and one medical, the student nurses had been withdrawn and replaced by black nursing assistants. For this project they were also included in this category of 'student nurse'.

The student nurses were the group most involved in patient care activities, and were involved in every category of care activity.

Their highest involvement was in comfort transactions (107) followed by monitoring and observation (92).

6.4.1.2 Sisters: 278 (24% of the transactions)

Session I : 131 (47%)
Session II: 147 (53%)

This category included all trained nursing staff, either registered or enrolled with the South African Nursing Council. Most of them were registered nurses, and mostly female.

It was the group second most involved in patient care activities, after the student nurses, and together they gave almost two thirds (64%) of all the care in the ward. This group was also involved in all 8 categories of care activities. It was the only major group of caregivers who had more involvement in Session II (53%) than in Session I, possibly because its main involvement was in treatment activities, which tended to take place more during Session II. The main transactions of this group were treatment (69) monitoring and observation (64) and charting (63) which together made up over 70% of the transactions of the group.

TABLE 6.4: The Regular Caregivers

REGULAR CAREGIVERS	SURGICAL I	SURGICAL II	SURGICAL TOTAL	MEDICAL I	MEDICAL II	MEDICAL TOTAL	S & M I	S & M II	S & M TOTAL
4. DOCTORS									
1. Monitor/OBS	9	5	14	25	7	32	34	12	46
2. Comfort	-	-	-	3	-	3	3	-	3
3. Charting	1	1	2	2	1	3	3	2	5
4. Conversation	2	2	4	7	1	8	9	3	12
8. Treatment	1	2	3	1	-	1	2	2	4
	13	10	23	38	9	47	51	19	70
5. PHYSIOTHERAPISTS									
1. Monitor/OBS	-	-	-	1	2	3	1	2	3
2. Comfort	-	-	-	1	1	2	1	1	2
3. Charting	-	-	-	1	-	1	1	-	1
4. Conversation	1	-	1	5	2	7	6	2	8
7. Rest & Exercise	2	2	4	-	1	1	2	3	5
8. Treatment	-	-	-	2	3	5	2	3	5
	3	2	5	10	9	19	13	11	24
6. PORTERS									
4. Conversation	2	-	2	-	-	-	2	-	2
7. Rest & Exercise	2	2	4	2	3	5	4	5	9
	4	2	6	2	3	5	6	5	11
7. ZONE MATRONS									
1. Monitor/OBS	1	6	7	-	2	2	1	8	9
8. Treatment	-	1	1	-	-	-	-	1	1
	1	7	8	-	2	2	1	9	10
8. WARD CLERKS									
1. Monitor/OBS	-	-	-	1	-	1	1	-	1
3. Charting	3	-	3	1	-	1	4	-	4
	3	-	3	2	-	2	5	-	5
9. PHARMACISTS									
3. Charting	-	2	2	2	-	2	2	2	4
8. Treatment	-	-	-	1	-	1	1	-	1
	-	2	2	3	-	3	3	2	5
10. CLINICAL SISTER									
2. Comfort	-	2	2	-	-	-	-	2	2
8. Treatment	-	1	1	-	-	-	-	1	1
	-	1	1	-	-	-	-	1	1

RANK ORDER	DOCTORS NUMBER	DOCTORS NATURE	PHYSIOTHERAPISTS NUMBER	PHYSIOTHERAPISTS NATURE	PORTERS NUMBER	PORTERS NATURE	ZONE MATRONS NUMBER	ZONE MATRONS NATURE
1	46	Monitor/Obs	8	Conversation	9	Rest & Ex	9	Monitor/Obs
2	12	Conversation	5	Rest & Ex	2	Conversation	1	Treatment
3	5	Charting	5	Treatment				
4	4	Treatment	3	Monitor/Obs				
5	3	Comfort	2	Comfort				
6	-		1	Charting				
7	-		-					
8	-		-					

6.4.1.3 Ward Maids: 112 (10% of the transactions)

Session I : 76 (68%)
Session II: 36 (32%)

This category of caregivers included ward maids, cleaners and 'pink caps'.These were maids who had been promoted on merit and were allowed to help with certain nursing tasks in the wards. They were identified by their pink striped uniform.

The major task of this group was cleaning and tidying (63 - 56%). The group also helped with food activities (38 transactions) and carried out a few comfort (7) and monitoring transactions(2) and occasionally helped the patient to move around (rest and exercise - 2).

They were never involved in treatment, or charting, and were never observed to carry on a conversation with the patients.

6.4.2 Regular Caregivers (See Table 6.4)

6.4.2.1 Doctors: 70 (6% of the transactions)

Session I : 51 (73%)
Session II: 19 (27%)

This category included all those functioning in the doctor's role, whether professors, consultants, registrars or medical students. After the nursing staff and ward maids they were the category of caregiver most involved in patient care activities.

The number of persons in this category who visited the patient was much higher than 70, because they tended to move round in groups of 5 or more (on one occasion, 15). However, as a rule only one or two of them interacted with the patient while the rest of the group looked on. For this project the observer noted the number in the group, but recorded as transactions only those in which there was an identifiable transaction with the observed patient.

The major activity of this group was that of monitoring and observing the patient's condition (46 - 66%). On 12 occasions they conversed with the patient without any other identifiable care transaction. The other activities of this group included working with the files and charts (5), treatment (4) and comfort transactions(3).

They were never seen to be involved with food transactions, cleaning and tidying or helping the patient to move around (rest and exercise).

6.4.2.2 Physiotherapists: 24 (2%)

Session I : 13 (54%)
Session II: 11 (46%)

This category of caregiver, who usually worked alone, was involved in rest and exercise and treatment transactions (5 each). Conversation features high (8) and they were occasionally concerned with monitoring/observation and charting transactions.

The above 5 categories of staff,student nurses, sisters, maids, doctors and physio-therapists, were the main caregivers, providing 82% of the patient care transactions. The remaining providers of care who belonged to the hospital services were:

6.4.2.3 Porters (11): Were mainly involved in fetching patients in wheelchairs or stretchers, and bringing them back.

6.4.2.4 Zone Matrons (10): Were concerned with ward rounds and, on one occasion, with treatment.

6.4.2.5 Ward Clerks (5): Were concerned with the files of the observed patients.

6.4.2.6 Pharmacists (5): Checked the files and were concerned with the patient's medication.

TABLE 6.5: Occasional Caregivers

	SURGICAL			MEDICAL			S & M		
	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL
11. ELECTROCARDIOGRAPH TECHNICIAN									
1. Monitor/OBS	-	-	-	-	3	3	-	3	3
12. STOMATHERAPIST									
8. Treatment	1	-	1	-	-	-	1	-	1
13. SOCIAL WORKER									
4. Conversation	-	1	-				-	1	1
14. RADIOGRAPHER									
8. Treatment	-	-	-	-	1	1	-	1	1
15. LIBRARIAN									
4. Conversation	-	-	-	2	-	-	2	-	2
16. VOLUNTARY WORKERS									
4. Conversation	-	1	-	-	-	-	-	1	1

TABLE 6.6: Outsiders Who Gave Care

OUTSIDERS	SURGICAL			MEDICAL			S & M		
	I	II	TOTAL	I	II	TOTAL	I	II	TOTAL
17. SELFCARE ACTIVITIES									
2. Comfort	5	7	12	9	7	16	14	14	28
3. Charting	-	-	-	1	-	1	1	-	1
4. Conversation	3	1	4	1	-	1	4	1	5
5. Food	1	4	5	4	3	7	5	7	12
6. Cleaning & Tidy	1	-	1	-	-	-	1	-	1
7. Rest & Exercise	14	13	27	14	13	27	28	26	54
8. Treatment	-	2	2	-	-	-	-	2	2
	24	27	51	29	23	52	53	50	103
18. PATIENTS									
2. Comfort	-	-	-	2	-	2	2	-	2
4. Conversation	13	13	26	11	5	16	24	18	42
5. Food	-	-	-	-	1	1	-	1	1
	13	13	26	13	6	19	26	19	45
19. VISITORS									
4. Conversation	3	1	4	1	6	7	4	7	11
20. OBSERVERS									
1. Monitor/OBS	-	3	3	-	-	-	-	3	3
2. Comfort	-	1	1	-	-	-	-	1	1
4. Conversation	1	3	4	-	-	-	1	3	4
5. Food	1	-	1	-	-	-	1	-	1
	2	7	9	-	-	-	2	7	9

RANK ORDER	SELFCARE		OTHER PATIENTS		VISITORS		OBSERVERS	
	NUMBER	NATURE	NUMBER	NATURE	NUMBER	NATURE	NUMBER	NATURE
1	54	Rest & Ex	42	Conversation	11	Conversation	4.	Conversation
2	28	Comfort	2	Comfort			3	Monitor/Obs
3	12	Fo d	1	Food			1	Comfort
4	5	Conversation					1	Food
5	2	Treatment						
6	1	Charting						
7	1	Clean & Tidy						
8	-							

6.4.2.7 Clinical Sisters (3) : Were observed to be involved in comfort and treatment activities, together with the student nurses.

6.4.3 Occasional Caregivers (No.11 - No.16)

These are shown in Table 6.5. They gave service each according to her own designated role. Together they were responsible for 9 patient care transactions.(0,8%).

6.4.4 Outsiders who gave Care (See Table 6.6)

6.4.4.1 Selfcare: 103 (9%)

Session I : 53 (51%)
Session II: 50 (49%)

Patients often looked after their own needs, particularly in terms of rest and exercise(54) and comfort activities (28 actions). They also dealt with their own food needs (12). On occasion they carried out their own treatment (2) and their own charting once, and once tidied their own area.

6.4.4.2 Other Patients: 45 (4%)

Session I : 26 (58%)
Session II: 19 (42%)

Patients were sometimes involved with each other's care needs. Most of this took the form of conversation with the observed patient, but on 2 occasions they helped with comfort transactions and once with food.

6.4.4.3 Visitors: 11

This consisted entirely of conversation with the observed patient.

6.4.4.4 The Observers: 9

Although the observers had asked staff and patients to ignore them there were a few occasions when they were drawn into interaction with the patients under observation. On 4 occasions this was simply conversation, and on 3 occasions it involved monitoring/observation transactions, once "food" and once "comfort."

TABLE 7.1: Summary of the Computer Analysis Findings

a) RESULTS OF REPEATABILITY STUDY BY EVALUATOR ONE ON 11 SUBJECTS.

VARIABLE CONSIDERED	Mean Difference 1st-2nd evaluations	t-value	p-value
Group I	0,3900	2,74	0,021
Group II	0,2636	0,63	0,542
Group III	0,4627	5,23	0,000
Group IV	0,5265	2,10	0,062
Group V	0,3827	0,86	0,397
Group VI	0,0018	0,01	0,989
AVERAGE	0,4184	2,45	0,034
Group I (Corrected Procedure)	0,4118	2,18	0,054
Group II (Corrected Procedure)	0,2636	0,63	0,542
Group III (Corrected Procedure)	0,2518	1,39	0,195
Group IV (Corrected Procedure)	0,5000	2,24	0,049
Group V (Corrected Procedure)	0,4618	1,78	0,121
Group VI (Corrected Procedure)	-0,2718	-0,97	0,354
AVERAGE (Corrected Procedure)	0,4184	2,45	0,034
IMPORTANT VARIABLE	0,2591	1,69	0,121
AVERAGE vs AVERAGE CORRECTED Group 1	0,5491	5,05	0,000
AVERAGE vs AVERAGE CORRECTED Group 2	0,6791	4,51	0,001

b) CORRELATIONS THAT EXIST BETWEEN TWO SETS OF VALUES.

	r	p
Average score (first and second)	0,9896	0,000
Corrected Average score (first and second)	0,5760	0,063
Important variables (first and second)	0,3713	0,261
Average vs Corrected Average (first observations)	0,9834	0,000
Average vs Corrected Average (second observations)	0,5888	0,057

c) OBSERVERS EVALUATED ONE WITH OTHERS WITHIN SURGICAL AND GENERAL WARDS SEPARATELY

VARIABLE	GENERAL WARDS			SURGICAL WARDS		
	Mean	t	p	Mean	t	p
GR I	0,4883	3,61	0,002	0,3715	3,99	0,002
GR II	-1,1674	-6,22	0,004	-1,2305	-2,57	0,019
GR III	0,8022	3,41	0,003	0,7720	3,73	0,001
GR IV	0,6004	3,86	0,014	0,9020	3,40	0,003
GR V	1,1670	3,86	0,001	1,1000	2,98	0,008
GR VI	0,7169	3,19	0,004	1,0295	5,33	0,000
AVERAGE	0,4822	3,69	0,001	0,5174	3,55	0,003
GR I(CORR)	0,6870	4,17	0,000	0,6350	3,70	0,002
GR II(CORR)	-1,1548	-6,19	0,004	-1,2635	-2,62	0,017
GR III(CORR)	0,5709	3,02	0,006	+1,0375	6,32	0,000
GR IV(CORR)	0,8004	3,87	0,001	1,2990	5,64	0,000
GR V(CORR)	0,8537	3,34	0,004	0,4125	1,87	0,077
GR VI(CORR)	1,2926	6,09	0,000	1,8505	6,87	0,000
AVERAGE(CORR)	0,8686	5,92	0,000	0,9400	7,17	0,000
IMPORTANT VARIABLES	0,7365	4,58	0,000	0,9570	6,29	0,000

d) A TABLE SUMMARISING FOR THE VARIOUS FACTORS, THE PROBABILITY THAT WARDS DIFFER FROM ONE ANOTHER, THE PROBABILITY THAT SURGICAL WARDS DIFFER FROM GENERAL WARDS AND WHICH PAIRS GAVE A SIGNIFICANTLY HIGHER VALUE THAN OTHERS.

VARIABLE	ANALYSIS OF VARIANCE		SURGICAL vs GENERAL		WARDS DIFFERING FROM ONE ANOTHER
	t-value	p-value	t-value	p-value	
GR I	1,9659	0,0806	0,1830	0,8615	Gen 3 > Gen 1 Gen 3 > Surg 3;Gen 3 > Gen 2
GR II	0,8725	0,3864	0,7640	0,4484	-
GR III	2,4751	0,0430	-0,7787	0,4468	Gen 3 > Gen 2
GR IV	1,3939	0,2434	0,3637	0,7089	-
GR V	0,1160	0,9809	-0,4099	0,6837	-
GR VI	0,6145	0,6892	0,1300	0,8984	-
AVERAGE	2,6397	0,0346	-0,0815	0,9364	Gen 3 > Surg 3;Gen 3 > Gen 2
AVCOR	2,7965	0,0278	-0,6736	0,5038	Gen 3 > Surg 3;Gen 3 > Gen 2
GR I(CORR)	2,5830	0,0438	0,0722	0,9427	Gen 3 > Surg 3
GR II(CORR)	0,9858	0,4857	0,7467	0,4584	-
GR III(CORR)	2,1873	0,0765	-0,9958	0,3541	Gen 3 > Surg 3;Gen 3 > Gen 2
GR IV(CORR)	1,9868	0,1188	-0,7817	0,4863	-
GR V(CORR)	0,4732	0,7944	-0,9881	0,3728	-
GR VI(CORR)	1,3864	0,2938	-1,1148	0,2788	-
IMPORTANT VARIABLE	2,8903	0,0340	-1,3347	0,1883	Gen 3 > Surg 3;Gen 3 > Gen 2

With acknowledgements to the Institute for Biostatistics (Transvaal Branch) of the South African Medical Research Council

VII THE QUALPACS RATINGS

7.0 Introduction

This chapter deals with the ratings ascribed by the observers to the patient care activities they recorded. In Chapter V, Table 5.8 shows that during 108 observation sessions observer and co-observers rated 1088 of the 1228 activities recorded (89%), 504 in the surgical and 584 in the medical wards.

