

The role of communication in nursing care for elderly people: a review of the literature

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Communication in nursing care is an important topic assessing the specific needs of elderly patients and providing nursing care that is tailored to the individual patient's needs. In this review of the literature, we describe the role attributed to communication in theoretical nursing models and we report how research in communication in nursing elderly patients has taken place over the last ten years. It appears that since the eighties there has been an increase in observation studies into nurse-patient communication. There still is, however, a lack of observation instruments to do justice to the interactive nature of nurse-patient communication. Special attention should be paid to reliability and validity.

INTRODUCTION

Western countries are being confronted with a steady increase of the percentage of the elderly in their populations (OECD 1994). The increase in dependency and disability with age means that increasing numbers of elderly people require for care (OECD 1994, Scenariocommissie 1992). The elderly group is confronted with various problems, such as physical and psychological deterioration necessitating adjustments in life patterns; losses due to retirement; loneliness caused by children living away from home and by partners and friends dying (Wright 1988). At

this time of their lives people have fewer prospects. Nursing care for elderly people, who are faced with these problems requires communicative abilities, empathy and concern. Apart from that, the elderly population is a very heterogenous group. In addition to the characteristics of diverse cultures and backgrounds, there is variety with respect to age, limitations, and views on aging.

Some elderly people camouflage the effects of aging while others stereotype themselves and take on the characteristics they believe to be typical of the aging group (Giles & Coupland 1991). Some view aging negatively as a decline, while others associate it with development which is a functional part of the living system (King *et al.* 1986). These different views and backgrounds lead to different coping styles, standards and values, and therefore to different needs, which nursing professionals have to deal

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with. They have to support the elderly in coping with problems related to their stage of life and to recognize and assess their demands, so that they can offer nursing care that is tailored to the individual needs. Communication is an essential prerequisite in this process.

NURSE-PATIENT COMMUNICATION

Communication is a concept used in many ways. In this article communication is defined as 'the exchange of information for some purposes' (Cherry 1978). This broad definition encompasses enormous diversity with respect to participants, settings and type of exchanges. The scope of this article is the communicative behaviour in the nurse-elderly patient relationship. Within the concept of communication, a distinction can be made between verbal and nonverbal communication. Verbal communication is all behaviour conveying messages with language. Nonverbal communication refers to all behaviour which conveys messages without the use of verbal language. Within the latter kind of communication there is a distinction in vocal nonverbal communication (such as pitch, intonation, speech rate and fluency) and nonvocal nonverbal communication (facial expressions, eye contact, posture, gesture, physical appearance and touch) (LeMay & Redfern 1987). A major goal of effective communication is interpreting the messages and responding in an appropriate manner (Pagano & Ragan 1992).

As mentioned before, nurses have to communicate with a variety of people. Furthermore, nurses have different communication goals, such as building up a good personal relationship, assessing the nature of the perceived problem, negotiating and decision making about nursing goals, exchanging information, giving explanations, providing physical care, showing empathy etc. These different goals require different communicative behaviour. Communicative behaviour in health care has instrumental and affective aspects. This distinction is often made in the literature on doctor-patient communication (Bensing 1991). Instrumental or task-related behaviour refers to those aspects necessary in assessing and solving problems. This kind of behaviour is mainly verbal in nature. Affective or socio-emotional behaviour refers to those aspects that are needed to establish a good relationship with the patient, such as showing respect, giving comfort and trust.

This kind of behaviour is transferred both verbally and nonverbally (Strecher 1983). In nurse-patient communication, a comparable distinction can be made; although to some authors this distinction is artificial because, in nursing practice, caring has a central role (Kitson 1987, Benner 1984). But, even in caring there are instrumental and affective aspects. In their need for care, patients have two distinct goals (Engel 1988). Firstly, patients want information, clarification and physical care — all instrumental in nature — for health-related problems. In addition,

patients have emotional needs, such as reassurance, concern and understanding, which are affective in nature. In this connection, Bottorff and Morse (1994) categorize four different behaviours in four contexts of care:

1. 'Doing tasks', focused on tasks excluding the patient. The object of these tasks is to get the job done. There is rarely any communication with the patient or very brief task related communication.
2. 'Doing with', these tasks are focused equally on patient and the task. The object is to involve the patient and there is a two-way discussion about care, patient needs and instruction.
3. 'Doing for' refers to tasks focused on the patient, where the patient is given the opportunity to direct his/her own care. There is communication about care or social talk.
4. 'Doing more' refers to establishing a relation and is focused on the patient as a person. The nurse wants to understand patient experience of illness and treatment. The dialogue is intensive, with emotionally supportive statements by the nurse.

This categorization shows aspects of instrumental and affective behaviour. 'Doing tasks' and 'doing with' exclusively comprises elements of instrumental behaviour; while 'doing more' is restricted to aspects of affective behaviour. 'Doing for' contains a mixture of both.

Communication with elderly patients

In providing nursing care tailored to the individual needs of people, effective communication is an essential prerequisite (Grypdonck 1993, Armstrong-Esther *et al.* 1989). This is especially the case in communicating with elderly patients because this kind of communication has some specific characteristics. Firstly, there may be barriers to communication due to sensory deficits (Greene *et al.* 1994). Secondly, elderly patients and nurses may have different agendas. The patient who is deprived of social contact, wants to continue the interaction with social talk, while the nurse wants to hurry up because she has work to do. Thirdly, the generation gap makes effective communication between them difficult, for elderly people have different values and different expectations from the young (LeMay & Redfern 1987). The elderly are, for instance, less likely to challenge the authority of health care providers, become involved in decision making and discuss psychosocial issues (Greene *et al.* 1994). These factors may all influence communication dynamics in nursing the older patients, which demands particular communication skills.

THE STUDY

The recognition of the central role of communication in nursing practice has led to an increase in research into

interaction between nurses and patients (May 1990). The aim of this article is to give an overview of the research into nurse-patient communication. The point of departure is theories on nursing. Since nursing is growing as a profession many theoretical models have been developed. In this article, a selective review is made of these models and the role attributed to communication in them. A review of the research on nurse-patient communication follows with special attention to elderly patients. The object is to outline communication research in this field and to highlight the areas in which more research is needed.