The values attributed by the observer and co-observers to the single observed episodes of patient care were entered on the score sheets and the scores were calculated in accordance with the directions in the Quality Patient Care Scale manual. Thus scores were derived for each of the 68 items, and for each of the 6 Qualpacs subsections for each of the 108 observation sessions. These figures were further processed in accordance with the instructions to produce a mean score for each patient, for each ward, and for the surgical group and the medical group of wards.

The calculation of the scores and analysis of the data are described in this chapter and discussed in Chapter VIII.

7.1 Analyzing the Data

The data were submitted to the Institute for Biostatistics (Transvaal Branch) of the South African Medical Research Council for computer analysis. (See their report, Appendix F) Their findings are summarised in Table 7.1. In their tables Group I - Group VI refers to the Qualpacs subsections, Subsections I-VI. They refer to the medical wards as "general wards" and Gen1, Gen2 and Gen3 are the same as MI, MII and MIII in this work, while Surg1, Surg2 and Surg3 are SI, SII and SIII. "Avcor", the corrected average and "Important Variable" are explained in their report, Appendix F.

The analyses can be divided into 2 sections:

Part I: The Qualpacs Scores and the Quality of Care. This deals with the Qualpacs item ratings and the information derived from them about the standard of the care observed

Part II: The Quality Patient Care Scale. This includes the reliability findings from the repeat observations and the comparison of observer/co-observer scores.

TABLE 7.2: RESULTS OF REPEATABILITY STUDY OF EVALUATOR ONE ON 11 SUBJECTS.

VARIABLE CONSIDERED	Mean Difference 1st-2nd evaluation	t-value	p-value
Group I	0,3900	2,74	0,021
Group II	0,3636	0,63	0,542
Group III	0,4627	5,23	0,000
Group IV	0,5245	2,10	0,062
Group V	0,2827	0,88	0,397
Group VI	0,0018	0,01	0,989
AVERAGE	0,4164	2,45	0,034
Group I (Corrected Procedure)	0,4118	2,18	0,054
Group II (Corrected Procedure)	0,3636	0,63	0,542
Group III (Corrected Procedure)	0,3518	1,39	0,195
Group IV (Corrected Procedure)	0,6600	2,24	0,049
Group V (Corrected Procedure)	0,4618	1,70	0,121
Group VI (Corrected Procedure)	-0,2718	-0,97	0,354
AVERAGE (Corrected Procedure)	0,4164	2,45	0,034
IMPORTANT VARIABLE	0,3591	1,47	0,173
AVERAGE vs AVERAGE CORRECTED Group 1	0,5491	6,05	0,000
AVERAGE vs AVERAGE CORRECTED Group 2	0,6791	4,91	0,001

PART I: THE QUALPACS SCORES AND THE QUALITY OF CARE. "It was expected to be able .....to form an opinion about the quality of care." (Chapter IV,4.0)

7.2 Calculating the Scores

The Quality Patient Care Scale manual gives directions for calculating the scores. The score for each item is "the average of the ratings in all the cells of the item."(1) The "total mean score is the measure of the quality of the nursing care received by the patient" and is calculated by "adding the mean scores of all the items rated and dividing by the number of items that had ratings, carried to one decimal place."(2) In this study the student refers to the total mean score as the 'patient score'. The scores were calculated according to the directions but carried to 2 decimal places.

The manual also refers to "single category mean scores" which are calculated by "adding the mean scores of all items rated in the category and dividing by the number of items rated."(3) The 'single categories' refer to the 6 subsections into which the 68 Qualpacs items are divided. In this work the student refers to them as 'subsection scores'.

The manual points out that patient scores cannot be calculated from the average of the 6 subsection scores but must be calculated from the item mean scores.(4)

In the computer analysis of the data collected for this study two methods of calculating the mean score for each patient were considered:

i) 'Average': The total of all the ratings divided by the number of ratings.

ii) 'Avcor' (the corrected average): An average score was obtained for each item and then an average over all items of these averages was calculated as the final value. This method corresponds with the Qualpacs scoring system.

The report states that from the last 2 lines of Table 7.2, when Average is compared to Avcor it can be seen that both in the first and second observations of the patients the Average is statistically significantly higher than Avcor. (Appendix F)

The report concludes that "in calculating the mean score of the patients by means of the two methods described....significant statistical differences were observed. The corrected procedure" (which corresponds with the Qualpacs scoring system) "tended to have lower averages than the other method of calculation." (Appendix F)

7.3 Interpreting the Scores

Although there are instructions for rating items and for calculating the scores, the student could find no directions for ascribing quality to the final scores. In order to examine and describe the data about the quality of care an empirical system was devised which classified the Qualpacs scores into the same 5 categories as the Quality Patient Care Scale. For greater clarity "Between" became "Above Average" and "Below Average" respectively.

Since the Qualpacs scores ranged from 1,00 to 5,00 the 5 categories were contained within this range (4,00) producing intervals of 0,80. The resulting classification of the scores was as follows:

Best Care: More than 4,20
Above Average: 3,41 - 4,20
Average Care: 2,61 - 3,40
Below Average: 1,81 - 2,60
Poorest Care: Less than 1,81

This classification, which is purely arbitrary, has enabled the student to give quality labels to the scores and thus to quantify, identify and more readily compare the values of the Qualpacs scores. In discussing qualitative scales, Runyon and Haber say, "it is debatable that many of our scales achieve interval measurement (but) most behavioural scientists are willing to make the assumption that they do"(5), while Abdellah and Levine discuss the use of evaluative terms, saying "Non-quantitative data....can be most useful in enriching the analysis of the research and in providing insights into the meaning of the phenomena being observed."(6) For the purposes of this project these descriptive labels will be used as a means of discussing the standard of the care observed.

TABLE 7.3: The Item Scores

ITEMS SCORED THE MOST OFTEN				
RANK	N	ITEM	MEAN SCORE	S/S
1	65	1	3.4	I
2	65	3	3.47	
3	62	51	3.31	IV
4	62	66	3.48	VI
5	61	7	3.51	I
6	61	65	3.41	VI
7	60	26	2.97	III
8	59	13	3.42	I
9	59	52	3.33	IV
10	56	6	3.2	I

ITEMS SCORED THE LEAST OFTEN (N = less than 10)				
RANK	N	ITEM	MEAN SCORE	S/S
46	9	50	3.85	IV
47	8	16	3.44	II
48	8	4	3.59	I
49	7	10	3.74	I
50	5	53	3.03	IV
51	4	33	3.75	III
52	4	55	2.75	V
53	3	43	4.0	IV
54	3	58	4.67	V
59	2	18	2.5	II
60	2	21	2.0	
61	1	40	2.0	IV
62-68 (65)	Nil	9		I
		17		
		19		
		20		II
		22		
		23		
		37		V

ITEMS RATED HIGHEST				ITEMS RATED LOWEST			
RANK	SCORE	ITEM	S/S	RANK	SCORE	ITEM	S/S
BEST CASE							
1	4.67	58	V	59	2.5	18	II
2	4.46	61		60	2.0	21	
3	4.31	54		61	2.0	40	IV
ABOVE AVERAGE							
4	4.14	60	V				
5	4.0	43	IV	62-68	Not Rated	9	I
6	3.87	49				17	
7	3.87	67	VI			19	
8	3.85	50	IV	65		20	II
9	3.84	63	VI			22	
AVERAGE							
10	3.79	62	VI			23	
11	3.76	68				37	V
12	3.75	33	III				
13	3.74	10	I				
14	3.73	32	III				
15	3.7	12	I				
16	3.69	24	III				
17	3.64	14	I				
18	3.63	27	III				
19	3.63	59	V				
20	3.59	4	I				
21	3.57	48	IV				
22	3.55	11	I				
23	3.55	35	III				
24	3.54	5	I				
25	3.51	7					
26	3.5	39	IV				
27	3.49	15	I				
28	3.49	36	III				
29	3.48	64	VI				
30	3.48	66					
31	3.47	2	I				
32	3.47	3					
33	3.45	37	III				
34	3.44	16	II				
35	3.44	25	III				
36	3.44	47	IV				
37	3.44	49					
38	3.42	13	I				
39	3.43	28	III				
40	3.41	42	IV				
41	3.41	65	VI				

7.4 The Item Scores (Appendix E)

When the item scores had been calculated by the student according to the Qualpacs formula, each was examined for 2 factors. The one was the Qualpacs value of the item and the other the frequency with which each item received a score in the 65 observations. The findings are summarised in Table 7.3.

From the 65 observations carried out by the observer there were 1998 item scores. It can be seen that Items 1 and 3 were scored in every observation session (N=65). Seven items were never rated and 12 items were scored fewer than 10 times.

Three items were rated "Best Care", all in Subsection V which is concerned with 'communication on behalf of the patient." These items were:

- Item 58 - Patient's behaviour accurately reported (N=3)
- Item 61 - Patient's needs met through referrals (N=13)
- Item 54 - Ideas, facts, feelings and concepts about the patient are clearly communicated in speech (N=21)

These items were rated in 3, 13 and 21 respectively of the 65 observations.

Six items were rated 'Above Average' all from Subsections IV, V and VI. In rank order from highest to lowest, they were:

- Item 60 - Effective communication and good relationships with other disciplines.(N=16)
- Item 43 - Resources within the milieu used to provide opportunities for problem solving (N=3)
- Item 49 - Patient with slow or unskilled performance is accepted and encouraged (N=14)
- Item 67 - Flexibility in rules and regulations (N=20)
- Item 50 - Nursing care goals are recognized and supported (N=9)
- Item 63 - Evidence of insight into deeper needs of patients (N=34)

TABLE 7.4: The Subsection Scores per Patient

SUBSECTION I

Ward	No. Pat	High-Low	Range	Total	No. Scores	Mean	Median
I	9	4.33-2.27	2.06	30.18	9	3.35	3.33
II	11	4.84-2.42	2.14	38.93	11	3.54	3.59
III	11	4.5 -2.36	2.13	36.03	11	3.27	3.15
SUNG	31	4.56-2.27	2.29	109.44	31	3.4	3.38
MI	11	3.68-2.85	.84	35.63	11	3.24	3.27
MII	12	4.1 -2.48	1.65	38.99	12	3.25	3.15
MIII	11	4.56-2.6	1.96	41.84	11	3.8	3.85
MED	34	4.56-2.48	2.11	116.46	34	3.42	3.34
SUM	65	4.56-2.27	2.29	221.90	65	3.41	3.35

SUBSECTION II

High-Low	Range	Total	No. Scores	Mean	Median
4.0 -1.0	1.0	7.0	2	3.5	3.5
2.75		2.75	1	2.75	2.75
5.0 -2.0	3.0	7.0	2	3.5	3.5
5.0 -2.0	3.0	16.75	5	3.35	3.0
3.0 -2.0	1.0	11.0	4	2.75	3.0
3.0 -3.0		6.0	2	3.0	3.0
		-		-	-
3.0 -2.0	1.0	17.0	6	2.83	3.0
5.0 -2.0	3.0	33.75	11	3.07	3.0

SUBSECTION III

Ward	No. Pat	High-Low	Range	Total	No. Scores	Mean	Median
I	9	4.56-1.0	3.56	30.1	9	3.34	3.33
II	11	4.24-2.89	1.35	37.35	11	3.39	3.2
III	11	3.67-2.69	.98	34.79	11	3.16	3.09
SUNG	31	4.24-1.0	3.24	108.87	31	3.29	3.25
MI	11	3.63-2.86	.93	35.88	11	3.26	3.25
MII	12	3.71-2.33	1.38	35.68	12	3.07	3.02
MIII	11	4.49-3.07	1.42	39.95	11	3.61	3.4
MED	34	4.49-2.33	2.16	111.48	34	3.28	3.31
SUM	65	4.49-1.0	3.49	312.35	65	3.27	3.3

SUBSECTION IV

High-Low	Range	Total	No. Scores	Mean	Median
4.5 -1.0	3.5	37.11	9	3.13	3.17
4.31-2.83	1.48	37.16	11	3.4	3.33
4.83-3.0	1.83	35.47	11	3.23	3.13
4.5 -3.0	1.83	104.25	31	3.36	3.33
4.83-2.83	1.42	35.34	11	3.21	3.17
3.78-2.67	1.11	35.91	11	3.26	3.31
4.29-3.1	1.19	39.38	11	3.58	3.61
4.29-2.67	1.67	108.63	33	3.35	3.33
4.5 -2.67	1.83	214.89	64	3.36	3.36

SUBSECTION V

Ward	No. Pat	High-Low	Range	Total	No. Scores	Mean	Median
I	9	4.5 -1.0	3.5	30.11	9	3.34	3.33
II	11	4.8 -3.0	1.8	33.79	10	3.38	3.8
III	11	5.0 -2.67	2.33	36.14	10	3.61	3.25
SUNG	31	5.0 -2.67	2.33	99.37	30	3.34	3.31
MI	11	4.75-1.67	3.08	40.11	11	3.65	4.0
MII	12	4.72-2.0	1.72	40.71	11	3.7	3.67
MIII	11	4.8 -3.0	1.8	36.94	11	3.36	3.0
MED	34	4.75-1.67	3.08	117.76	33	3.57	3.62
SUM	65	5.0 -1.67	3.33	217.63	61	3.56	3.53

SUBSECTION VI

High-Low	Range	Total	No. Scores	Mean	Median
4.11-1.0	3.11	33.0	9	3.56	3.61
4.47-2.0	1.57	39.39	11	3.58	3.58
3.84-2.21	1.63	37.25	11	3.39	3.5
4.47-2.21	2.26	108.71	31	3.51	3.58
4.82-3.13	1.69	37.72	11	3.43	3.36
4.44-2.75	1.69	39.88	11	3.33	3.0
4.7 -2.5	2.2	40.95	11	3.72	3.66
4.7 -2.33	2.37	118.55	34	3.49	3.39
4.7 -2.21	2.49	227.26	65	3.5	3.5

Scores Above 4,20 - Scores Below 2,61

Subsection	Best Care Score	Range	Pat	Ward		Care Below Ave Score	Range	Pat	Ward	
I	1	4.56	13	MII		10	2.6	41	MIII	
		4.54	46	MIII		61	2.58	37	MII	
	3	4.5	19	MIII		63	2.45	45	MII	
	4	4.46	48	MIII		64	2.42	87	BII	
	5	4.35	1	BI		64	2.28	21	BIII	
	6	4.29	93	MIII		65	2.27	85	BI	
	7	4.27	47	MIII						
	8	4.23	3	BI						
II	1	5.0	33	BIII		11	3.0	28	MI	
III	1	4.49	48	MIII		61	2.86	R42	MII	
	2	4.29	47	MIII		62	2.5	37	MII	
	3	4.29	46	MIII		63	2.39	41	MII	
	4	4.24	18	BII		64	2.33	28	MII	
						65	1.0	2	BI	(Poorest Care)
IV	1	4.5	3	BI		NIL				
	2	4.31	12	BII						
	3	4.29	46	MIII						
	4	4.86	11	BII						
V	1	5.0	19	BIII		61	1.67	27	MI	(Poorest Care)
	2	4.75	32	MI						
	3	4.73	44	MII						
	4	4.5	3	BI						
		4.5	40	MII						
	6	4.39	21	BIII						
		4.33	20	BIII						
	8	4.33	38	MI						
		4.33	49	MII						
	10	4.25	17	BIII						
VI	1	4.7	R48	MIII		61	2.5	49	MIII	
	2	4.64	46	MIII		64	2.33	33	MI	
	3	4.47	11	BII		65	2.21	92	BIII	
	4	4.46	13	BII						
		4.44	39	MII						
		4.44	44	"						
	7	4.33	1	BI						
	8	4.29	48	MIII						

The three items which received 'Below Average' ratings were:

Item 18 - Encouraged to participate in group activities (N=2)
Item 21 - Helped to vent emotions in a socially acceptable way (N=2)
Item 40 - Patient and family involved in planning for care and treatment (N=1)

It can be seen that these 3 items received very few ratings as well as low scores, and appeared to be in a neglected area of patient care.

7.5 The Subsection Scores

The subsection scores were calculated according to the formula:

$$\frac{\text{Sum of Item ratings}}{\text{Number of Item ratings}} \quad \text{per subsection}$$

The scores were processed and 2 sets of figures have been derived. Table 7.4 shows the subsection scores per patient, their range and central tendency in each ward and the highest and lowest patient scores in each subsection. Table 7.5 shows the mean subsection score in each ward and the ward ranking in each subsection as well as the overall rankings.

From these figures the following information was obtained:

7.5.1 Subsection Scores per Patient (Table 7.4)

Subsection I: Psychosocial (Individual) 15 Items

All 65 patients had items rated in this subsection, which had the second most high scores, as well as the most low scores. Eight of the patients had 'Best Care' ratings (above 4,20) and 6 had 'Below Average' ratings (below 2,61).

Subsection II: Psychosocial (Group) 8 Items

Only 11 of the patients received ratings in this category. Of these, one was assessed as 'Best Care' and rated 5,0 and one was 'Below Average'.

TARLE 7.5: The Subsection Scores per Ward

a) Range and Central Tendency

Ward	High	S/S	Low	S/S	Range	Total	No. of Scores	Mean	Median
SI	3,79	V	3,19	III	,60	20,92	6	3,49	3,49
SII	3,88	VI	3,75	II	,83	19,94	6	3,32	3,39
SIII	3,61	V	3,16	III	,45	20,15	6	3,36	3,33
SURG	3,79	V	2,75	II	1,04	61,01	18	3,39	3,39
MI	3,65	V	2,75	II	,90	19,54	6	3,26	3,25
MII	3,7	V	2,97	III	,73	19,50	6	3,25	3,25
MIII	3,8	I	3,36	V	,44	18,09	5	3,62	3,63
MED	3,8	I	2,75	II	1,05	57,13	17	3,36	3,32
M+M	3,8	I	2,75	II	1,05	118,14	35	3,37	3,39

b) Ward Rank Order per Subsection

SUBSECTION I			II		III		IV		V		VI	
Rank	Score	Ward	Score	Ward	Score	Ward	Score	Ward	Score	Ward	Score	Ward
1	3,8	MIII	3,5	SI	3,63	MIII	3,58	MIII	3,79	SI	3,72	MIII
2	3,54	SII	3,5	SIII	3,39	SII	3,49	SI	3,7	MII	3,58	SII
3	3,39	SI	3,8	MII	3,26	MI	3,4	SII	3,65	MI	3,56	SI
4	3,27	SIII	3,75	MI	3,19	SI	3,26	MII	3,61	SIII	3,43	MI
5	3,29	MII	3,75	SII	3,16	SIII	3,22	SIII	3,36	MIII	3,39	SIII
6	3,24	MI	-	MIII	2,97	MII	3,21	MI	3,28	SII	3,32	MII

c) General Rank Order

Rank	Total	S/S	Ward	
1	3,8	I	MIII	Above Average
2	3,79	V	SI	
3	3,72	VI	MIII	*
4	3,7	V	MII	
5	3,65	V	MI	*
6	3,63	III	MIII	
7	3,61	V	SIII	*
8	3,58	IV	MIII	
9	3,58	VI	SII	*
10	3,56	VI	SI	
11	3,54	I	SII	*
12	3,5	II	SI	
13	3,5	II	SIII	*
14	3,49	IV	SI	
15	3,43	VI	MI	*
16	3,4	IV	SII	Average
17	3,39	I	SI	
18	3,39	III	SII	*
19	3,39	VI	SIII	
20	3,36	V	MIII	*
21	3,32	VI	MII	
22	3,28	V	SII	*
23	3,27	I	SIII	
24	3,26	II	MI	*
25	3,26	IV	MII	
26	3,25	I	MII	*
27	3,24	I	MI	
28	3,22	IV	SIII	*
29	3,21	IV	MI	
30	3,19	III	SI	*
31	3,16	III	SIII	
32	3,0	II	MII	*
33	2,97	III	MII	
34	2,75	II	SII	*
35	2,75	II	MI	
36	-	II	MIII	*

Subsection III: Physical — 15 Items

All 65 patients received ratings in this category. Four of these patients were rated 'Best Care' and 5 were 'Below Average' one of them 'Poorest Care'.

Subsection IV: General — 15 Items

One patient was not rated in this section. Of the remaining 64 there were 4 patients in the 'Best Care' category. None received less than 'Average Care' in this subsection.

Subsection V: Communication — 8 Items

Although only 61 patients received ratings in this section, it was the most highly rated subsection. Ten patients received 'Best Care', 3 of them in the highest category, and one received 'Poorest Care'. The mean and median of this subsection were 3,56 and 3,53, the highest of the subsections, and in the 'Above Average' category.

Subsection VI: Professional — 7 Items

All 65 patients received ratings in this subsection. Eight patients were in the 'Best Care' category, one in the upper level. Three of the scores were 'Below Average'. The mean and median in this subsection (both 3,5) were the second highest of the subsections, and also in the 'Above Average' category.

7.5.2 The Subsection Scores and the Wards (Table 7.5)

Ward MI[illegible] had the highest mean score for 4 of the subsections:

Subsection I - Psychosocial (Individual): 3,8

Subsection III - Physical: 3,63

Subsection IV - General: 3,58

Subsection VI - Professional: 3,72

TABLE 7.6: The Patient Scores

a) Summary of the Scores per Session per Ward

	WARD SI				WARD SII				WARD SIII				WARD MI				WARD MII				WARD MIII			
	SESSION I		SESSION II		SESSION I		SESSION II		SESSION I		SESSION II		SESSION I		SESSION II		SESSION I		SESSION II		SESSION I		SESSION II	
Rank	Score	Pat	Score	Pat	Score	Pat	Score	Pat	Score	Pat	Score	Pat	Score	Pat	Score	Pat	Score	Pat	Score	Pat	Score	Pat	Score	Pat
1	4,2	3					4,32	12			3,71	19			3,72	32	4,13	41			4,37	46		
2	3,9	1			3,99	11			3,41	25					3,67	31	3,86	19					4,26	48
3			3,94	6			3,87	16	3,42	17			3,59	29			3,57	40			4,01	47		
4	3,51	R1					3,61	10			3,28	27	3,41	33			3,42	16			3,95	52		
5	3,49	4					3,53	15	3,25	24			3,1	26			3,31	45					3,87	R48
6			3,46	5	3,33	13					3,22	R21			3,24	14			3,17	41	3,19	50		
7	3,1	R4					3,3	9	3,2	20			3,2	30			3,16	35			3,46	51		
8			2,98	3	3,18	7					3,17	23	3,17	R29					2,94	43			3,17	54
9			2,87	R5	3,09	14			3,09	21					3,09	R28			2,9	42			3,3	49
10					2,96	9					3,06	R22			3,02	28			2,83	38			3,24	R49
11					2,91	R7					3,04	18	3,0	27					2,79	R42	3,13	51		
12																			2,75	17				
		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.		No.
Total	18,20	5	12,85	4	19,46	6	18,67	5	16,19	5	19,48	6	19,67	6	16,75	5	21,46	6	17,38	6	22,47	6	18,04	5
Means	3,64		3,21		3,24		3,73		3,24		3,25		3,28		3,35		3,58		2,9		3,74		3,61	
Total SI		31,05		9	SII	38,11		11	SIII	35,67		11	MI	36,42		11	MII	38,84		12	MIII	40,46		11
Means		3,45				3,47				3,24				3,31				3,24				3,68		

Totals SURGICAL: Session I 54,05 18 Session II 51,00 19
Means 3,38 3,4
Session I + Session II 105,05 31
Means 3,39

MEDICAL: Session I 61,97 18 Session II 57,17 14
3,51 3,26
Session I + Session II 119,72 34
Means 3,4

b) Range and Central Tendency

WARD	Highest Score	Pat	Lowest Score	Pat	Range	Mean	Median
SI	4,2	3	2,87	R5	1,33	3,45	3,49
SII	4,32	12	2,91	R7	1,41	3,47	3,11
SIII	3,71	19	3,04	18	,67	3,26	3,22
SURG	4,32	12	2,87	R5	1,45	3,39	3,3
MI	3,72	32	3,0	27	,72	3,31	3,25
MII	4,14	44	2,75	37	1,39	3,24	3,16
MIII	4,37	46	3,13	53	1,24	3,68	3,48
MED	4,37	46	2,75	37	1,62	3,4	3,3
S+M	4,37	46	2,74	37	1,62	3,4	3,3
SURGICAL:							
SESSION I	3,74	MIII	2,9	MII	,84	3,46	3,41
SESSION II	3,73	SII	3,21	SI	,52	3,33	3,25
COMBINED	3,74	MIII	2,9	MII	,84	3,4	3,3

c) Evaluation of Scores

WARD	Inferior Care Below 1,81	Mainly Inferior 1,81 - 2,60	Average Care 2,61 - 3,40	Mainly Superior 3,41 - 4,20	Superior Care 4,21+	No. of Patients
SI			///	////// /		9
SII			////// /	////	/	11
SIII			////// ///	///		11
SURGICAL			17	11	1	31
MI			////// //	////		11
MII			////// ///	////		12
MIII			////	//////	//	11
MEDICAL			19	11	2	34
S + M			36	26	3	65

Wards SI and SIII were rated higher in Subsection II - Psychosocial (Group) with a score of 3,5 each. Ward SI also had the highest rating in Subsection V (Communication) with a score of 3,79.

Subsection I - Psychosocial (Individual) in Ward MIII(3,8) was the highest rated subsection, followed closely by Subsection V (Communication) in Ward SI (3,79).

Subsection II received no rating in Ward MIII and was rated lowest in MI and SII (2,75 each). The next lowest score was Subsection III in MII.

7.6 The Patient Scores

Table 7.6 summarises the patients scores calculated from the Qualpacs item ratings of 65 observation periods carried out by the observer.

Table 7.6(a) shows that there were 31 surgical patient scores, 16 during the early (8h00 - 10h00) session and 15 during the later (Session II), and 34 medical patient scores, 18 in Session I and 16 in Session II. The Session I and Session II means in the surgical group of wards were close at 3,38 and 3,4 respectively, but there was a difference within the medical group with the Session I mean (3,53) higher than Session II (3,26).

The surgical and medical group means were very close at 3,39 and 3,4 respectively and the medians were both 3,3 (Table 7.6(b)), but the combined (Surgical and Medical) means of Session I and Session II are 3,46 and 3,33 respectively, once again suggesting a higher standard of care in Session I.

Table 7.6(c) shows that 3 patient scores were in the 'Best Care' category. These were Patient No. 12 in Ward SII, (4,32) Patients No. 46 (4,37) and No. 48 (4,26) in Ward MIII. No patient scores were rated below average.

In the surgical wards 17 of the patients received 'Average' ratings (55%) and 19 (56%) of the medical ward patients, making a total of 36 (55%).

'Above Average' scores were ascribed to 13 surgical patients (42%) and 13 medical (38%). Thus, altogether, 29 (45%) of the patient scores were above average, 3 of them (5%) in the 'Best Care' category.

TABLE 7.7: The Ward Scores

a) Ranked Means per Session and per Ward

Rank	Mean	Session	Ward		Mean	Ward
1	3,74	I	MIII		3,68	MIII
2	3,73	II	SII		3,47	SII
3	3,64	I	SI		3,45	SI
4	3,61	II	MIII		3,31	MI
5	3,58	I	MII		3,26	SIII
6	3,35	II	MI		3,24	MII
7	3,28	I	SIII			
8	3,28	I	MI			
9	3,25	II	SIII			
10	3,24	I	SII			
11	3,21	II	SI			
12	2,9	II	MII			
Totals	40,81	N=12			20,41	N =6
Means	3,41				3,4	

b) Evaluation

CORRECT CARE Below 1,81	BELOW AVERAGE 1,81 - 2,60	AVERAGE CARE 2,81 - 3,40	ABOVE AVERAGE 3,41 - 4,20	DEEP CARE 4,21+
		SIII MI MII	SI SII MIII	

c) A TABLE SUMMARISING FOR THE VARIOUS FACTORS, THE PROBABILITY THAT WARDS DIFFER FROM ONE ANOTHER, THE PROBABILITY THAT SURGICAL WARDS DIFFER FROM GENERAL WARDS AND WHICH WARDS GAVE A SIGNIFICANTLY HIGHER VALUE THAN OTHERS.

VARIABLE	ANALYSIS OF VARIANCE		SURGICAL VS GENERAL		WARDS DIFFERING FROM ONE ANOTHER
	F-value	P-value	t-value	P-value	
C2 I	2,9652	0,0296	0,1830	0,8555	Gen 3 > Gen 1 Gen 3 > Surg 3;Gen 3 > Gen 2
GR II	0,8725	0,5066	0,7640	0,4486	-
GR III	2,4751	0,0450	-0,7787	0,4400	Gen 3 > Gen 2
GR IV	1,3939	0,2434	0,3837	0,7029	-
GR V	0,1169	0,9880	-0,4099	0,6837	-
GR VI	0,6145	0,6892	0,1360	0,8924	-
AVERAGE	2,6397	0,0348	-0,0815	0,9354	Gen 3 > Surg 3;Gen 3 > Gen 2
AVCOR	2,7965	0,0270	-0,6736	0,5038	Gen 3 > Surg 3;Gen 3 > Gen 2
GR I(CORR)	2,5030	0,0430	0,0722	0,9427	Gen 3 > Surg 3
GR II(CORR)	0,9050	0,4857	0,7467	0,4589	-
GR III(CORR)	3,1073	0,0165	-0,5958	0,5541	Gen 3 > Surg 3;Gen 3 > Gen 2
GR IV(CORR)	1,9060	0,1108	-0,7017	0,4863	-
GR V(CORR)	0,4732	0,7944	-0,9001	0,3726	-
GR VI(CORR)	1,2664	0,2938	-1,1148	0,2705	-
IMPORTANT VARIABLE	2,8203	0,0260	-1,3347	0,1883	Gen 3 > Surg 3;Gen 3 > Gen 2

7.7 The Ward Scores

Table 7.7(a) shows the means of the scores per session in each ward and the means per ward. It can be seen that while the ward means ranged from 3,68 (MIII) to 3,24 (MII) there was a greater range over the individual sessions from 3,74 (Session I, MIII) to 2,9 (Session II, MII).

While there are too few ward scores for reliable conclusions to be drawn, the table suggests that the care given the observed patients in MIII rated the highest (3,68) particularly in Session I (3,74), while the MII patients received the lowest rated care (3,24) especially in Session II (2,9). This last finding is confirmed in Table 7.6(a) where the ranked order of the scores in MII show that all the scores in Session II except one fall well below the Session I scores.

Table 7.7(b) shows that 3 wards were rated 'Above Average,' SI, SII and MIII, while the other 3 rated 'Average'. None of the wards scored below 3,00.

Ward scores were also compared in the computer analysis. For this comparison the six wards were considered as treatments and the patient scores in the wards as replicates. Only the patient scores in the initial observations carried out by the main observer were used in this analysis.

The results are summarised in Table 7.7(c). It was found that the surgical group of wards did not differ from the medical group of wards in any statistically significant way.

For some of the variables, especially the more important ones, namely Average, Avcor and Important Variables, it was found that there was a significant difference between individual wards. Comparing the wards with one another, using a much lower test level (0,005) since so many comparisons were made, it was found that medical ward MIII, in three cases was statistically significantly higher than surgical ward SIII and medical ward MII.

The comparison between surgical and medical wards was repeated by considering a ward as an observation. Thus there were 3 observations for surgical wards and 3 for medical wards. An ordinary t-test was applied but in none of the variables was a significant difference found between types of wards.

In summary it was found in the computer analysis that when comparing surgical with medical wards no significant statistical differences seemed to be present in the quality of care.