More specifically, this review seeks to address the following questions:

1. What is the role attributed to communication in various theories of nursing?
2. How do nurses communicate with elderly patients, i.e. what kind of verbal and nonverbal strategies are used in communicating with the elderly?
3. What are the determinants of the quality or quantity of nurse-patient communication?

Method

In order to obtain the international literature, a search was made of three databases: Medline (1986–1995), Nursing and Allied Health Literature (1986–1995) and the Catalogue of the Netherlands Institute of Primary Health Care (up to and including 1995). The key words used in these searches were: nursing theories, patient-nurse relationship, patient-nurse communication and patient-nurse interaction. A combination of keywords was also used: nursing care-communication, communication-elderly, nursing theories-communication, nursing care-communication skills, nursing care-observation study. Because of overlap with medline, in nursing and allied health fewer keywords were used: communication skills, observation study and a combination of keywords: communication-elderly.

Furthermore, the bibliographies of the selected articles revealed some relevant literature. A total of 289 articles were sampled in this way. 46 articles described observation studies. The following inclusion criteria were used for the review

- the study was directed at the interaction of nurses and elderly patients
- the study used observation techniques
- the study was published in English or Dutch

In the survey of observation studies, all those which met these criteria were included, regardless of their quality (reliability and validity) and sample size. Studies assessing communicative behaviours using indirect methods such as questionnaires or interviews were excluded. Twenty

three articles describing 21 studies met the inclusion criteria.

RESULTS

The role of communication in nursing theories

As nursing grew into a profession in the twentieth century, theoretical models were developed. Theories were borrowed from other disciplines to develop these models and they were adapted to suit the nursing context. In this way a great diversity of theories and models originated, which can be categorized as interaction, need-oriented, system-oriented, simultaneity and developmental theories (Kiikkala & Munnukka 1994). Communication is a central aspect in the so called interaction theories. Examples of this kind of theories are from Peplau (1952), Orlando (1961) and King (1981).

Peplau's theory of interpersonal relations

Peplau can be considered as a pioneer. In the beginning of the fifties, she paid attention to the types of process in nursing and the characteristics of nurse-patient interaction. Before that time, the view of Florence Nightingale was predominant, in which attention was directed at optimizing patient condition and environment, so that nature could take its course (Evers 1991). Peplau (1952) constructed a theoretical model of nursing as a developing therapeutic relationship, in which she described several phases:

1. Orientation: a working relationship is established.
2. Identification: the nurse helps the patient to identify his needs.
3. Exploitation: the patient makes use of the interpersonal relationship with the nurse to derive full value from what is offered, while at the same time identifying and working towards new goals.
4. Resolution: old goals are reached and new goals are adopted. The patient becomes independent of the nurse.

These phases can be recognized during the nursing process, but are also reflected in each interaction between nurse and patient. During these phases the nurse fulfils several roles: stranger, resource person, teacher, leader, surrogate and counsellor. The nurse's communication will be more instrumental or more affective in nature, depending on the role it reflects.

There are also authors (Rhiel & Roy 1980), who describe Peplau's theory as developmental, arguing that Peplau considers human growth and development essential in nursing. Although Peplau's operational definitions are considered as empirically precise (Marriner 1986), little empirical research has been directed at the theoretical test-

ing of the concept of the nurse-client relationship (Forchuk & Brown 1989).

Orlando's interaction theory

Orlando's (1961) theory is more or less based on Peplau's work and, in her view, nursing means assisting patients in meeting their needs 'through a process of deliberative interaction in which the nurse recognizes the verbal and nonverbal behaviour indicative of unmet needs, validates those needs with the patient, and acts to meet the patient's needs'. To achieve these goals it is required that:

1. What the nurse says to the individual must match (be consistent with) any or all of the items contained in the immediate reaction.
2. What the nurse does nonverbally must be verbally expressed and the expression must match one or all of the items contained in the immediate reaction.
3. The nurse must clearly communicate to the individual that the item being expressed comes from herself.
4. The nurse must ask the individual about the item expressed in order to obtain correction or verification (Meleis 1985).

In these requirements the concept of communication is pivotal. Although not explicitly elaborated, nursing in this view asks for both instrumental and affective behaviour. The nurse needs instrumental skills to find out and to meet the patient's need for help. Affective behaviour is a prerequisite for establishing a good relationship with the patient, so that the patient can be fully involved in all aspects of the nursing process.

King's interacting systems framework

The roots of King's theory appear to be in the work of Peplau and Orlando (Parse 1987). The model contains four concepts: social systems, perceptions, interpersonal relations and health. King defines nursing as a process of human interaction between nurse and patient, whereby each perceives the other in the situation and, through communication, they set goals and explore means to achieve these goals (King 1981). In this view communication is significant for mutual goal setting and in turn, mutual goal setting contributes to goal attainment. King defines communication as: 'a process whereby information is given from one person to another, either directly in face-to-face meetings or indirectly through telephone, television or the written word. Communication is the information element in the interaction' (King 1981). The opinion that nursing is a goal-oriented process, implies communication that is instrumental in nature, including aspects such as gathering information, making a nursing diagnosis, listing goals and planning (King 1981). Mutual goal setting and shared decisions on the means of achieving these goals, requires communication that is both instrumental and affective in nature.

King's theory is useful to guide research (Hanucharunkul 1989). Most studies are not directed at communication *per se* but test hypotheses on the theory of goal attainment (Parse 1987).

Recently developed nursing theories

The recently developed nursing theories tend to focus on the individual rather than on the dyadic relationship. Orem's (1991) Self-Care theory, for instance, is an example of a need oriented theory. Orem distinguishes six nursing methods: acting or doing for, advising, giving physical support, providing psychological support, creating an environment to promote personal growth and instruction or education (Evers 1991). In all six methods communication has a more or less implicit role. Nevertheless there is no explication of this concept. Orem only gives a prescription 'to communicate' which is interpreted as making information — the intangible — the common property of all involved (Orem 1991). The theory of Orem is widely used in practice and education of nurses (Fawcett 1995, Evers 1991, Berbiglia 1991). This theory has also been used a great deal in research (Grypdonck 1990).

Neuman's (1990) system theory represents the system oriented theories, in which man is viewed as an open system interacting with internal and external factors from the environment. Nursing aims 'to facilitate optimal 'wellness' for the client through retention, attainment or maintenance of client system stability' (Neuman 1989). Neuman describes a nursing process, that is made up of three steps: nursing diagnosis, nursing goals and nursing outcomes. Although the model is based on interacting systems, the concept of communication is not elaborated. Research based on the Neuman System Model is rapidly increasing (Fawcett 1995).

Research into nurse-patient communication

Macleod Clark (1985) presented an overview of research into nurse-patient communication. The earliest studies, though not specifically directed at nurse-patient communication reveal data about the subject. For instance, in the 1960s, survey research of patients' satisfaction with hospital care showed that patients were frequently more critical about communication with staff than about any other aspects of hospital care. The dissatisfaction with the communication was generally directed at nursing staff. From the seventies onwards, researchers have moved towards more specific studies of nurse-patient interaction. With new technology like video recorders and wire-free tape recorders, more sophisticated data collection became possible and a growing number of observation studies was carried out in a variety of nursing settings. The emphasis in this review is upon nurse-patient communication in nursing care for the elderly, from 1985 onwards.

Verbal communication in the nursing process

Over the last 10 years, several studies have been undertaken which examine verbal communication in geriatric nursing. Table 1 gives an overview.

The first part of the table shows five studies which focused on the patients' interaction level, but also represented findings about the amount and frequency of nurse-initiated communication. (Armstrong-Esther & Browne 1986, Armstrong-Esther *et al.* 1989, 1994, Allen & Turner 1991, Nolan *et al.* 1995). The main conclusion of these studies was that interaction between nurses and patients is low. Yet nurses reported that interacting with patients was an important and enjoyable aspect in their work (Armstrong-Esther *et al.* 1989, 1994; Nolan *et al.* 1995). In the studies of Allen and Turner (1991) and Nolan (1995), the samples were rather small. In the three studies (Armstrong-Esther & Browne 1986, Armstrong-Esther *et al.* 1989, 1994) sample sizes were bigger but these concerned the respondents filling out a questionnaire on nursing attitudes. It is unclear how much nurses were involved in the observation study. Only one study (Allen & Turner 1991) gave figures on inter-observer reliability (>0.95).

The next two studies highlight the ways that speakers modify their speech in communicating with elderly people. De Wilde and De Bot (1989) studied the use of simplified speech, more specifically 'secondary babytalk', which is defined as a set of accommodations including simplification and high and variable pitch, usually addressed to children, but also used in talking with elderly (Coupland *et al.* 1991). In this research, the speech of auxiliary nurses was analyzed on six characteristics of babytalk: length, complexity, imperatives, question-sentences, repetition and substitutions of pronouns (Ashburn & Gordon 1981). The results showed that auxiliary nurses used features of babytalk in communication with geriatric patients. When asked the nurses reported that expressive motives were determinants for their way of communicating. Still using babytalk may be perceived as patronizing and is likely to have negative side effects such as a decrease in well-being and a decline of physical and psychological functioning (De Wilde & De Bot 1989, Ryan *et al.* 1986). Although only six auxiliary nurses participated in this study the results were comparable with the findings of other research (Ashburn & Gordon 1981).

The Edwards and Noller (1993) study also focused on speech modifications in communicating with elderly people. (In this study both verbal and nonverbal characteristics are investigated, but as the nonverbal aspects were related to speech, this research is discussed in this section.) Edwards and Noller used a quasi-experimental design. Special video-vignettes were developed on which interactions between a nurse and an elderly woman, in which three strategies of over accommodation were used: altered pitch, touch and a verbal expression: 'that's a good girl'. Three respondent groups, elderly women, nursing

students and psychology students, rated the video-vignettes with the three different interaction strategies and their combinations.

All these strategies were perceived as somewhat patronizing, but the elderly rated them significantly less patronizing than the nursing and psychology students. The interaction with the combined strategy of 'that's a good girl' and altered pitch was rated as the most patronizing of all, but in addition, the elderly also rated it as respectful and non-dominant. As no natural communication was studied in this research its validity was questioned.

In the next five studies (Gibb & O'Brien 1990, Davies 1992, Salmon 1993, Waters 1994, Thomas 1994) nurses were the focus of the observation. Both instrumental and affective variables were measured. Gibb and O'Brien (1990) used a qualitative method, by which they defined 42 speech act categories, in which a distinction can be made in instrumental communication, such as explanation, instruction, checking out, and affective communication such as encouragement and reassurance. The speech style of nurses seemed to vary in relation to the way morning care procedures were carried out. During the so called 'journey' in which a fixed sequence of activities from getting up, toileting, showering, dressing, grooming was carried out, more affective behaviour was observed. During the 'dissection' in which parts of care were interrupted and the accent was on efficient use of time, a more task-related communication style was observed. The sample size in this study was rather small; nor were figures about reliability or validity reported. In other studies it was also found that the way a ward organized nursing labour could be related to the amount and quality of communication.

Salmon (1993) reported that arrangement of formal interaction periods increased the amount of social nurse-patient interaction. Thomas (1994) concluded that the influence of ward organization was clearer than staff grade. Regardless of staff grade, nurses on wards practising primary nursing used more affective communication, than nurses practising team or functional nursing. They offered patients more choice and spent more time seeking verbal feedback. As regards instrumental communication, nurses on primary wards gave more information about the care provided. The Thomas study reported a rather large sample (72 nurses) and a high inter-observer agreement (>0.95) on the observations.