TABLE 7.8: The Caregivers and the Quality of Care

a) RANGE AND CENTRAL TENDENCY OF MAJOR CAREGIVERS

		HIGH - LOW	RANGE	TOTAL	N° OF WARDS	MEAN
1. STUDENT NURSE CATEGORY (462)						
Student Nurses		3,56 - 3,26	,3	13,79	4	3,45
Scholar Nurses		2,91 - 2,88	,03	5,79	2	2,89
Black Nursing Assistants		3,12 - 3,0	,12	6,12	2	3,06
2. SISTER CATEGORY	(278)	3,7 - 3,07	,63	20,0	6	3,33
3. WARD MAID CATEGORY	(112)					
"Pink Caps"		3,31 - 3,08	,23	18,87	6	3,14
Ward Maids		3,0 - 2,57	,43	11,49	4	2,87
4. DOCTOR CATEGORY	(70)	3,94 - 2,68	1,26	20,18	6	3,36

b) RANK ORDER OF CAREGIVERS

CONST' CAREGIVERS			REGULAR CAREGIVERS		OCCASIONAL CAREGIVERS	
RANK	SCORE	CATEGORY	SCORE	CATEGORY	SCORE	CATEGORY
1	3,45	St. Nurses	3,77	Zone Matron	5,0	Social Worker
2	3,33	Sisters	3,75	Physiotherapists	4,46	Stomatherapists
3	3,14	Pink Caps	3,43	Pharmacists	3,28	Voluntary Workers
4	3,06	BNA's	3,36	Doctors	3,1	Radiographers
5	2,89	Scholar Nurses	3,05	Porters	3,04	ECG Technicians
6	2,87	Ward Maids	2,65	Ward Clerks	3,0	Librarian

c) OVERALL RANK ORDER

RANK	SCORE	CATEGORY	EVALUATION
1	5,0	Social Worker	Best Care
2	4,46	Stomatherapist	" "
3	3,77	Zone Matron	Above Average
4	3,75	Physiotherapist	" "
5	3,45	Student Nurses	" "
6	3,43	Pharmacist	" "
7	3,36	Doctors	Average (upper)
8	3,33	Sisters	"
9	3,28	Voluntary Workers	"
10	3,14	Pink Caps	"
11	3,	Radiographor	"
12	3,05	BNA's	"
13	3,05	Porters	"
14	3,04	ECG Technicians	"
15	3,0	Librarian	Average
16	2,89	Scholar Nurses	"
17	2,87	Ward Maids	"
18	2,65	Ward Clerks	"

However, there were differences between the wards themselves with, in most cases, MIII being rated higher than SIII and MII, a finding confirmed in the Table 7.7(a).

7.8 The Caregivers and the Quality of Care

Using the activity records (Appendix D2) the category of caregivers involved in each recorded interaction were identified and linked to the item ratings of that interaction. It must be emphasised that these ratings were ascribed to the interactions and not to the caregivers. There were occasions when different categories of caregiver shared the rating ascribed to an interaction. As a matter of interest the student has processed these ratings to derive the mean of the ratings linked to each category of caregivers.

Table 7.8 summarises these ratings. It can be seen that student nurses were rated the highest of the constant caregivers, the zone matrons highest of the regular caregivers and the social workers the highest of the occasional caregivers. The interactions involving the social workers and the stomatherapists were both in the 'Best Care' category, while those of the zone matrons, physiotherapists, student nurses and pharmacists were 'Above Average'.

However, i must be pointed out that from Chapter VI,6.4, the social workers and the stomatherapists received their high scores in only one transaction each, the pharmacists in 5 and the zone matrons in 10, while the physiotherapists scored above average over 24 transactions and the student nurses over 462. This last relatively high rating over so many transactions seems to indicate that student nurses were giving a particularly satisfactory level of patient care on the Qualpacs scale.

TABLE 7.9: The Repeatability Study

a) Scores

Rank	SI Initial Score	SI Initial Pat	SI Repeat Score	SI Repeat Pat	SII Initial Score	SII Initial Pat	SII Repeat Score	SII Repeat Pat	SIII Initial Score	SIII Initial Pat	SIII Repeat Score	SIII Repeat Pat	HI Initial Score	HI Initial Pat	HI Repeat Score	HI Repeat Pat	HII Initial Score	HII Initial Pat	HII Repeat Score	HII Repeat Pat	HIII Initial Score	HIII Initial Pat	HIII Repeat Score	HIII Repeat Pat
1	4,2	3			4,37	12			3,71	18			3,72	33			4,14	44			4,37	46		
2	3,9	1			3,99	11			3,43	25			3,67	31			3,86	39			4,26	48		
3	3,54	6			3,89	16			3,42	17			3,98	29			3,57	40			4,03	47		
4			3,91	R3	3,63	10			3,28	22			3,41	33			3,42	36			3,95	52		
5	3,49	4			3,83	15			3,25	24			3,3	26			3,31	45					3,87	R48
6	3,46	9			3,33	13					3,22	R21	3,25	34			3,17	41			3,48	50		
7			3,1	R4	3,5	9			3,2	20			3,2	30			3,16	35			3,46	51		
8	2,98	2			3,18	7			3,17	23					3,17	R29	2,94	43			3,37	54		
9			2,87	R5	3,09	14			3,09	21					3,09	R28	2,9	42			3,3	49		
10					2,96	8					3,04	R22	3,02	28			2,83	38					3,24	R49
11							2,91	R7	3,04	18			3,0	27					2,79	R42	3,13	53		
12																	2,75	37						
Totals	21,57	6	9,48	3	35,22	10	2,91	1	29,59	9	6,28	2	30,16	9	6,26	2	36,05	11	2,79	1	33,35	9	7,11	2
Means	3,59		3,16		3,52		2,91		3,29		3,14		3,35		3,13		3,28		2,79		3,71		3,55	
Totals — Means —			SURGICAL -		86,38	25	14,67	6			MEDICAL -		99,56	29	14,16	5			S + M -		83,94	34	24,83	11
					3,45		3,11						3,43		3,23						3,44		3,17	

b) RESULTS OF REPEATABILITY STUDY OF EVALUATOR ONE ON 11 SUBJECTS.

VARIABLE CONSIDERED	Mean Difference 1st-2nd evaluation	t-value	p-value
Group I	0,1900	2,74	0,011
Group II	0,1636	0,63	0,542
Group III	0,4627	1,23	0,000
Group IV	0,3365	2,10	0,062
Group V	0,2827	0,86	0,397
Group VI	0,0018	0,01	0,989
AVERAGE	0,4164	2,43	0,034
Group I (Corrected Procedure)	0,4118	2,18	0,054
Group II (Corrected Procedure)	0,3636	0,63	0,542
Group III (Corrected Procedure)	0,2518	1,39	0,195
Group IV (Corrected Procedure)	0,6600	2,24	0,049
Group V (Corrected Procedure)	0,4618	1,78	0,121
group VI (Corrected Procedure)	-0,2718	-0,97	0,354
AVERAGE (Corrected Procedure)	0,4164	2,43	0,034
IMPORTANT VARIABLE	0,3591	1,47	0,173
AVERAGE vs AVERAGE CORRECTED Group I	0,5491	4,05	0,000
AVERAGE vs AVERAGE CORRECTED Group I	0,6791	4,91	0,001

c) CORRELATIONS THAT EXIST BETWEEN TWO SETS OF VALUES.

	r	p
Average score (first and second)	0,9296	0,000
Corrected Average score (first and second)	0,5769	0,063
Important variables (first and second)	0,3713	0,261
Average vs Corrected Average (first observation)	0,9234	0,000
Average vs Corrected Average (second observation)	0,7880	0,037

PART II: THE QUALITY PATIENT CARE SCALE
"A secondary objective was to critically evaluate the measuring instrument." (Chapter IV, 4,0)

In this study two aspects of Qualpacs reliability were tested. It was decided to repeat at least one patient observation in each ward, and to have an independent co-observer concurrently rate at least half the observations in each ward. Thus, test-retest reliability and observer/co-observer reliability tests were carried out.

7.9 Test/Retest Reliability

In order to test the reliability (i.e. consistency) of the scale over time the observer carried out 11 repeat observations, in which the same patient was observed over the same period of time on the following day. Table 7.9 summarises the outcome of this part of the study. It is evident that when the patients were observed a second time the observer tended to ascribe lower scores than those given to the initial observation.

In the computer analysis a paired t-test was....applied to the first and second repeats of each observation for all of the different variables. The results are summarised in Table 7.9(b).

Except for Group VI (Corr), the first evaluation of patient care tends to be higher than the second, some of them statistically significant. Especially Average and Avcor. To quote from the report: "Since we observed that in general the first observation was higner than the repeat observation, we also calculated the correlation coefficients between these two for the major variables. The results are summarised in Table 7.9(c). In two of the variables there are strong relationships, in two further variables reasonable, and in one there was not a strong relationship." (Appendix F)

These findings suggest that the observations on a patient are not repeatable. The tendency seems to be to evaluate patient care more strictly the second time.

TABLE 7.10: Observer/Co-observer Scores

a) Scores

	SI			SII			SIII			MI			MII			MIII		
Rank	Co-obs Score	Pat	Obs Score	Co-obs Score	Pat	Obs Score	Co-obs Score	Pat	Obs Score	Co-obs Score	Pat	Obs Score	Co-obs Score	Pat	Obs Score	Co-obs Score	Pat	Obs Score
1	3,09	R3	3,51	4,0	10	3,63	4,04	19	3,71	3,88	26	3,3	3,05	35	3,16	4,29	52	3,95
2	2,93	R4	3,1	3,47	8	2,96	3,25	24	3,25	3,46	27	3,0	2,9[illegible]	36	3,42	3,83	49	4,26
3	2,8	R5	2,87	2,92	13	3,13	3,12	25	3,41	2,38	R28	3,09	2,54	39	3,86	3,66	51	3,13
4	2,6	2	2,98	2,89	9	3,1	3,1	18	3,04	2,12	28	3,02	2,54	45	3,31	3,36	50	3,48
5	2,45	1	3,9	2,88	R7	2,91	2,13	22	3,28	1,97	31	3,67	2,18	37	2,75	3,3	54	3,37
6	2,07	6	3,54	2,59	14	3,09	2,09	R23	3,22				2,0	R42	2,79	3,27	49	3,3
7				2,36	11	3,99							1,8	41	2,94	3,03	51	3,46
8				1,98	7	3,18							1,55	38	2,83	2,78	R48	3,87
9													1,41	42	2,9	2,45	R49	3,24
Totals	15,94	6	19,90	23,09	8	26,39	17,71	6	19,93	14,01	5	16,08	20,04	9	27,96	29,97	9	12,06
Means	2,66		3,32	2,89		3,3	2,95		3,32	2,8		3,22	2,23		3,11	3,33		3,56
	SURGICAL						MEDICAL						S + M Combined					
Totals	58,76	20	66,22				64,02	23	76,10				120,78	43	142,32			
Means	2,84		3,31				2,78		3,31				2,81		3,31			

MEDIANS																		
Co-observers		SI	2,7	SII	2,88	SIII	3,11	SURG	2,88	MI	2,38	MII	2,18	MIII	3,1	MED	2,78	MED	2,88
Observer			3,3		3,24		3,26		3,26		3,09		2,94		3,46		3,3		3,28

b) COMPARING EVALUATOR ONE WITH OTHERS WITHIN SURGICAL AND GENERAL WARDS SEPARATELY

VARIABLE	GENERAL WARDS			SURGICAL WARDS		
	Mean	t	p	Mean	t	p
GR I	0,4872	3,61	0,002	0,5715	3,59	0,002
GR II	-1,1474	-3,22	0,004	-1,2385	-2,57	0,019
GR III	0,6022	3,41	0,003	0,7720	3,73	0,001
GR IV	0,6604	2,66	0,014	0,9820	3,40	0,003
GR V	1,1670	3,86	0,001	1,1020	2,98	0,008
GR VI	0,7165	3,19	0,004	1,9295	5,53	0,000
AVERAGE	0,4822	3,69	0,001	0,5175	3,55	0,002
GR I(CORR)	0,6070	4,17	0,000	0,6150	3,70	0,002
GR II(CORR)	-1,1568	-4,19	0,004	-1,2655	-2,62	0,017
GR III(CORR)	0,5709	3,02	0,006	+1,0375	6,52	0,000
GR IV(CORR)	0,8904	3,87	0,001	1,2950	8,64	0,000
GR V(CORR)	0,6557	2,26	0,034	0,6135	1,87	0,077
GR VI(CORR)	1,3928	6,05	0,000	1,8505	6,07	0,000
AVERAGE(CORR)	0,6626	5,92	0,000	0,9460	7,17	0,000
IMPORTANT VARIABLES	0,7365	4,58	0,000	0,9570	6,29	0,000

7.10 Observer/Co-observer Reliability

In order to examine the reliability (consistency) between observers, 43 of the patient observations carried out by the main observer were concurrently observed and rated by the co-observers, 20 observations in the surgical wards and 23 in the medical. The scores were summarised in Table 7.10(a). From the table it is apparent that the main observer consistently scored the interactions higher than did the co-observers.

Table 7.10(b) shows the outcome of the computer analysis, which used 19 of the surgical and 22 of the medical patient observations. From this table it is noted that the main observer tended to evaluate the care as being better than the co-observers did. This tendency is statistically significant re Average, Avcor and Important Variables. The same trend is evident in surgical and medical wards. Thus, when these two are compared and a difference is found the preference of the main observer for the one or the other type of ward can be ruled out. (Appendix F)

7.11 Validity

There are reports of validity studies, particularly of a cross-validation study between Qualpacs and Phaneuf's Nursing Audit, (7) but these are beyond the scope of this study.

7.12 Conclusions

The Qualpacs item ratings were used to calculate the Qualpacs scores, and it was possible to use these scores to make assumptions about the quality of care. However, reliability of the scale could not be conclusively shown in either the test-retest or the observer/co-observer comparisons and the accuracy, constancy and precision of the scale is in question. This will be discussed further in the next chapter.

Chapter VII

References:

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VIII : DISCUSSION OF THE FINDINGS

8.0 Introduction

The primary purpose of this study was to observe patient care in action in a hospital ward in order to accumulate data about that care. The research student focused on the individual patient, observed and recorded the patient care activities and rated them, in order to use the data to determine the nature of the care and to form an opinion about its quality.

For convenience the patient care activities will be called PCA's in this chapter.

8.1 The Accumulation of Data

From Chapters V and VI it can be seen that a great deal of data was collected by the researcher. During 36 two-hour observation periods 54 patients were observed and 11 repeat observations were carried out (Table 5.4). From these 65 records the researcher found that there were 770 patient care activities (PCA's) with 987 components (Table 6.1). Further examination showed that they involved 1157 caregiver transactions (vide Chapter VI,6.4). Of the 770 PCA's, 693 perceived as containing the care component were rated on the Quality Patient Care Scale. They were labelled "interactions" (Table 5.8), and were dealt with separately to produce an evaluation of patient care. The analysis of these data is described in Chapter VII.

In their directions for using the Qualpacs rating scale the authors recommend that there should be at least 2 observers working together on a project. They "are usually comfortable and use the scale reliably after observing and rating 4 or 5 patients, or at the end of two days of tryouts and discussions."(1) They may then carry out observations separately, each contributing "ratings to the total project."(2)

This was not possible in this project (see Chapter IV, 4.2) and only the researcher's ratings have been used to arrive at the Qualpacs scores. However, there were 9 independent co-observers who observed, recorded and rated 43 of the observations concurrently with the researcher. (Table 5.4) Their records produced a substantial amount of additional data which were used for the purposes of comparison in order to verify the main observer's findings.

The descriptive information in Chapter V was accumulated from the details set out in the upper section of the recording sheets (described in Chapter IV, 4.3.3). These included the date, day, time of the observation period, and identity of the observer. The ward, room and bed position of the patient were also recorded, and diagnosis and level of care of the patient. Personal details about the patient and extracts from the Kardex were recorded on a separate sheet of paper. They were omitted from this analysis because there were sufficient data for the purposes of this project without them. This will be discussed later in this chapter (8.5).