Davies (1992) examined whether trained and untrained staff used different communication strategies. She identified 15 verbal behaviour categories, which included task-related categories like orienting to reality, explanations and more affective categories, such as personal recognition and reassurance. It was found that trained and untrained staff used broadly the same range of verbal strategies, but that registered and enrolled nurses used proportionately more of those strategies which were in harmony with the

Table 1 Summary of research into nurse-patient interaction: verbal communication

Source	Setting and sample	What was being studied	Methods and instruments	Variables	Reliability/Validity	Findings
Armstrong-Esther <i>et al.</i> (1986)	7 geriatric wards 4 psycho-geriatric wards 23 patients 118 nurses (different grades)	The influence of elderly patients' mental impairment on nurse-patient interaction	Non participant observation on, directed at patients	Patient focused observation, of three behaviour categories: postures, activities, interactions	No figures	Interaction between nurses and patients is low. Nurses interact significantly less with confused than with lucid patients. Nursing staff, however regarded their care priority as physical care rather than psychosocial interaction.
Armstrong-Esther <i>et al.</i> (1989)	5 wards in an acute hospital care setting 90 patients 105 nursing staff (different grades)	Nurses' attitudes towards elderly people The amount and quality of nurse-patient interaction	Non participant observation sampling behaviour of each patient during 10 minutes; each minute predominant patient behaviour was coded	Patient focused observation; 16 categories were coded, such as postures, non interactive activities, interactive activities, interaction initiation	No figures	Interaction between nurses and patients is low. In 52.2% of the cases no interaction by nurses was engaged during the observation-period. Staff initiated the most interaction with elderly who were slightly confused.
Armstrong-Esther <i>et al.</i> (1994)	Acute medical geriatric ward, acute psychiatric ward 24 patients 306 nurses (different grades)	Activity and interaction level of elderly patients in a geriatric and psychiatric unit	Non participant observation on directed at the patients, using a micro-computer	Patient focused observation, 16 categories were coded, such as interactions with others, postures, non interactive behaviour	No figures	Level of staff-patient interaction is very low outside expected routines of patient care. Nurses reported that social interaction with patients was important, but in practice they did not engage patients in social interaction.
Allen & Turner (1991)	Ward for continuing care 19 patients 15 nurses (different grades)	The effect of an intervention programme on staff-resident interaction levels	Interaction levels of patients, were observed using Allen's observation schedule (cited in Allen & Turner 1991).	Patient focused observation categories, such as activity, social setting, interaction initiation, type of response, content of interaction	Inter observer reliability > 0.95	There was no significant differences pre-intervention and post-intervention. It seems that nurses were less likely to interact with physically depended patients.
Nolan <i>et al.</i> (1995)	Two continuing care units 24 patients 24 staff	Interaction level of elderly patients in continuing care wards	Two observers in field observation based on time sampling; Nolan's molar coding system (extended version cited in Nolan 1995)	Patient focused observation, 12 categories, such as informal activity, organized activity, eat, drink, asleep, verbal interaction	Observers were trained to ensure validity and reliability no figures	Nurses report commitment of communicating with patients, but in practice it has little priority. Socially skilled patients attract more interaction both from other

<p>patients and from staff. During care-related interaction staff was more likely to engage in social conversation with socially adept patients.</p>					<p>De Wilde & de Bot (1989)</p> <p>3 wards in a psycho-geriatric nursing home 10 patients 6 auxiliary nurses</p> <p>Viewing sessions with: 40 elderly women 40 nursing students 40 psychology students rating 18 different video-vignets</p> <p>2 nursing homes 10 registered nurses each attending 3 or 4 residents</p> <p>Ward for elderly people, small sample of staff; representative sample of residents 24 2-hour tapes of patient care</p>	<p>Use of secondary babytalk in communication with elderly people</p> <p>Perception of communication aspects by elderly people, future nurses and uninvolved observers</p>	<p>Taperecorded interactions of communication with alert, non alert and control group were analyzed using Ashburn & Gordon scheme (1981)</p> <p>Video-vignettes were developed which different communication strategies; participants rated the interaction between a nurse and a elderly women on three dimensions: patronizing, status and solidarity</p>	<p>Characteristics of babytalk, such as imperative, substitutions of pronouns, repetitions</p> <p>Accommodation of speech such as: altered pitch, touch, verbal expression</p>	<p>No figures</p>	<p>Reliability: No figures Validity questioned (No natural communication)</p>	<p>Strategies of overaccommodation were evaluated as more or less patronizing. The elderly rated all strategies as significantly less dominant and more respectful than the other raters did. Not all the elderly object to overaccommodation. Dependent elderly will not respond negatively to it.</p>	<p>Patterns of speech-style varied in relation to the physical procedure being carried out. Patterns of speech-style have also a psychological function and reflected a particular way of relating.</p>	<p>Trained and untrained staff use the same range of verbal strategies. Trained staff use proportionally more strategies promoting dignity, self-respect, choice and independence.</p>	<p>Inter-observers agreement 0.90</p>	<p>Definition of 42 speech acts instrumental e.g.: explanation, instruction, signals of co-operation</p> <p>15 verbal behaviour categories instrumental e.g.: orienting to reality, explanations, offering choice</p> <p>Content analysis of tape-recorded interactions; 3 raters coded the incidence of 15 types of verbal behaviour</p> <p>The extent to which qualified and unqualified nurses use different verbal strategies in nurse-patient interaction</p>
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Table 1 (continued)

Source	Setting and sample	What was being studied	Methods and instruments	Variables	Reliability/Validity	Findings
Salmon (1993)	Two geriatric wards in a psychiatric unit 47 patients and 27 nurses (different grades)	Interaction of nursing-staff with elderly people; does interaction improve by changing attitudes or informal activity periods?	2 observers coded nurse's behaviour following a time-sampling procedure, during routine care and formal activity periods; special observation-scheme	16 behavioural categories instrumental: informing questioning	Inter-observer reliability: 0.74-0.82 Validity: no figures	A larger proportion of nurses' time was spent in interaction with patients than has been reported in other studies, but interaction is largely restricted to physical care. Nurses attitudes failed to predict the level of quality of the interaction with the elderly. Nurses behaviour was improving in formal activity periods.
Waters (1994)	2 rehabilitation wards in geriatric hospital, 32 patients.	Styles of staff-patient interaction on rehabilitation ward	Participant observation with Godlove's schedule (cited in Waters 1994)	Alone instrumental variables were measured, such as: physical activity, verbal guidance, appropriateness of work style	Intra-reliability 0.92-0.95	Attention should be focused on the educational preparation for rehabilitative nursing. There is a need for research to identify how to maximize the skills of team members to optimum benefit of patients.
Thomas (1994)	9 hospital elderly care wards, with each 4 Qualified Nurses (QN) and 4 Nursing Auxiliaries (AN) each had a 3 hour observation	A comparison of the verbal interactions of QNs and NAs in primary, team and functional nursing wards	Non participation observation using a computerized event recorder	Categories of verbal interaction: Instrumental: questions, commands, explanation	Inter-observer agreement > 0.95	Nursing staff in primary wards spent the most time communicating with patients and those in functional wards the least time. NAs spent larger time in verbal interactions than QN's.
Liukkonen (1992)	4 wards in institutional care 52 nurses (different grades) 95 hours of observation	Characteristic behaviour of dementia patients and activities of nurses during basic care	Non participant observation of basic care situations; analysis following the Grounded steps of Glaser & Strauss (1967)	Four categories of nursing activities: instrumental: e.g. obligatory daily activities and related activities	affective: e.g. voluntary activities taking patient's characteristics into account	Five models of nursing activity were identified, such as rejective, routinized, robot-like, cassette-like and skilful.

Kihlgren <i>et al.</i> (1993)	2 long term wards in different nursing homes: 10 patients; 10 nurses; 99 video recorded morning care sessions	The effect of training promoting integrity care on behaviour of caregivers towards demented patients during morning care	Field experiment with an intervention and control group; video-taped interactions before and after training were analyzed with a 39 item coding scheme	Instrumental categories e.g. upper body care, orientating the patient	Affective categories e.g. giving appraisals, eye contact	Inter-observers agreement 0.83	Following the intervention nurses offered patients more opportunities to take part in decisions and activities, patients showed more co-operation and there was more verbal interaction between nurses and patients.
Hewison (1995)	Hospital ward 24 patients 175 observed interactions	Nurses' power in interactions with patients; use of nurses; language and effect of language on patients	Participant observation; recorded verbatims and handwritten notes; analysis following principles of the grounded theory (Glaser & Strauss, 1967)	Merely instrumental variables: Power of language, persuasion, controlling the agenda	Reliability: No figures Validity No figures.	Nurses use language to exert power over patients. This is considered as a normal situation and is accepted by both staff and patients. The existing power-relationship constrains open communication.	

professions' recognized philosophy of promoting dignity, self respect, choice and independence, than nursing auxiliaries did. In this way, a division of labour in which nursing auxiliaries provided most of the direct patient care, could have effects on the quality of nurse-patient communication. The sample size in this study was small and the inter-observer reliability was 0.90.

Waters (1994) reported the findings of an investigation into styles of nurse-patient interaction during morning routines and the effects on elderly patients in rehabilitation care. This research only concerned instrumental communication. It was found that about 60% of the work-styles used during morning care routine were, to a greater or lesser degree, inappropriate. Often there was too little nurse-patient communication. The patients were left to go on with morning care, while they were unable to do so. In other cases, the style of interaction was wholly compensatory or dependency-creating. The inter-rater reliability in this study was high 0.95 and 0.92 for interaction categories and verbal communication respectively.

The next two studies (Liukkonen 1992, Kihlgren *et al.* 1993) focus on communication with patients suffering from dementia. Liukkonen (1992) found that nurses concentrated more on obligatory daily activities than on the individual needs of the patients or the special characteristics of dementia. They paid less attention to voluntary activities such as going outside the ward, going to the canteen, touching and playful teasing. Interaction was therefore rather superficial, which made the days for patients in the institution rather boring and monotonous. Liukkonen used a qualitative method. The observational data were completed with interviews about nurses' observations to achieve better validity and reliability. Basically the results were consistent. Kihlgren *et al.* (1993) described how caregivers behaved towards patients with dementia during morning care before and after a training programme of integrity-promoting care. They used an experimental control group design. A specially developed 93-item coding scheme was applied, which noted whether an action occurred or not. After the training, the nurses offered patients more opportunities to co-operate and there was an increase in verbal contact.

Finally, Table 1 describes Hewison's (1995) study into power in the nurse-patient communication. He followed the principles of the grounded theory (Glaser & Strauss 1967). The findings confirmed much previous research that most of nurse behaviour is instrumental, routinized and superficial. It was found that nurses exert a lot of control over interactions and the language they use is a major factor in it. The use of power is considered a normal situation and is generally accepted by both patients and nursing staff.

Nonverbal communication in the nursing process

Table 2 summarizes research into nonverbal communication. Five studies are directed at touch and the sixth

Table 2 Summary of research in nurse-patient interaction: Nonverbal communication

Source	Setting and sample	What was being studied	Methods of instruments	Reliability/ Variables	Validity	Findings
Hollinger (1986)	150 bed chronic rehabilitative care facility 12 patients	The relation between nurses' touch and the duration and frequencies of patient's verbal responses	Experimental design with 4 treatment conditions: no touch and touch in different phases of the interaction; countings of number of seconds of verbalizations and silences, countings of words	Affective touch (hand-over-hand)	Environmental variables were controlled, no figures	The duration and frequency of verbal responses appeared to increase when touch was applied in the interaction.
Le May & Redfern (1987)	4 continuing care wards for elderly people 30 patients 318 interactions	The amount and type of nurses' touch to elderly patients on long term care wards.	Participant observation using the touch observation schedule of Porter (1986)	Task related touch affective touch	Inter-observer reliability: 7 aspects acceptable 3 unreliable Validity: no figures	Nurses touch is predominantly instrumental The finding that expressive touch is scarcely used in nursing is supported.
Oliver & Redfern (1991)	Acute/rehabilitation care of the elderly ward. 5 patients 18 nurses 137 interactions	Touch-interaction between nurses and elderly patients in an acute rehabilitation care setting; Refinement of observation schedule.	Patient-focused observation, using time sampling; LeMay & Redfern (1987); events recorded on portable computer and tape-recorded conversations	Instrumental touch expressive touch	Inter-observer reliability: all aspects acceptable; validity: questioned	Nurses touch is predominantly instrumental. The new schedule facilitated the recordings. No benefits were obtained by using a computer.
McCann & McKenna (1993)	continuing care ward 4 patients and 37 interactions were observed during 16 hours of observation	The amount and type of touch received by elderly Patients from nurses. Elderly patients' perception of touch	Patient-focused non-participant observation; observation-schedule Porter (1986) refined by Le May & Redfern (1987)	Instrumental touch expressive touch	Validity: triangulation using semi-structured interviews No figures	Most touch (95%) was instrumental in nature. Expressive touch is given predominantly at body extremities. Nurses' gender and the part of the body that is