Thus it can be seen that, while a great deal of data were accumulated, the limitations of this research project restricted their use. A more ambitious project, based on a similar research design, carried out by a trained team, well planned and computer aided, could produce a wealth of information about various aspects of patient care in the wards.

From the data collected in this project, the findings in Chapter V suggest several promising avenues for further research:

8.1.1 The differences between the patient capacity of the wards, the bed state and the bed occupancy, as well as the consistent drop in patient numbers between Mondays and Thursdays, would be an interesting area of investigation. (Table 5.1)

Similarly, the ratio of surgical to medical beds in the 3 surgical and 3 medical wards was 87:75 (Table 5.1) Bed occupancy using Monday figures was 68:71 and 57:64 using Thursday figures.

What are the reasons for these discrepancies? Does this thin spread of patients make for efficient and effective staff utilization? Is it cost-effective? Does it reflect the real surgical: medical patient ratio? Is it constant or seasonal? Planned or unintentional?

Confirmation of these figures and investigation of the reasons for the discrepancies, if they are confirmed, would probably be very useful to hospital management.

8.1.2 The information in 5.1.4 (Table 5.3) seems to indicate that nursing staff are using progressive patient care in the wards, although some of them have since said that they believe this system to be outdated.

Further research could reveal whether the system is used consciously and deliberately or intuitively. Is it useful? Does it make patient care more effective? Efficient? Is it outdated?

8.1.3 Tables 5.6 and 5.7 demonstrate the number of PCA's that were recorded. From these tables it appears that there are an average of 11,37 PCA's over a two-hour period on midweek mornings. The earlier session (Session I, with an average of 12,4 PCA's) appears to be busier than Session II(10,3 PCA's). Although the range is identical, the medical wards had more total PCA's (119-156 with a total of 412) than the surgical wards (100-137,total 358). Many questions arise. What are the relationships between the number of PCA's and the standard of care? Between surgical PCA's and medical? Between Session I PCA's and Session II? How do PCA's relate to ward staffing? Or to quality of care?

8.1.4 Table 5.8 indicates that only 86%-90% of the PCA's recorded were rated. This discrepancy occurred consistently in the co-observer as well as the observer records. What were the reasons for this? Was it due to the short-comings of the observers, or were there indeed PCA's without a quality component?

These and many other questions arise from the findings described in Chapter V, and give an indication of the range of material that could be investigated in a research project of this kind.

8.2 The Nature of the Patient Care Activities

The information in Chapter V was derived from the records on the upper portion of the Recording Sheets (described in Chapter IV,4.3.3). For Chapter VI the information was obtained from the remaining section of the Recording

Sheets, where observers recorded the patient care activities as they saw them occur. The research student tabulated all the activity components, including the persons involved, and grouped them. From these groupings quantitative information was derived about the nature of the patient care activities and the caregivers involved in them.

From the 770 PCA's the research student identified 987 components. When the components were grouped homogeneously they fell into 8 broad categories which are described in detail in Chapter VI, 6.0 - 6.2 and the supplementary tables. The time element is described in 6.3 and the caregiver involvement in 6.4.

For the research student this information provided new insights into the nature of the patient care activities, and new areas for further investigation. She has selected some of these for discussion below:

8.2.1 Activities related to monitoring, investigating and assessing the condition of the patient were the most frequent throughout. Together with charting they formed almost one third of all the activities. Is this indicative of the importance of this caring function of the nurse? How does it relate to the assessment/evaluation aspects of the Nursing Process? Can it be usefully linked to the concept of 'nursing diagnosis' which is currently the subject of controversy in nursing? What is its significance to the independent, interdependent and dependent functioning of the nurse? How important is it to primary nursing? Case nursing? Do we give sufficient emphasis to this aspect of nursing practice in our teaching?

8.2.2 Conversation - as the sole PCA, not where it accompanied other PCA's - was the fourth most common activity. It most usually occurred between the observed patient and other patients or visitors, often with student nurses, less often with sisters and doctors, hardly ever with black nursing assistants, never with ward maids. It was the main activity of zone matrons (90%) a major activity of doctors (66%) but third last for both sisters and student nurses (6% and 8%).
This was a serendipitous finding in this study and would need to be confirmed by a more careful investigation.

Although verbal communication is not necessarily a therapy, it has potential for being therapeutic. The conversation with a social worker on one occasion received a very high rating (5,0) and on another a young doctor transformed a ward of apathetic male patients into a lively group when he introduced the topic of "the races" into the conversation. Psychotherapists and occupational therapists are aware of the therapeutic potential of verbal communication. Nurse theorists such as Peplau, Orlando and Altschul have focused on it. In the hospital wards it could be given therapeutic meaning by:

i) Teaching student nurses to listen to their patients and to develop meaningful nurse-patient relationships.

ii) Forming discussion groups with the patients, to focus on dealing with their needs and the problems associated with their condition.

iii) Using the hospital situation to form educational groups to reinforce the primary (preventive and promotive) and tertiary (rehabilitative) aspects of health care.

There are many ways in which an aware nursing staff could maximise the therapeutic potential of verbal communication.

8.2.3 Treatment activities were mostly carried out by the sister and more often in the later part of the morning (Session II). The hierarchical nature of the work from the humbler duties of the most junior student nurses through to the more skilled treatment PCA's carried out by the sister was evident in these findings. Table 6.3 shows that treatment activities were bottom of the list for student nurses (7% of their PCA's) and top for the sisters (25%).

Also, with only 92 components, this was the smallest category of PCA's. (See Table 6.2). The most frequent activities under this heading were giving out medicines (32%) and giving injections (14%) (6.3.8). The more skilled procedures totalled only 50 of the 987 components of the PCA's. If these activities make up so little of nursing practice, they should be examined further in relation to student nurse education. Should less time be devoted to teaching seldom used

procedures? Should specialist nurses be employed to carry them out in the appropriate groups of wards?

These, then, were some of the inferences that could be drawn from the patient care activities identified by the observer from the records she had made. These are only some of the findings from one study, conducted by a single observer and they would need to be confirmed by others. But if they are, it would be well to examine our nursing education programmes in relation to our nursing practice and establish whether our teaching bears any relation to that practice. Do we give too much attention to low profile activities? Or, on the other hand, should changes be made in our practice?

8.3 The Time Element

Early in this study the research student found that most of the PCA's were brief, "rarely as long as a minute" (vide Chapter IV, 4.7.2) and could not be accurately timed. However, the time of occurence of each PCA was recorded and she later constructed a timetable to record over 10 minute intervals the PCA's in each observation period. (See 4.8.1) While they were not as precise as a stopwatch would have been the timetables did give an indication of the time fluctuations of the PCA's. These fluctuations are described in Chapter IV, 6.3 and Figures 6.1 and 6.2 illustrate the time factor in Session I and Session II respectively.

From these graphs an impression can be formed of the patient timetable in the wards. For instance, it appears that 8h00-8h10 was a period of intense activity, while 10h30-10h40 was the all-time low of the morning. It was found that Session I activity levels were generally higher than Session II, except for treatment activities. Another observation supported by the records was that morning tea often followed ridiculously close behind breakfast, 8h10-8h40 for breakfast tea/coffee with morning tea at 9h20-10h00.

These may appear to be trivialities, but the ward environment is known to have a potent influence on the well-being of patients. A letter published in the Nursing Times called "Hospitals should do the patient no harm" says: "A friend of mine would have discharged himself from hospital if the medical staff had not taken pity on him and allowed him to go home"... "After a few days in the peace of his own home" his condition improved..."He swore never to be admitted to hospital again."(3)

Time studies of this nature would enable nurses to examine the ward timetable from the patients' point of view and to restructure it to maximise its therapeutic potential for the patient. An activity timetable could be the source of much useful information:

How does the ward timetable affect the patient? Can problem areas be identified and altered for the patients' benefit. eg. quiet periods used for the patients to rest, periods created for group discussion? Meal and refreshment times more evenly spaced?

Can it be examined from the staff point of view? Peak activity periods staggered? Or staff maximised at these times and given opportunities for off-ward activities during the lulls. Would an activity timetable be a useful form of time and motion study in the wards?

The introduction of the timetables into these patient care observations gave an added dimension to the findings on the nature of the PCA's. While not as accurate as stopwatch timing, they were much easier to incorporate into the observational system that was used, and produced useful information.

8.4 The Caregivers and the Patient Care Activities

The observers recorded the occupational identity of the people who interacted with the observed patients. Because they had worked in the hospital for some years and most of the people who came to the ward wore distinctive garb, the observers were able to identify them with relative ease. In the few cases where they were unsure the observers checked with each other or with some other person after the observation period was over. Thus, quantitative information about the nature of the PCA's was linked to the identity of the caregivers involved in them. The researcher found that there were 1157 caregiver actions in the 770 PCA's, and to avoid confusion she has called them "transactions". They are described in Chapter VI, 6.4 together with the relevant tables. (Tables 6.3, 6.4, 6.5 and 6.6)

From the records the researcher found that there were 20 categories of persons involved in caregiver transactions. Four of these categories were not official caregivers, but did indeed participate in PCA's, and she labelled them "Outsiders Who Gave Care". The major caregiver in this group was the observed patient himself who frequently attended to his own needs - his own rest and exercise, his own comfort needs and his own food needs, in particular.

The other 16 caregiver groups were divided into the constant caregivers, i.e. the ward nursing and domestic staff, the regular caregivers who were attached to the ward, and the occasional caregivers who came to the ward to give their particular services.

Once again the researcher found that the records yielded a considerable amount of data about the caregivers and the PCA's which is summarised in 6.4. Further aspects which could have been investigated are:

8.4.1 It is not always realized what a variety of caregivers are involved in patient care. The sister in charge of the ward who is responsible for the nursing care of the patient, usually has to coordinate the activities of all these people. They are often activities which would be carried out by the nurses themselves in a less sophisticated hospital environment. It would be worthwhile to examine the caregiver transactions in more depth and from the patients' point of view, to establish how therapeutically effective they are. Also from the point of view of the ward sister - how should she coordinate, control and utilize these various services for the maximum therapeutic benefit of her patients?

8.4.2 The classification of the caregiver groups in this project was very broad, and no attempt was made to identify them in more detail. However, it was apparent that there were quite a number of subgroups. 'Sisters' were made up of enrolled and registered nurses, usually female, but sometimes male. 'Student nurses' were made up of first, second and third year students and included black nursing assistants and scholar nurses as well. 'Doctors' ranged from medical students to professors. An indepth study could elicit further information about the role and functioning of these various subgroups.

8.4.3 Another noteworthy aspect of these findings was the different ways in which the various caregivers tended to function. Ward nursing staff worked cooperatively in pairs or small teams, while the physiotherapist usually worked alone. Doctors were ofter in groups too, but with only one or two carrying out a patient care function while the others were interested (usually) onlookers. When they functioned cooperatively it was to discuss the

case together, usually at the foot of the bed, rather than to interact with the patient. An in-depth study of caregiver functioning could produce insights into the characteristics of the various caregiver groups.

8.5 The Patient Role and 'Patientology'

In the beginning of this chapter, mention was made of the personal details of the patient, which were omitted from this analysis.(8.1) If these details had been included it would have been possible to derive a detailed patient profile from the records. Such factors as the effect of the patient's condition, age, sex, bed position on the PCA's could have been investigated. The research student believes that 'patientology', the study of the patient, could be as useful a subject to medical sociologists and health workers as victimology is to criminologists, and that in-depth studies on similar lines to the present one could be used to yield valuable information about the patient population.

8.6 The Qualpacs Scores and the Standard of Care

While Chapters V and VI dealt with the quantitative aspects of patient care, Chapter VII entered into the far more difficult realm of quality assessment. In Chapter V, Table 5.8 shows that the main observer rated 693 of the 770 PCA's (patient care activities) she recorded. These she labelled 'Interactions/Interventions' in accordance with Qualpacs nomenclature, but they will be referred to as interactions in this discussion.

Chapter VII describes the analysis of the ratings ascribed to these interactions. Part I deals with the calculation of the Qualpacs scores by the research student and by computer. The research student devised her own labelling system as a means of interpreting the scores in quality terms. Tables 7.1 - 7.8 illustrate the findings in this section.

In 7.4 - 7.7 the findings are discussed in regard to item and subsection scores, patient scores and ward scores. The ward score findings were confirmed in the computer analysis of the data(7.7). Dealing only with the Qualpacs scores of the main observer, and disregarding the questions of accuracy, validity and reliability the following points arise from these findings:

8.6.1 Altogether there were 1998 item scores from the observer's ratings. Only 2 items were rated in all 65 observations. Seven items were never rated at all, and this could be investigated further. Did the appropriate interactions never occur? Or did the observer not recognize them? Do they represent deficiencies in the nursing care? Or in the instrument?

8.6.2 The 3 'best care' items were all to do with communication on behalf of the patient, Subsection V. However, Item No. 58 was only scored 3 times, No. 61 was scored 13 times and No. 54 was scored 21 times. Do the scores alone really indicate the quality of care, or should they include a frequency weighting? The greater the frequency of an item score, the more likely it is to tend towards the mean. Even a superficial examination of Table 7.3 shows that 6 of the items in the 'least often' column were scored in the top 20 while in the 'most often' column Item No.7, with the highest score, was only in the 25th position. Is this coincidental? Or should this aspect be examined further?

8.6.3 Analysis of the subsection scores indicated that Subsection V, contained the largest number of 'best care' scores(10), while Subsections VI and I contained 8 'best care' scores each. The overall means also indicate that the care in these 3 subsections in the same order, was rated the highest. Do these scores reflect the aspects of patient care that were well dealt with, communication on behalf of the patient, professional implications and psychosocial (individual) aspects of patient care?

8.6.4 From the patient scores it would seem that Session I scores were higher than Session II scores. Three of the individual patients received 'best care', none received less than average care. Although 7 of the items were never rated and 3 of them received scores below average, and although some patients received below average ratings in some of the subsections, these were evened out in the calculation of the patient scores. Nearly half the patients (45%) received above average scores, 3 of them 'best care', and the remaining 55% received average care.