Moore & Gilbert (1995)	3 nursing homes 25 patients, who rated videotapes.	Possibility to communicate immediacy and affection by touch.	23 patients rated versions of videotapes on which nurses were interacting with patients. 2 nurses used touch and 2 did not; rating scale Burgoon (cited in Moore & Gilbert 1995)	Immediacy affection	Internal Consistency affection scale α 0.86 immediacy scale α 0.84 validity questioned	touched are of influence of perception of touch by patients. The elderly patients perceived greater immediacy and affection from nurse's use of comforting touch.
Van Ort & Philips (1992)	Psycho-geriatric ward 10 patients 11 nurses and caregivers (different grades)	The nature of interactions between nurses and Alzheimer patients during feeding activities	Exploratory, descriptive design; systematic observations of videotaped interactions; analysis on principles of the grounded theory of Glaser & Strauss (1967)	10 feeder behaviours were defined: instrumental e.g.: fixing/mixing food, role modelling adjusting	No figures	Environment was not arranged to elicit or support self feeding attempts. The continuity, pattern and synchronization of nurse's and resident's behaviour were poorly represented. Nursing interventions to modify the environment and to alter the behavioural context by patterning the feeding interactions could enhance mealtime for both resident and feeder.

concerns interaction during mealtimes. (This study considers both verbal and nonverbal characteristics. Because the emphasis is on nonverbal aspects it is discussed in this section).

Hollinger (1986) investigated the relationship between nurses' use of touch and the frequency and duration of verbal responses by elderly hospitalized people. She used an experimental design with five treatment conditions, varying from no touch and touch at different time intervals. Findings showed that nurses' touch increased the duration of verbal responses in the patients during the time period when touch was applied.

LeMay and Redfern (1987), Oliver and Redfern (1991) and McCann and McKenna (1993) used an observation schedule developed by Porter *et al.* (1986). In all three investigations, following Watson (1975), a distinction was made between instrumental and expressive touch. Instrumental touch is defined as deliberative physical contact necessary to perform a task. Expressive touch is relatively spontaneous and affective, and not necessary for the completion of a task. The Observation Schedule from Porter *et al.* (1986) was in 1987 refined and tested by LeMay and Redfern (1987); to improve the reliability. After another refinement (Oliver & Redfern 1991) the reliability of this instrument was acceptable, still validity is questioned. All three studies reveal that touch in the nurse-patient interaction is predominantly instrumental. Expressive touch, on the contrary, is scarcely used. McCann and McKenna report that the nurse's gender and the part of the body being touched determined how touch was perceived. Instrumental touching of the arm and shoulder by a female nurse is perceived as comfortable by all respondents.

In 1995 another study in touch was carried out by Moore and Gilbert (1995). They investigated whether affection and immediacy could be communicated to elderly nursing home residents by means of touch, using a quasi-experimental design. For that purpose, video-taped interactions were developed, in which four nurses utilized comforting touch or not. The residents rated the tapes on a 30-item scale, developed by Burgoon & Hale (1987). Elderly patients appeared to perceive greater immediacy and affection from nurse's use of comforting touch. Although the reliability of the rating scale was acceptable, validity in this study was questioned, because the sample might not be representative and the video tapes did not reflect natural communication.

Finally, Van Ort and Philips (1992) identified and categorized nursing behaviours that elicit or sustain functional behaviour in Alzheimer patients or decrease non functional behaviour, during eating activities. Using videotape recordings and a systematic observation of the events, they noted that the environment in which the eating activities took place were rather chaotic and not arranged to support self-feeding attempts. Further, nurses did not give appro-

priate cues to elicit functional feeding behaviour in the residents; neither did they react appropriately to patient's signals, because they did not recognize them.

Determinants of the quality or quantity of nurse-patient communication

Three groups of variables arise from the literature, that seem to determine the quality or quantity of nurse-patient communication. Variables related to nurses (that will be referred to in this article as provider variables), variables related to patients and variables related to the situation, particularly ward characteristics (Table 3).

Provider variables that were shown to be related were attitude, education, job satisfaction and gender. Nurses with a favourable attitude towards elderly people thought it more important to have social interaction with patients than to provide hygienic care (Armstrong-Esther *et al.* 1989). On the other hand, Salmon (1993) could not demonstrate a relation between nurses' attitude towards the elderly and their communicative behaviour. Actually, he found that establishing formal interaction periods, lead to a greater increase of interactions than targeting nurses' attitudes. A positive factor relating to communication might be the amount of job satisfaction. Kramer & Kerkstra (1991) showed that nurses with high levels of job satisfaction were more sensitive to patients' needs than nurses with lower levels. With regard to training and education, Davies (1992) found that although trained and untrained staff used broadly the same range of verbal strategies, trained staff used proportionately more of those strategies which promoted dignity, self-respect, choice and independence.

These results compete with the conclusions from studies in other fields of nursing care. Macleod Clark (1985) for instance did not find a difference in frequency of communication between trained and untrained staff. Wilkinson (1991) found that nurses in cancer care, who had a post basic training in communication skills, were no more effective in communicating than nurses who had not. On the contrary nurses who had completed an oncology course showed more facilitative communication, than nurses who had not. It might therefore be concluded that training should not only focus on communication skills, but also on knowledge of the specific area in which nursing is carried out. (The studies from Macleod Clark (1985) and Wilkinson (1991) are not included in Table 3 because they are not directed at communication with elderly patients.)

Patient characteristics that seem to be related to nurse-patient communication are level of mental alertness and level of physical ability. Armstrong-Esther *et al.* (1986, 1989) showed that nurses interact significantly less with confused patients than those who are. De Wilde and De Bot (1989) showed that nurses used more babytalk when the elderly were more dependent. Referring to Armstrong-Esther and Browne (1986), Allen and Turner (1991) sug-

gested that nurses would also be less likely to interact with physically dependent patients as compared with those who were more physically able. In investigating the effect of an intervention programme to enhance patients' quality of life, no effect of the intervention was found, which could be attributed to the difference of the physical ability level in the pre- and post-intervention group.