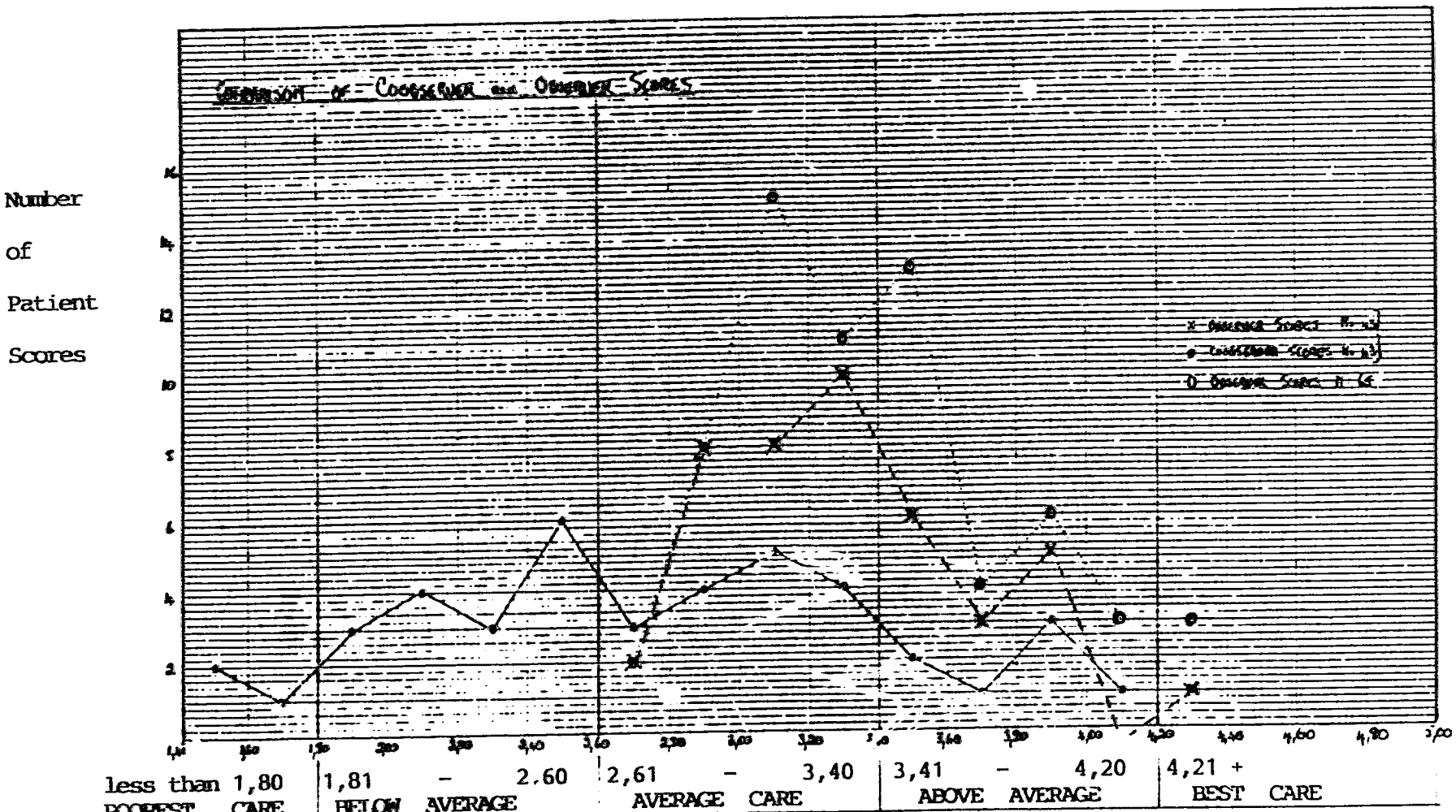

FIGURE 8.1: Comparison of Observer's and Co-observers' Scores

The ward scores suggest that, while there were no significant differences between the medical group and the surgical group of wards, there were differences between individual wards. Medical ward MIII gave the highest quality of care, particularly in Session I, and medical ward MII gave the lowest, particularly in Session II. However, while the care in SI, SII and MIII was above average, none was below average.

Thus it appears from these scores that the standard of patient care in the selected wards was satisfactory. However, while assumptions can be made about the quality of care, without confirmation of the accuracy of the measurements they must remain only assumptions.

In summary, the findings described in Part I of Chapter VII show that the rating of the interactions on the Qualpacs scale did indeed yield scores, and these scores were used to describe the quality of patient care. The quality intervals devised by the research student to label the scores can in no way be regarded as quality measurements. They were used purely as a means of interpreting the scores in order to simplify the discussion. The accuracy of the measurements remains uncertain.

8.7 Verifying the Findings

Part II of Chapter VII describes the attempts made to support the findings in Part 1. From 7.9 it can be seen that, both in the the computer analysis and in the candidate's observations, there was no agreement between the initial scores and the 'repeat' scores (Table 7.9). In fact, it was apparent that the circumstances surrounding a patient could change completely between one day and the next (vide Chapter V, 5.1.4). In addition, the tendency to score the repeat observation lower than the original suggests the possibility of observer bias. From the findings in this section it appears that the observations in this study were not repeatable.

In 7.10 the patient scores of the observer and the co-observers were compared. (Table 7.10) The findings suggest that the main observer's scores were more consistent, but that she tended to evaluate the care more leniently than the co-observers. This is illustrated in Figure 8.1 and the findings in this part of the study remained inconclusive.

8.8 The Quality of Care and the Caregivers

In Chapter VII, 7.8, the ratings ascribed to the interactions were linked to the caregivers involved, producing caregiver scores. It was stressed that the ratings were ascribed to the interactions and not to the personnel involved.

It was found that student nurses were scored relatively high over a large number of ratings, and it may be thought that they were rated less strictly than trained personnel. However, in discussing the standard of measurement, Wandelt and Ager emphasize that it is important to hold the standard of measurement constant. A flexible standard of measurement would fail to reveal differences in the standard of care.(4) The observer did attempt to keep her 'yardstick' constant, regardless of the category of the caregiver, and this is borne out by the consistency of her scoring.

Thus, the fact that interactions were rated and not the caregivers, together with the constancy of the yardstick, suggest that student nurses gave an 'above average' quality of care. It would be worthwhile to investigate this further, and if this finding is confirmed, to find out what the quality is that is lost when they become sisters.

8.9 Conclusions

Apart from the foregoing findings, the data were examined in other areas:

8.9.1 The computer analysts considered the method of calculating the patient scores and concluded that 'Avcor', the corrected average, which gives equal weighting to all the items, tended to produce lower scores that 'Average'. (vide Appendix F, for their report) As 'Avcor' corresponds with the Qualpacs method of calculating the scores, this was the method used throughout.

8.9.2 The research student, with the help of her supervisors, separated out several of the items as being more important to the physical well-being of the patient in the acute hospital setting. These were included in the computer analysts' account (Appendix F) but no significant findings were reported.

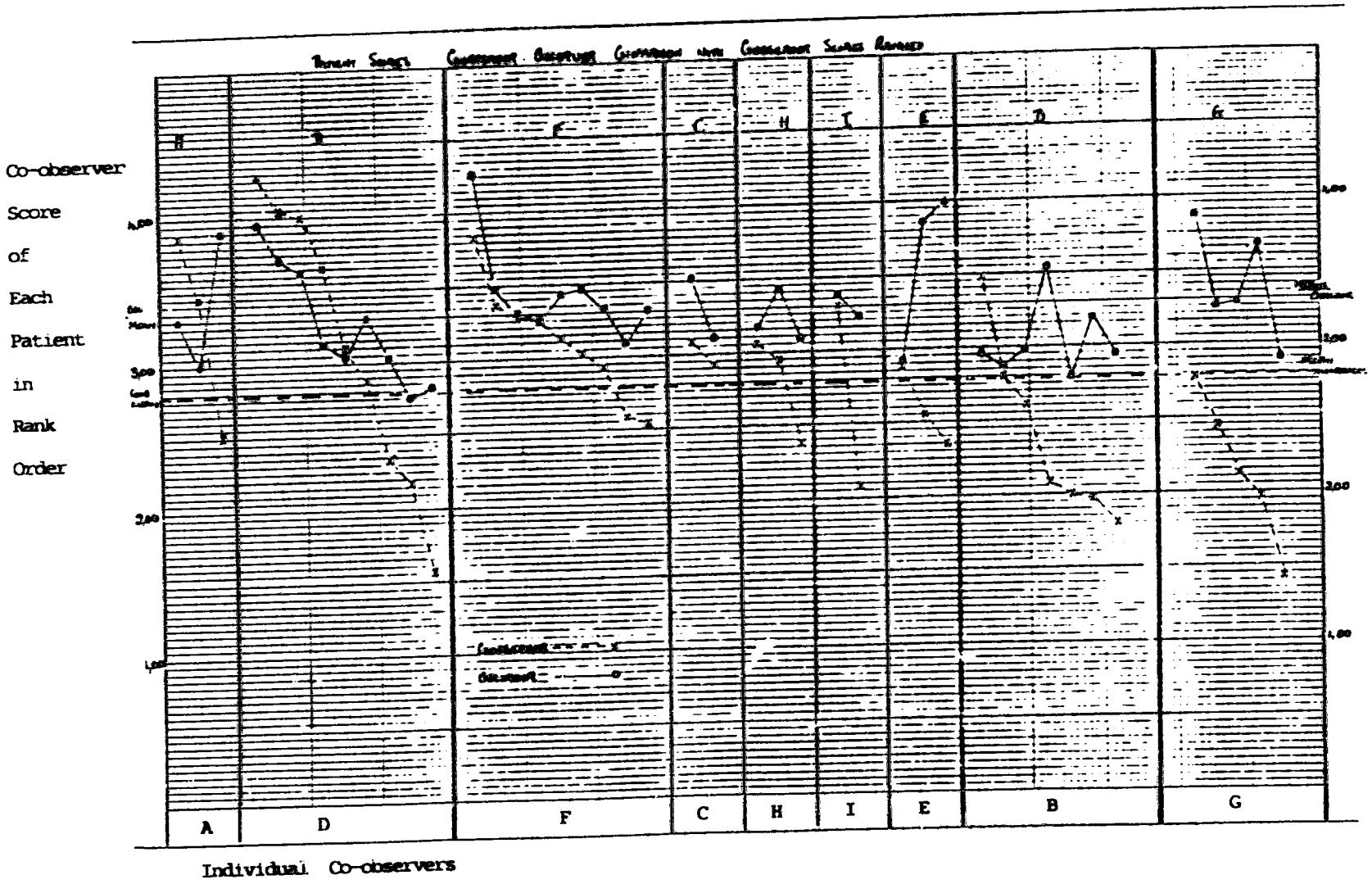

FIGURE 8.2: Comparison with Individual Co-observer's Scores

8.9.3 The research student continued the analysis of the observer/co-observer patient scores, separating out the scores of individual co-observers and comparing them with the corresponding observer scores. The co-observer scores were ranked from highest to lowest.

The graph (Figure 8.2) shows clearly the tendency of the observer to evaluate the care higher than the co-observers. It also shows that, although the correlation between the 2 sets of scores is poor, there are observable matching trends in the scores between the observer and certain of the co-observers. Unfortunately, there were too few scores for these observations to be conclusively demonstrated, but they indicate that the claim of Wandelt and Ager that there is a high inter-rater agreement in measurements of the quality of nursing care in varied situations(5) is not without foundation. With hindsight, this is an aspect of this project which the research student should have dealt with more thoroughly. It would also be a very worthwhile area for further research.

Overall, the data collected in this study yielded a great deal of information about the patient care in the selected wards. In this project it was dealt with at a superficial level, but it is clear that there are many promising areas for further investigation.

Chapter VIII

References:

1. Wandelt & Ager p.34
2. Ibid. p.42
3. Levy, V. Hospitals Should Do the Sick no Harm. Letter published in the Nursing Times, January 2, 1985.
4. Wandelt & Ager. Op.cit. p.45
5. Ibid. p.45

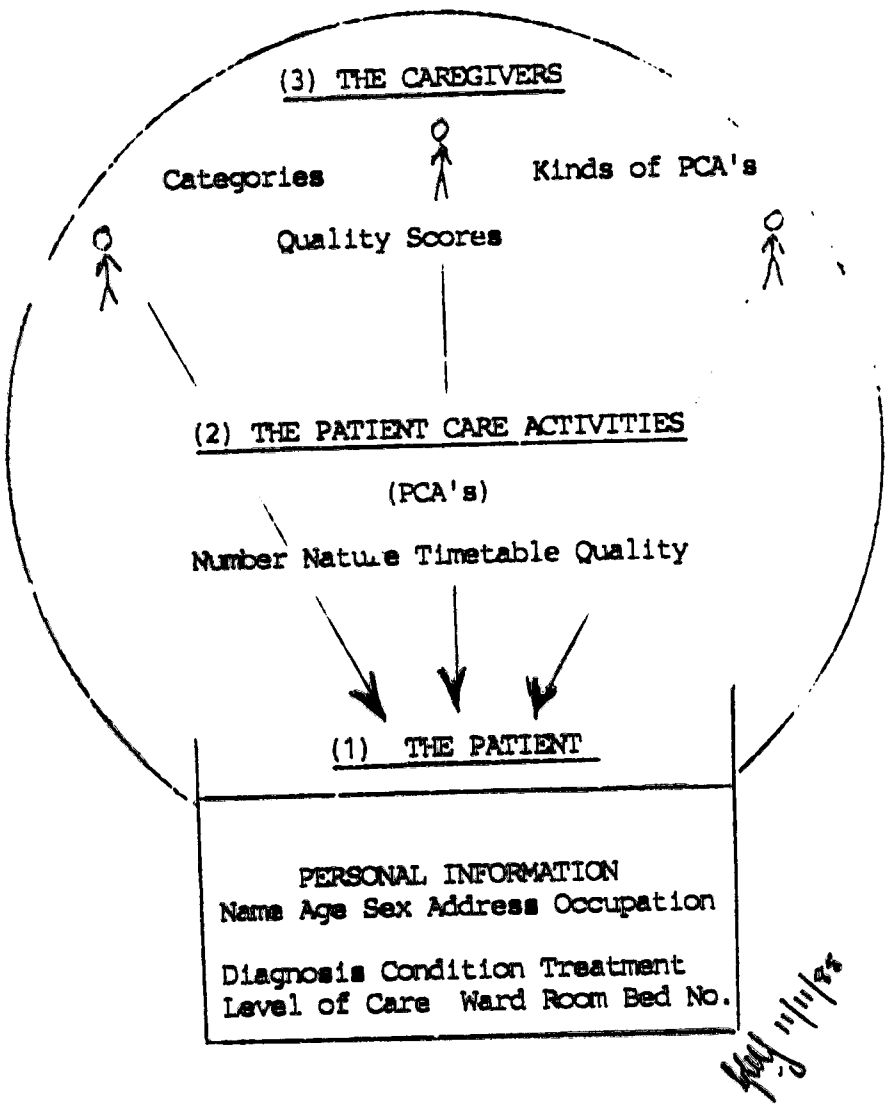

FIGURE 9.1: The Patient Care Activities Model (PCA's)

IX CONCLUSIONS

9.0 Introduction

A primary purpose of this study was to take an objective look at current nursing practice in the hospital wards in order to identify its present state and to make recommendations for its future development (vide Chapter I, 1.1). The candidate focused on the individual patient and recorded the patient care activities (PCA's) involving that patient. This produced data which fell into 4 categories as shown in Figure 9.1. The findings are described in Chapters V, VI and VII and discussed in Chapter VIII.

The observation and recording of the PCA's yielded data which were used to provide an overview of the patient care experienced by the observed patients. This included information about the number of PCA's, the nature of the PCA's, the caregivers, the time factor and a quality evaluation. Limitations in the scope of the research prevented a more detailed study of any aspect of the patient care, but it was clear that there were many areas which could have been investigated in depth to produce valuable information about nursing practice and patient care.

9.1 Appraisal of the Instrument

A secondary objective of this study was to evaluate the measuring instrument. It is claimed by its authors to have potential uses which are quoted in Chapter I (vide 1.2.2). The candidate proposed to critically assess the practicability of using the scale for these and other purposes:

9.1.1 To Determine the Level of Quality of Nursing Care

The authors list several uses which can be included under this heading - to provide information for administrative purposes, to account for the execution of a service responsibility and for supervisors to account to administration for the level of quality of the nursing programme.(1)

From the findings in this study the scores derived from the measuring instrument are not sufficiently reliable to be used to determine the level of the quality of nursing care. Apart from the well-known problems of observer bias, the derivation of mean

scores from an ordinal scale is open to question, and the use of an undefined standard of measurement. All these shortcomings would lead any reasonable person to doubt the authenticity of the scores.

9.1.2 To Identify Strengths and Weaknesses

The authors suggest that the scale may be used to identify strengths and weaknesses in patient care or to determine the effectiveness of changes in programme, etc.(2)

In the opinion of the candidate the Qualpacs scoring system could be used for this purpose, but only by a suitably qualified team of trained observers with an agreed standard of measurement. The effectiveness of their observations would depend upon their knowledge and their ability to interpret scores in the light of their experience. They would be able to identify the strengths and weaknesses and determine the effectiveness of change, using the scoring system to support their opinions.

9.1.3 For Educational Purposes

The authors also suggest that the scale can be used for educational purposes, to alert personnel to often-neglected elements of care and as a teaching aid to improve alertness in observations.(3)

As an educational instrument the candidate believes that Qualpacs scale has a great deal of potential. In giving staff or students guidelines and the opportunity to observe and evaluate patient care in their wards it would help to develop skills in many areas. It would develop their observational skills, increase their awareness and understanding of patient care, particularly from the patient's point of view. It has the distinct advantage of being able to be used without interrupting the routine of a busy ward, and of producing ample material in only 2 hours of observation. Under the guidance of a tutor and with the goodwill of the ward sister, both trained staff and student nurses would derive benefit from using this method of examining nursing practice and using their findings as a basis for further discussion and the introduction of appropriate educational programmes.

9.1.4 Convenience

Not much has been published about the use of Qualpacs in this country. The candidate found it a very convenient instrument to use, as mentioned in 9.1.3 above, and because it is presented as a manual clearly intended for this purpose. However, there were shortcomings:

i) The scale in the appendix of the manual did not clearly separate out the subdivisions of the items. For this project the research student set out the items of each subsection on a separate sheet. This made it easier for the observers to manage in the practical situation.

ii) Sixty-eight items were not easy to sift through when rating interactions. For this study a checklist was provided which was helpful to the observers, particularly in the earlier observations

iii) The cues were clear, but gave only clues to best care. The research student drew up a modified cue sheet which gave examples for both 'best care' and 'poorest care'.

iv) There was no interpretation of the scores. In this study the student devised descriptive labels for the various levels of scores (vide Chapter VII,7.3). This was not intended as an interval measurement, but was purely a descriptive device, and it simplified the discussion of the findings in this section.

9.1.5 The Methodology

i) Qualpacs has been designed to evaluate care while it is in progress. In Donabedian's terms it is a 'process' model (vide Chapter II,2.3(69)) and in research terms it uses the observational method.

The observational method is one of the oldest forms of gathering data and has many advantages and disadvantages. The effect of observers on the situations they observe has long been a matter of debate. Kerlinger says: "Individuals and groups seem to adapt rather quickly to an observer's presence and to act as they would usually act "(4) In this study it was difficult to know how the observers affected the patients and staff. They worked in the wards as clinical teaching sisters and

most of the ward staff knew them and appeared to accept them. The doctors sometimes made remarks about their presence in the ward and seemed to be more aware of them than the other people, who usually ignored them. Further research would be necessary to measure the impact of the observers on the staff and patients in a study such as this one.

ii) Qualpacs uses a numerical rating scale, which is "perhaps the easiest to ....use. In addition, because the numbers may represent equal intervals in the mind of the observer, they may approach interval measurement." (5)

Also, it is a graphic rating scale. These "are probably the best because they fix a continuum in the mind of the observer. They suggest equal intervals. They are clear and easy to understand and use." Guilford says, "The virtue of graphic rating scales are many; their faults are few." However, all rating scales are prone to constant or biased error.(6)

In this study the recording and rating of the observations was not difficult. Some of the co-observers remarked that they found it both interesting and enlightening to observe the patient care. Some, however, were very critical of what they saw and it seemed as though their opinions may have influenced their ratings toward 'error of severity." On the other hand observer/co-observer comparisons suggest that the main observer may have exhibited 'error of leniency'. Thus both these errors of bias may have been present in this study to invalidate the findings.

iii) The authors of Qualpacs refuse to define the standard of measurement because, they say:

- persons knowledgeable in the field identify similar observable examples of " care provided by a first-level staff nurse";
- there is general agreement about nurse actions that make up this standard of care;
- there is high inter-rater agreement between Qualpacs and the Slator scale using the same standard of measurement;

- delineation of the many elements and patterns would be so involved and lengthy it would become unusable.(7)

They cite many example to support their stand, and although they recommend that there should be 2 observer-raters who should study and practice together their emphasis is on their mutually supportive function rather than on their training and correlation of scores.(8) The authors stand firm in their assertion that "nurses competent to judge the quality of nursing care displayed in nurse-patient interactions hold common conceptions of care expected of a first-level staff nurse."(9) "Findings from various testings of the scale have demonstrated that there is high inter-rater agreement in measurements of the quality of nursing care."(10) For these and other reasons they do not define the standard of measurement.

However, Polit and Hungler say,"If persons are to become good 'instruments' for measuring observational data, then they must be trained to observe in such a way that accuracy is maximized and biases are minimized. The training of observers is a crucial phase in the preparation for a study and should not be neglected."(11)

In this project, the observer received no observational training. She carried out the observations and in order to test the reliability of her findings suitably qualified nurses concurrently rated at least half the observations. As nurses engaged in clinical teaching and accustomed to assessing the performance of student nurses, while not being trained to use the instrument, these nurses were judged to be competent for the task of evaluating the quality of care. Their scores were intended to form a basis for comparison, either to substantiate or to invalidate the observer's findings.

However, a comparison of the observer's and the co-observers' scores, while showing that the observer's scores were more consistent and more lenient, was inconclusive. Thus, in this study because there was no definite standard of measurement the scores lacked credibility.

iv) Calculation of the Qualpacs scores is straightforward, but it is based on the

assumption that the scale has equal intervals. Thus the derivation of a mean score from an ordinal scale may also have contributed to the lack of agreement between observer and co-observer scores.

In the opinion of the candidate, the instrument may be used for educational purposes and, with careful control, as an aid to identify strengths and weaknesses in patient care. However, the patient care activities (PCA's) recorded by the observer yielded considerably more quantifiable data than the scale. It may be of more value, in determining the level of the quality of nursing care, to rely more on the observation of PCA's and to use the scale descriptively, or even to rate the PCA's directly on a 5-point scale.

9.2 Conclusions

One of the aims of this study was to identify from the observations, the current state of nursing practice in the wards. (Vide Chapter I, 1.1) Information about the current state of nursing practice in the wards at the time of these observations, has been described and discussed in the earlier chapters, and may be summed up as follows:

9.2.1 The wards were never full. The reasons for this were not investigated, nor the effect on patient care, but it is probably linked to the crisis in the hospital services which has existed for some years (12)(13) and an indication of the effect of socio-economic factors on nursing practice at that time.

9.2.2 Patient classification as described by Abdellah and Levine affected several areas of patient care.(14) Patients in the ward were not in need of intensive care or of long term care in this setting. They were clustered according to diagnosis. Their condition influenced their position in the ward. Thus nursing care tended to be specialised and included modified progressive patient care principles.

9.2.3 Interactions with the patient were seen to be brief, rarely lasting as long as a minute, probably in keeping with the task centred approach in the wards at that time.

9.2.4 Quantification of the PCA's showed that monitoring/observing/investigating the condition of the patient were the most common and treatment activities the least. This is discussed in detail in Chapter VI, 6.1, while 6.4 describes which of the PCA's belonged to each group of caregivers, the 'division of labour.'

This section shows the major role played by the student nurses, ward sisters and ward maids in the patient care, and also how many other persons are involved in various aspects of patient care in the wards. With this splintering of patient care a feature of current nursing practice is the necessity to function cooperatively with other caregivers and to coordinate all their activities for the benefit of the patient. It also highlights the trend toward the specialized functioning of caregivers in the wards at this time, eg. stomatherapists, electrocardiograph technicians, librarians, etc.

9.2.5 Also in Chapter VI, 6.3 dealt with the time element of the PCA's. From this a picture of the ward timetable at that time emerged and the flow of PCA's through the course of the morning were described.

9.2.6 An attempt to measure the quality of care using the Quality Patient Care Scale revealed that the level of care was average or above average, never below. Of the nursing staff, the stomatherapist, the zone matrons and the student nurses received above average scores. However, these scores were unconfirmed and these findings were inconclusive.

Thus, it can be seen that the observations produced a quantity of information about nursing practice in the wards, limited only by the restricted scope of the study.

9.3 Recommendations

In Chapter I, 1.1 it was stated that there was no established system in the wards for measuring the care being received by patients. The intention of this project was to take an objective look at current nursing practice in order to identify its present state and to make recommendations for its future development.

Based on the findings in this study, the research student believes that an evaluation system could be introduced into the hospital as a series of observational studies, using the Quality Patient Care Scale manual as a guide and tool because it contains a great deal of useful material. The rating scale may be used, but only as a support to the main study.

The student has drawn up a model, Figure 9.1, to illustrate the form she would suggest for the observational studies. They focus on the individual patient, and the patient care activities (PCA's) are observed and recorded. In the experience of the research student a great deal of useful material can be derived from the observation of PCA's.

It would be important to have a small trained team of observers, 2 - 4 would be enough, to decide on their methods and standards and to make decisions about the significance of their findings. The team would have to come together to plan and coordinate their work. They should approach the wards with consideration and tact and may possibly carry out observations alone in order to avoid becoming a threat to the ward staff. Findings should be dealt with in a non-threatening way if the system is to function smoothly.

The method advocated in the Qualpacs manual for carrying out the observations has many advantages. It can be used on a time sampling basis, with two-hourly observation periods producing much useful material. It can be used without interrupting ward routines. Because it focuses on individual patients, it can be used in almost any setting, ranging from the sophisticated urban hospital to a small cottage hospital, to produce information about patient care relevant to that setting.

The introduction of such an evaluation system into the hospitals could be of enormous value to the health services, and the potential uses of such a system are manifold, for example:

- To form an opinion about patient care and to act accordingly.
- To be used as a method of performance appraisal in any unit, both for ward staff and for student nurses.
- To examine nursing practice and make recommendations for improvement.
- To examine ward timetables and make changes for the benefit of the patients or staff.
- To create an awareness in staff of all the dimensions of patient care.

Such a hospital evaluation system could be used by nursing management to identify strengths and weaknesses in patient care, and as a means of motivating hospital staff towards the improvement of patient care. As an educational aid, it can be used by clinical teaching staff to help student nurses to improve their observational skills and to gain a deeper understanding of nursing practice. The Qualpacs rating scale can be used to provide a quality score, or it may be possible to rate the PCA's directly, using the same 5-point ratings as Qualpacs and the standard of measurement advocated by the authors of the Quality Patient Care Scale. Despite its shortcomings, Qualpacs has many good qualities. It can be used effectively provided its deficiencies are kept in mind.

From her experience in carrying out this research project, the research student has formed the opinion that there is great potential for the improvement of nursing practice in the introduction of a patient care activities (PCA's) system of evaluation into the hospitals.

Chapter IX

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APPENDIX A: The Quality Patient Care Scale Items

I PSYCHOSOCIAL:INDIVIDUAL - Actions directed toward meeting psychosocial needs of individual patients.

1. Patient receives nurse's full attention.
2. Patient is given an opportunity to explain his feelings.
3. Patient is approached in a kind, gentle, and friendly manner.
4. Patient's inappropriate behaviour is responded to in a therapeutic manner.
5. Appropriate action is taken in response to anticipated or manifest patient anxiety or distress.
6. Patient receives explanation and verbal reassurance when needed.
7. Patient receives attention from nurse with neither becoming involved in a nontherapeutic way.
8. Patient is given consideration as a member of a family and society.
9. Patient receives attention for his spiritual needs.
10. The rejecting or demanding patient continues to receive acceptance.
11. Patient receives care that communicates worth and dignity of man.
12. The healthy aspects of the patient's personality are utilized.
13. An atmosphere of trust, acceptance, and respect is created rather than one of power, prestige, and authority.
14. Appropriate topics for conversation are chosen.
15. The unconscious or unoriented patient is cared for with the same respectful manner as the conscious patient.

II PSYCHOSOCIAL:GROUP - Actions directed toward meeting psychosocial needs of patients as members of a group.

16. Patient as a member of a group receives warmth, interest, and attention from the staff.
17. Patient receives the help necessary to accept limits on his behaviour that are essential to group welfare.
18. Patient receives encouragement to participate in or to plan for the group's daily activities.
19. The member of the group is provided with the opportunity to assume responsibility according to his capability.
20. Staff proposals for patient activities appropriately reflect interests and needs of the group members.
21. Patient is helped to vent his emotions in a socially acceptable way within the group.
22. Praise and recognition are given for achievement according to individual needs and with respect for others in the group.
23. The rights and integrity of the group member are protected within the group structure.

III PHYSICAL - Actions directed toward meeting physical needs of patients.

24. Nursing procedures are adapted to meet needs of individual patient for treatment.
25. Patient's daily hygiene needs for cleanliness and acceptable appearance are met.
26. Nursing procedures are utilized as media for communication and interaction with patient.
27. Physical symptoms and physical changes are identified and appropriate action taken.
28. Physical distress evidenced by the patient is responded to quickly and appropriately.
29. Patient is encouraged to observe appropriate rest and exercise.
30. Patient is encouraged to take adequate diet.
31. Action is taken to meet the patient's needs for adequate hydration and elimination.
32. Behavioural and physiologic changes due to medications are observed and appropriate action taken.
33. Representations of patient's behaviour are adjusted and acted upon according to the effect the medication has on the patient.
34. Medical asepsis is carried out in relation to patient's personal hygiene and immediate environment.
35. Medical and surgical asepsis is carried out during treatments and special procedures.
36. Environment is maintained that gives the patient a feeling of being safe and secure.
37. Safety measures are carried out to prevent patient from harming himself or others.
38. Established techniques for safe administration of medications and parenteral fluids are carried out.

IV GENERAL - Actions that may be directed toward meeting either psychosocial or physical needs of the patient or both at the same time.

39. Patient receives instruction as necessary.
40. Patient and family are involved in planning for care and treatment.
41. Patient's sensitivities and right to privacy are protected.
42. Patient is helped to accept dependence/independence as appropriate to his condition.
43. Resources within the milieu are utilized to provide the patient with opportunities for problem solving.
44. Patient is given freedom of choice in activities of daily living wherever possible and within patient's ability to make the choice.
45. Patient is encouraged to take part in activities of daily living that will stimulate his potential for positive psychological growth.
46. Activities are adapted to physical and mental capabilities of patient.
47. Nursing care is adapted to patient's level and pace of development.
48. Diversional and/or treatment activities are made available to the patient according to his capabilities and needs.
49. Patient with slow or unskilled performance is accepted and encouraged.
50. Nursing care goals are established and activities performed which recognize and support the therapist's plan of care.
51. Interaction with the patient is within framework of the therapeutic plan.
52. Close observation of the patient is carried out with minimal disturbance.
53. Response to the patient is appropriate in emergency situations.

V COMMUNICATION - Communication on behalf of the patient.

54. Ideas, facts, feelings, and concepts about the patient are communicated clearly in speech to medical and paramedical personnel.
55. Family is provided with the opportunity for reciprocal communication with the nursing staff.
56. Ideas, facts, and concepts about the patient are clearly communicated in charting.
57. Well-developed nursing care plans are established and incorporated into nursing assignments.
58. Pertinent incidents re the patient's behaviour during interaction with staff are accurately reported.
59. Staff participate in conferences concerning patient care.
60. Effective communication and good relationships with other disciplines within the hospital are established for the patient's benefit.
61. Patient's needs are met through the use of referrals, both to departments in the hospital and to other community agencies.

VI PROFESSIONAL PERFORMANCE - Care given to patient reflects initiative and responsibility indicative of professional expectations.

62. Decisions that are made by staff reflect knowledge of facts and good judgment.
63. Evidence (spoken, behavioural, recorded) is given by staff of insight into deeper problems and needs of the patient.
64. Changes in care and care plans reflect continuous evaluation of results of nursing care.
65. Staff are reliable: follow through with responsibilities for the patient's care.
66. Assigned staff keep informed of the patient's condition and whereabouts.
67. Care given the patient reflects flexibility in rules and regulations as indicated by individual patient needs.
68. Organization and management of nursing activities reflect due consideration for patient needs.