Finally, an important role was attributed to ward characteristics. Time pressure seems to be a variable of influence. Gibb and O'Brien (1990) showed that nurses who were responsible for the ward (so they could be interrupted by questions from other patients or staff, during the provision of morning care), were brief and task-related in interaction with their patients. The arrangement of special activity programmes seemed to have a positive influence on the amount of nurse-patient interaction (Turner 1993, Salmon 1993). Thomas (1994) compared the differential contribution to patient care made by qualified nurses and auxiliaries on wards practising primary nursing, team and functional nursing. In practising primary nursing, nurses showed more patient centred communication than nurses on wards with functional or team nursing, regardless of staff grade.

DISCUSSION

This review of the literature has dealt with communication in nurse-patient interaction, with special reference to the communication of nurses with elderly people. Firstly, attention was drawn to the role of communication in theoretical nursing models. Secondly, a review of the research on nurse-patient communication was given.

Relations between nursing theories and research

The importance of communication is emphasized particularly in theories which have nurse-patient interaction as the dominant theme (Peplau 1952, Orlando 1961, King 1981). The early theorists Peplau and Orlando and more recently King describe nursing as a process of interaction, in which communication is a central concept. None of the theories described distinguishes explicitly between instrumental and affective behaviour, although they do pay attention to building up a relationship and to task-related behaviour.

When Peplau and Orlando developed their theories, there was little research on nurse-patient communication. Over the past 10 years, many more studies have been published, nevertheless we have found that in the recently developed and commonly used theoretical models (Neuman 1990, Orem 1980) the role of communication tends to be implicit. This gives rise to the question of the relationship between theory and research.

Theories give directions to research (Fawcett 1995) and in this way research can generate or modify an existing

theory or test hypotheses derived from a developed theory. None of the studies reviewed however, modified or tested existing nursing theories. This is consistent with the findings of Jaarsma and Dassen (1993) who concluded that nursing theories were scarcely used in research to test a theory, although sometimes a research problem was fitted into a theory, retrospectively. Grypdonck (1990) made the same conclusion in analysis of research in relation to Orem's theory: a theory is often used as a frame of reference, which contributes little to the research itself. Although none of the studies in this review used a nursing theory, some studies did have an identifiable link with theory from allied fields such as linguistics, communication science and social psychology.

Observed quality of nurse-patient communication

In theories as well as in practice, it is widely accepted that communication is essential in nurse-patient interaction. Nurses view their relationships with patients as an important aspect of nursing care. (May 1990, Sundeen *et al.* 1989, Kitson 1987, Macleod Clark 1983, Hockey 1976). Nevertheless, social interaction is scarce in nursing. (Nolan *et al.* 1995, Salmon 1993, Armstrong-Esther *et al.* 1993, 1989, Macleod Clark 1983). Further, the quality of nurse-patient interaction is questioned. Waters (1994) showed that two thirds of the workstyles observed in morning care were inappropriate and dependency creating. Wilkinson (1991) reported that nurses had overall a poor level of communication. They used more blocking than facilitating communication. Hewison's (1995) study showed that nurses exerted power in communication with their patients.

It seems that although research on nurse-patient communication is increasing, only little change has occurred in practice. Further, patient surveys show that dissatisfaction, if it exists, is usually directed at poor communication. (Davis & Fallowfield 1991, Macleod Clark 1985). Hence, nurse-patient communication still deserves attention.

Limitations and methodological shortcomings of research into nurse-patient communication

As mentioned above, research in nurse-patient communication can contribute to knowledge and theory in nursing. Apart of that, research findings can be used in curricula for nursing students and continuing nursing education. In this way research can contribute to effective communication in nursing care. Good research is needed to achieve these goals. But, though observation research is growing, there are serious gaps and limitations, which will be discussed in this section.

All the observation studies presented here, were carried out in institutional care. In none of the studies was atten-

Table 3 Summary of studies into determinants of the quality or quantity of communication

Source	Setting and sample	What was being studied	Methods	Provider variables/ shown to be related	Validity	Findings
Armstrong-Esther <i>et al.</i> (1989)	5 wards in an acute hospital care setting 90 patients 105 nursing staff	Nurses' attitudes towards elderly people The amount and quality of nurse-patient-interaction	MMA to assess mental alertness; participant observation	Attitude	MMA 0.66–0.82 KOP no figures	Nurses with a favourable attitude towards the elderly thought it rather important to have social interaction with the elderly than to provide hygienic care, while nurses with a less favourable attitude thought that providing hygienic care was the most important task.
Salmon (1993)	2 geriatric wards 47 patients 27 nurses	interaction of nurses with elderly patients: relationship to nurses attitudes and to establishing formal activity periods	observations following time-sampling procedures	Attitude	Inter observer reliability: 0.74–0.82	No relationship was found between nurses attitudes towards the elderly and their behaviour.
Davies (1992)	ward for elderly people 24 tape recorded two-hour-periods of patient care.	The extend to which qualified and unqualified nurses use different verbal strategies	content analysis of tape recorded interactions 3 raters	Education/training	Inter-observers agreement 0.90	Unqualified nurses provide most of the direct patient care. Unqualified nurses use different verbal strategies than qualified nurses do. This might have implications for the quality of care.
Kramer & Kerkstra (1991)	167 residents 37 nursing auxiliaries	loneliness of residents in an elderly home	residents: interviews nurses: questionnaires	Job satisfaction	Job satisfaction scale: α 0.66–0.88	Nurses with a higher level of job satisfaction showed to be more sensitive to feelings of loneliness in their elderly patients, than nurses with a lower level of job satisfaction.