APPENDIX B: Preparation for the Observations

B. 1 The Cue Sheet

QUALITY PATIENT CARE SCALE

PSYCHOSOCIAL : INDIVIDUAL

ACTIONS DIRECTED TOWARD MEETING PSYCHOSOCIAL NEEDS OF INDIVIDUAL PATIENTS

1. Patient Receives Nurse's Full Attention (D)
   - Patient is appropriately responded to, verbally and nonverbally, without being asked to repeat phrases.
   - Staff assumes positions that will aid in observation and communication with patient.
   - Conversation of staff is restricted to patient receiving care.
   - Questions are posed which encourage patient to express feelings.
   - Evidence is given of anticipation of needs of patient.

2. Patient is Given an Opportunity to Explain His Feelings (D)
   - Facial expression of staff indicates interest in and understanding of patient.
   - Patient is given time to talk.
   - Conversation is encouraged by brief comments or leading questions to let patient know they are listening and interested.
   - Conversation is terminated in such a manner that patient understands reason for termination, leaving patient with an apparent feeling of satisfaction about discussion (judging from his expression)

3. Patient is Approached in a Kind, Gentle and Friendly Manner (D)
   - Staff speak clearly in a soft, pleasant tone of voice.
   - Patient is called by name, and clearly given name of nurse.
   - Crying patients are shown patience and understanding (verbally and nonverbally)
   - Patients are approached with a smile and encouraging word.
   - Patient is given opportunity to verbalize needs.

4. Patient's Inappropriate Behaviour is Responded to in a Therapeutic Manner (D)
   - Withdrawn patient is helped to consider various means for involvement or interactions with others.
   - Attention of patient who is teasing or interfering with activities of others is redirected.
   - Patient who refuses examination or treatment is helped to think through various alternatives.
   - Expressions of hostility are accepted; changes that can be made are; explanations why some things cannot be changed are given; indications are given to the patient that the nurse is interested in knowing the patient's feelings.
   - Staff communicates, in an acceptable manner, dislike of abusive or provoking language or behaviour.

5. Appropriate Action is Taken in Response to Anxiety or Distress (D/I)
   - Leading questions are asked to determine what the patient knows about therapy and to allow him to express fears.
   - Time is spent with the patient or arrangements made to have someone else stay with the anxious patient.
   - Physical indicators of anxiety are noted.
   - Patient's repeated reference to a topic is noted and he is encouraged to discuss it.

2

6. Patient Receives Explanation and Verbal Reassurance when Needed (D/I)
   - Treatment or nursing-care actions are explained as appropriate.
   - Attempts are made to describe kind of pain or discomfort patient may expect, including estimated duration and what will be done, and what patient can do to alleviate pain or distress.
   - Patient is helped to explore and understand why he feels or behaves as he does towards others, towards himself or towards his illness.
   - Comments are made to reassure him of signs towards wellness.
   - Patient is told when staff are leaving and when they will return.

7. Patient Receives Attention with Neither Becoming Involved in a Nontherapeutic Way. (D)
   - Nurse-patient relationship is focused on patient's interests.
   - Appropriate forms of address are used by both rather than inappropriate endearing terms.
   - Monopoly of time of either patient or nurse is avoided.
   - Patient considering alternatives is listened to and encouraged, but allowed to make own decision; staff is neither authoritarian nor patronizing.

8. Patient is Given Consideration as a Member of a Family (D/I)
   - Care and treatm[illegible] at times that will least interfere with visiting family [illegible]riends.
   - Family is enco[illegible]ed to participate in care of patient.
   - Patient is assisted to maintain communication with friends and colleagues - comfortable setting for visitors, help with telephoning place and materials for letter writing, prompt mail delivery.
   - Rules are adjusted to meet special needs of patient or family

9. Patient Receives Attention for His Spiritual Needs (D/I)
   - Patients religious beliefs and practices are respected.
   - Religious articles are handled with respect.
   - Pastor is promptly called when patient wishes to see him.
   - Assistance is offered and patient is encouraged to attend the services of his faith available to him, within his limitations.

10. Rejecting or Demanding Patient Continues to Receive Acceptance (D/I)
   - Patient who refuses to talk is visited frequently by nurse who displays interest and gives assurance of 'Being There'.
   - Willingness to understand patient' point of view is conveyed in relation to refused activity or treatment.
   - Patient who turns away or shouts "Go away" is remained with, spoken to quietly and reassuringly, and helped with resolution of need to reject attention offered.
   - Attempts are made to help patient understand reasons for nurse's actions or treatment.
   - Bell is answered promptly and without hostility despite frequency of demands.

11. Patient Receives Care that Communicates Worth and Dignity (D)
   - Patient is cared for with kindness and helpfulness.
   - Is encouraged to make choices about daily care and allowed time to make decisions and responses.
   - Requests and needs of hopelessly ill or dying patient are met with the same interest as other patients.
   - Means and opportunities for communication are made possible even for patient with communication problems.
   - Physical movement of patient is managed so that minimal strain is caused.
   - Patient with permanent body defect is cared for in the same way as other patients.

12. Healthy Aspects of the Patient's Personality are Utilized (D/I)
- Patient receives guidance in resolving a problem to decrease frustration of indecision.
- Opportunities are provided for patient to receive satisfaction through helping others.
- Patient's abilities are pointed out, while focus on his disabilities is avoided.
- Patient is encouraged and helped to enlarge his knowledge in areas of interest to him.
- Patient's sense of humour is r[illegible]nded to in an appropriate way.
- Conversation is directed towa[illegible]imism.

13. An Atmosphere of Trust, Acceptan[illegible], and Respect is Created Rather than Power, Prestige and Authori[illegible]y (D)
- Patient is trusted in as many ways as possible.
- He is allowed to perform care activities within his capacity.
- Patient is allowed to [illegible]press his opinions, and respect for them reflected in his nurs[illegible]are.
- Withholding treatment [illegible]are is not used to make him cooperate.
- Patient's conversation [illegible] activities are not needlessly disrupted
- Inappropriate comments or actions by the patient are quietly and tactfully dealt with.

14. Appropriate Topics for Conversation are Chosen (D)
- Topics of known interest to the patient are introduced
- Patient is encouraged to talk about personal interests and concerns.
- Conversation is guided to neutral or positive subject if argument seems to be developing.
- Discussions realistic to plans for and feelings about the future are encouraged, whether expectation be recovery, limitations or death.

15. The Unconscious or Disorientated Patient is cared for with the Same Respectful Manner as the Conscious Patient (D)
- Help is sought in moving the patient when necessary
- Moving is performed in a safe, gentle manner.
- Conversation is focussed on matters about the patient and his care.
- Patient is referred to by name
- Patient is spoken to in a well modulated voice.
- condition or prognosis is not discussed in his presence.
- He is informed about treatment, instructions offered and interest shown in helping him to understand
- If to undergo anaesthetic, anxiety about being unconscious is recognized and discussed.
- Will be reassured about confidentiality of his behaviour and conversation while he is unconscious.

4

PSYCHOSOCIAL : GROUP

CARE RECEIVED REFLECTS RECOGNITION OF THE PATIENT'S PSYCHOSOCIAL NEEDS AS A MEMBER OF A GROUP.

16. PATIENT AS MEMBER OF A GROUP RECEIVES WARMTH, INTEREST AND ATTENTION FROM THE STAFF (D)
- CONVERSATION OF GROUP IS LISTENED TO AND COMMENTS MADE THAT PROMOTE PATIENTS' CONTINUED INTEREST.
- EACH MEMBER OF THE GROUP IS RECOGNIZED AND ACKNOWLEDGED BY THE STAFF.
- PATIENTS RECEIVE APPROPRIATE INFORMATION ABOUT CHANGES IN GROUP STRUCTURE.
- NEW PATIENTS ARE INTRODUCED TO THE GROUP BY STAFF.
- WHEN MORE THAN ONE STAFF MEMBER IS WORKING WITH A PATIENT, THE PATIENT IS GIVEN RECOGNITION AS A PART OF THAT GROUP.

17. PATIENT RECEIVES THE HELP NECESSARY TO ACCEPT LIMITS ON HIS BEHAVIOUR THAT ARE ESSENTIAL TO GROUP WELFARE (D)
- REASONS FOR OBEYING RULES AND REGUALTIONS ARE IDENTIFIED.
- GROUP MEMBER RECEIVES NECESSARY EXPLANATION AND GUIDANCE REGARDING GROUP AIMS.
- PATIENTS ARE HELPED TO PLAN ACTIVITIES THAT INCLUDE THOSE WITH PHYSICAL LIMITATIONS WITHOUT PLACING UNDUE ATTENTION ON THE LATTER
- HOSTILE EXPRESSIONS ABOUT LIMITATIONS ARE ACCEPTED, BUT STAFF ARE FIRM AND CONSISTENT WHEN NECESSARY
- REASONS FOR EXCLUSION OF AN INDIVIGUAL FROM A GROUP IS EXPLAINED WITHOUT EMBARRASSMENT TO EITHER THE INDIVIDUAL OR GROUP.

18. PATIENT RECEIVES ENCOURAGEMENT TO PARTICIPATE IN OR TO PLAN FOR THE GROUP'S DAILY ACTIVITIES (D)
PATIENT IS HELPED TO PLAN ACTIVITIES AND TIME SCHEDULES
- PATIENT IS ENCOURAGED TO MAKE PLANS HELPING OTHERS IN THE GROUP.
- PATIENT'S SUGGESTIONS AND ASSISTANCE ARE SOUGHT IN MAKING CHANGES IN PHYSICAL SETTING E.G. FURNITURE ARRANGEMENTS, ETC.
- PATIENT IS HELPED TO MAKE ARRANGEMENTS FOR SOME SOCIAL ACTIVITIES

19. THE MEMBER OF THE GROUP IS PROVIDED WITH THE OPPORTUNITY TO ASSUME RESPONSIBILITY ACCORDING TO HIS CAPABILITY (D)
- AGGRESSIVE PATIENT IS ENCOURAGED TO SERVE AS A MEMBER OF COMMITTEE GIVING SUPPORT TO CHAIRMAN, BUT NOT TO TAKE OVER CHAIRMAN'S DUTIES
- PATIENT IS GIVEN SCHEDULE OF HIS APPOINTMENTS AND GIVEN RESPONSIBILITY FOR BEING AT THE RIGHT PLACE AT THE RIGHT TIME.
- PATIENT IS ALLOWED TO INITIATE PREPARATIONS FOR MEALS, VISITS OR BEDTIME WITHOUT BEING REMINDED EACH TIME.
- IS ALLOWED TO HELP FEED OTHER PATIENTS.

20. STAFF PROPOSALS FOR PATIENT ACTIVITIES APPROPRIATELY REFLECT INTERESTS AND NEEDS OF THE GROUP MEMBERS (D)
- INVOLVEMENT OF EACH PATIENT IN GROUP ACTIVITIES IS NOTED AND SUBTLE MODIFICATIONS SUGGESTED TO ENSURE APPROPRIATE INVOLVEMENT OF ALL
- WAYS OF DIVIDING GROUP INTO SMALL COMMON-INTEREST GROUPS SUGGESTED
- NEW DIABETIC IS GUIDED IN DISCUSSING WITH OTHERS THE DISEASE AND ITS MEANING TO THEM.

5

21. PATIENT IS HELPED TO VENT HIS EMOTIONS IN A SOCIALLY ACCEPTABLE WAY WITHIN THE GROUP (D)
- GROUP IS HELPED TO ESTABLISH GUIDELINES AND DISCUSSION OF EMOTION LADEN ISSUES IS ENCOURAGED.
- HOSTILITY IS RECOGNIZED AND ACTIVITIES OFFERED THAT DEMAND PHYSICAL ENERGY AND MOVEMENT.
- GROUPS CONFINED TO THE HOSPITAL FOR LONG PERIODS OF TIME ARE GUIDED IN DISCUSSING THEIR FEELINGS ABOUT RESTRICTIONS AND HELPED TO DEVISE ACTIVITIES APPROPRIATE TO THE LIMITATIONS IMPOSED.
- PATIENTS WHO HAVE SUFFERED A CHANGE IN BODY IMAGE ARE ALLOWED TO GRIEVE WITHOUT BEING FORCED TO PARTICIPATE IN ACTIVITIES BEFORE THEY ARE READY.

22. PRAISE AND RECOGNITION ARE GIVEN FOR ACHIEVEMENT ACCORDING TO INDIVIDUAL NEEDS AND WITH RESPECT FOR OTHERS IN THE GROUP (D)
- STAFF MOVE QUICKLY TO NEXT ACTIVITY WHEN "BRAGGART" HAS SCORED A POINT.
- PATIENT IS HELPED TO RECOGNIZE HIS ACCOMPLISHMENT IN RELATION TO HIS ABILITIES AND THOSE OF OTHERS.
- HE IS GUIDED TO RECOGNIZE ACHIEVEMENTS OF OTHERS.
- STAFF DISCUSS AND HELP PATIENT TO RECOGNIZE RELATIONSHIP OF SMALL ACCOMPLISHMENT TO POTENTIAL FOR NEXT (MORE DIFFICULT) STEP.

23. THE RIGHTS AND INTEGRITY OF THE GROUP MEMBER ARE PROTECTED WITHIN THE GROUP STRUCTURE (D)
- CONVERSATION ABOUT DEATH ARE REDIRECTED BY STAFF IF ONE OF THE MEMBERS IS DISPLAYING ANXIETY.
- THE GROUP MEMBERS ARE INFORMED OF THE PROBLEMS OF THE PATIENT WHOSE CONDITION INTERFERES WITH HIS PARTICIPATION.
- HESITANT PATIENTS ARE ENCOURAGED TO JOIN ACTIVITIES; LESS ADEPT PATIENTS ARE ASSISTED WITHOUT THE PERFORMANCE ACTUALLY BEING DONE FOR THEM.
- PROVISION IS MADE FOR MAINTAINING CONFIDENTIALITY WHEN PERSONAL MATTERS OF THE PATIENT ARE INVOLVED.

PHYSICAL

ACTIONS DIRECTED TOWARD MEETING PHYSICAL NEEDS OF PATIENTS

24. Nursing Procedures are Adapted to Meet Needs of Individual Patients for Treatment (D)
- Sufficient time is allowed after patient's smoking, eating or drinking when taking oral temperature.
- Equipment and materials are arranged beside bed in a convenient position for left-handed patient to manage his own treatment.
- General morning care of the depressed or handicapped patient is left to last so no one will feel pressure of time and movements can be made slowly.
- Colostomy irrigation is done at the time the patient would find most convenient at home.

25. Patient's Daily Hygiene Needs for Cleanliness and Acceptable Appearance are Met (D)
- Staff offer to comb hair of patient unable to do so for physical or psychological reasons.
- Disturbed patient is helped to shower, shave and select clean clothes.
- Bedside environment is made neat and orderly, soiled gowns changed when necessary.
- Assistance is offered with oral hygiene.
- Deodorizers are provided as indicated.

26. Nursing Procedures are Used as Media for Communication and Interaction with Patients (D)
- Withdrawn patient is encouraged to talk of self, interests or family while receiving direct nursing care.
- During each contact staff encourage and allow time for the patient unable to speak easily to convey some message and respond in an unhurried manner.
- Patient is encouraged to discuss his progress while nurse is busy with him or making his bed, etc.
- Patient is encouraged to assist, even in a small way, with particularly painful or uncomfortable treatment.

27. Physical Symptoms and Physical Changes are Identified and Appropriate Action Taken (D)
- Cyanosis is noted and staff checks for possible causes.
- Mottled tissues over bony prominence are noted, and measures taken to prevent pressure point breakdown.
- Undesirable weight loss is noted and investigated.

28. Physical Distress Shown by Patient is Responded to Quickly and Appropriately (D)
- Patient is moved up in bed and pillows adjusted to provide a comfortable position and good body alignment.
- Complaint of pain or burning at site of infusion prompts investigation for infiltration.
- Signs of pain are noted and action taken to alleviate it.
- Respiratory tract secretions are helped by deep breathing, coughing or suctioning.

Author Jackson G E N
Name of thesis An evaluation of the quality of nursing received by patients in selected hospital wards 1985

PUBLISHER:
University of the Witwatersrand, Johannesburg
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