McCann & McKenna (1993)	ward for continuing care 4 patients 37 interactions	The amount and type of touch received by elderly patients from nurses	Patient focused non participant observation, added with interviews	Gender	No figures	Nurses' gender and the part of the body that is touched are of influence of perception of touch by patients.
De Wilde & De Bot (1989)	3 ward in psychogeriatric nursing home 10 patients 6 auxiliaries	Use of secondary babytalk in communication with elderly	analysis of tape recorded interactions	Level of mental alertness	No figures	Nurses' talking to less alert elderly use overaccommodative speech such as characteristics of babytalk.
Armstrong-Esther <i>et al.</i> (1986)	geriatric ward 23 patients 118 nurses	Influence of patient's mental impairment on nurse-patient interaction	patient assessment with CAPE, nurses attitude questionnaire and patient focused observation	Level of mental impairment	CAPE reliable no figures	Nurses interact significantly less with confused than with lucid patients.
Armstrong-Esther <i>et al.</i> (1989)	5 wards in an acute hospital care setting 90 patients 105 nursing staff	Nurses' attitudes towards elderly people The amount and quality of nurse-patient-interaction	MMA to assess mental alertness participant observation	Level of mental alertness	MMA 0.66-0.82 KOP no figures	Nursing staff initiated most interaction with patients they rated as slightly confused and alert. The least interaction took place with confused patients.
Allen & Turner (1991)	Ward for continuing care 19 patients 15 nurses	The effect of an intervention programme on staff resident interaction levels	Non participant observation	Level of physical ability	Inter-observer reliability > 0.95	It may be that nurses were less likely to interact with physically dependent patients when compared with those more physically ill.
Gibb & O'Brien (1990)	2 nursing homes 10 registered nurses each attending 3 or 4 residents	Style of speech used by nurses in carrying out routine nursing procedures	Conversation analysis of tape recorded interactions	Time pressure organisation of nursing labour	No figures	Time pressure and responsibility for the ward leads to short and interrupted communication between nurses and patients Some morning care activities 'the journey' are associated with more personally engaging social interaction than 'dissection' of morning care.

Table 3 (Continued)

Source	Setting and sample	What was being studied	Methods	Provider variables/ shown to be related	Validity	Findings
Davies (1992)	Ward for elderly people 24 tape recorded two-hour-periods of patient care.	The extent to which qualified and unqualified nurses use different verbal strategies	Content analysis of tape recorded interactions 3 raters	Ward organisation and division of labour between qualified and unqualified staff	Inter-observers agreement 0.90	Unqualified nurses provide most of the direct patient care. Unqualified nurses use different verbal strategies than qualified nurses do. This might have implications for the quality of care
Allen & Turner (1991)	Ward for continuing care 19 patients 15 nurses	The effect of an intervention programme on staff-resident interaction level	Observation using schedule Allen (cited in Allen & Turner 1991)	Activity programme	Inter-observer agreement > 0.95	Providing an activity programme on the ward opens the way for better communication between staff and patients.
Turner (1993)	2 wards 52 patients 19 nurses	Activity nursing and changes in quality of life from patients	Communication Scale to measure cognitive functioning of the patients; interviews with patients	Activity programme	No figures	Activity nursing opens the way for better communication between staff and elderly patients
Salmon (1993)	2 geriatric wards 47 patients 27 nurses	Interaction of nurses with elderly patients: relationship to nurses attitudes and to establishing formal activity periods	Observations following time-sampling procedures	Attitude	Inter-observer reliability 0.74–0.82	Formal reality orientation periods can improve the amount of nurse's positive behaviour in the nurse-patient interaction.
Thomas (1994)	9 wards for elderly care 36 qualified nurses 36 auxiliaries	A comparison of verbal interactions of QN's and NA's in primary, team and functional nursing	Non participant observation	Organisation of nursing labour	Inter-observer reliability > 0.95	Nurses on wards practising primary nursing gave patients more choice, general explanations about care, spent more time seeking verbal feedback from patients, than nurses on wards practising team or functional nursing.

tion paid to the nurse-patient communication in home care or the possible generalizations to primary care settings. In addition, generalization is questioned because of the small sample sizes that were used in several studies. Besides, some studies revealed no figures about observer reliability and the validity was questioned in nearly all studies. These findings make the quality of several of the studies doubtful.

A second limitation is that in several studies patient-focused observation was used. Those studies revealed data about the amount of patient interaction but did not provide specific information about the communication process. Other studies recorded the amount of communication, and studied individual aspects of communication, such as the length of the interaction, who initiated it, whether it was task-related or social interaction. Studies doing justice to the interactive nature of communication are scarce and, no instruments are available using systematic observations. Although there is a lot of research literature about nurse-patient interaction, only few studies focus on the development of observation instruments. The most commonly applied instruments count frequencies of various types of communicative behaviours. No instrument was found that investigated interaction patterns or paid attention to sequences of behaviour.

Another issue in research was patient contributions to communication. Although we found that some of the observation studies were patient-focused, these studies did not show how patients contributed to interactions. Jarrett and Payne (1995) in their review article concluded that the contribution of the patients had been neglected. Frequently, it is indicated in research that nurses deal with psychological issues at a very superficial level (Faulkner 1992). This is usually attributed to a reluctance of the nurse, but it might well be that patients consider these subjects as private or difficult to talk about to nurses (Jarrett & Payne 1995). Systematic research should be carried out which analyzes how patients contribute to the amount and quality of the nurse-patient interaction. A related subject is the measurement of patient outcomes. The effectiveness of nursing care is usually measured intuitively by nurses and based on a belief that what they do is good for the patient.

Fundamental question

A fundamental question is: what do nurses contribute to the welfare and well-being of patients (Armstrong-Esther *et al.* 1994). It can be argued that communicative behaviour influences patient outcomes, but the outcome of effective nurse-patient communication has received little attention. Research on the physician-patient relation has shown that physicians' behaviour during a medical encounter is directly related to patient outcomes such as satisfaction, recall of information and compliance (Bertakis *et al.* 1991). We expect to find a comparable

relation in nurse-patient interaction. Although little research was found investigating patient outcomes, the relationship between nurse-patient communication and patient outcomes has been mentioned in the literature. Fosbinder (1994) states for instance that nurse-patient interaction is critical in determining the quality of care from the patient's point of view. LeMay and Redfern (1987) and Copstead (1980) concluded that touch can enhance a patient's self esteem and reduce anxiety. If we believe that the patient will benefit from more effective communication we should focus on research into patient outcomes, such as patient satisfaction, psychosocial adjustment, compliance, patient autonomy and well-being, and quality of life.

All in all, the following conclusions can be drawn. Future research will require efforts to develop observation instruments and analysis systems which do justice to nurse-patient communication as an interactive activity, taking place in a variety of settings. Special attention should be paid to reliability and validity. Future research should also take patients' contributions into account and focus on patient outcomes.

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