

Health Dialogue Elements Identified during Health Communication between Nurses and Patients

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Abstract

Nurse-patient communication is an essential component of patient-centred health care that improves health outcomes and is characterised by health dialogue sanctioning mutual participation of both parties. This article reports on a study that aimed to identify the use of health dialogue elements during nurse-patient communication. A quantitative, descriptive, cross-sectional research design was used. The data was collected using the Observational Checklist of Health Dialogue Elements (OCHDE). The population comprised nurses (N=89) and adult diabetic patients in their care in a local municipality in Northern Cape, South Africa. Proportional sampling of public and private health facilities ($n=16$) was followed by convenience sampling of nurses ($n=22$). Descriptive statistics were calculated per group, comparing the nurse and patient responses per health dialogue element. The use of health dialogue elements during nurse-patient communication was diverse with an inconsistent display of antecedents, namely, a positive attitude (71.4%) and sensitivity and respect (41.7%) during communication. Regarding the antecedent element, training, the nurses displayed inadequate training in diabetes (19.3%) and in communication skills (30.6%). The patients received more diabetes training (48.7%) than the nurses, but their communication skills training (3.4%) was low. However, both the nurses and patients perceived the empirical referents, namely, shared responsibility/decision-making (67%, 68.2%), a health plan of mutual benefit



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(79.5%, 81.6%), and the use of context-sensitive communication strategies (73.6%, 67.8%). The inconsistent presence of antecedents and the reported presence of empirical referents indicates a need for further research and capacity building of nurses and patients.

Keywords: health communication; health dialogue elements; nurses; patient-centred health care

Introduction

The South African health system, based on the principles of decentralised delivery and management of health services, makes provision for patient-centred health care for all people in South Africa in keeping with the vision of long and healthy lives for all (SA 2014, 3). Patient-centred care is viewed as a holistic approach characterised by information, respect and negotiation of care. In practice, the interactive nature of patient-centred care not only encourages relationship building, but is also the impetus for the shift in focus from the health worker to the patient in need of care (Delaney 2018, 120; Morgan and Yoder 2012, 8).

High-quality participatory communication is acknowledged to be a determining influence and facilitator of patient-centred care in support of patient health. Essentially, communication in health is the enabler that sanctions the health worker to develop into a patient-centred health provider (Slatore et al. 2012, 411). Participatory communication encompasses interactive dialogue, that is, a communication process which encourages discussion, feedback, negotiation and collective decision-making. It is by virtue of the interactive nature of health dialogue that individuals are enabled to come to the empowering understanding that they have the ability to learn and take charge of their own lives (Govender 2011, 60).

The vital role that participatory health communication plays in delivering patient-centred care and improving health outcomes has particular relevance for patients living with a chronic disease and, in particular, diabetes (Delaney 2018, 120). Patients with diabetes, a non-communicable disease, are faced with having to come to terms with the diagnosis, as well as the need to accept and adapt to lifestyle adjustments that are necessary for maintaining optimal glycaemic control to avoid microvascular and macrovascular complications. Many patients, however, find it difficult to integrate these lifestyle changes into their daily lives (Berenguera et al. 2016, 2323). Related research studies in South Africa has reported comparable findings. Patients express that they feel ill-equipped to self-manage their chronic diseases, leaving many of them feeling anxious and frustrated about the quality of their health care, primarily due to a failure to address their health motivational needs (Mshunqane, Stewart and Rothberg 2012, 1; Murphy et al. 2015, 1).

Even though communication in health care has become a core topic of discussion, health workers voice concern regarding patient non-adherence to diabetic treatment regimens; whilst, conversely, patients express multiple constraints within the health environment that impede the attainment of desired health outcomes (Booyesen and Schlemmer 2015, 166). This challenge is also faced by nurses and their patients diagnosed with diabetes (hereafter patients with diabetes), in a local municipality in Northern Cape, South Africa. An estimated 70% of the municipality seeks health care from public health facilities (StatsSA 2015, 108) with the remainder of the population frequenting private health hospitals, clinics and general practitioners (SA 2015, 1–4). The mortality rate attributed to diabetes is growing in this area with 2.8% of deaths in 2011 rising to 4.3% in 2013 (StatsSA 2014a, 108; 2014b, 118). It is within this health environment that the use of health dialogue elements during health communication between nurses and patients with diabetes is presented.

Addressing these patient and health care provider challenges is complex. However, health communication, which embraces health dialogue, is a key contributor in the construction of a solid foundation for the delivery of patient-centred health care based on mutual participation. Therefore, health dialogue needs to be understood and recognised as an essential element of communication to benefit health outcomes.

Health Dialogue

A recent introduction to the concept of health dialogue developed by Reid (2019) provided the authors with a dual opportunity. Firstly, the content of the concept analysis of health dialogue offered insight into health dialogue (see Figure 1) and, secondly, it provided a foundation for assessing the use of the conceptually identified elements related to health dialogue, which include antecedents and empirical referents, during health communication between nurses and patients.

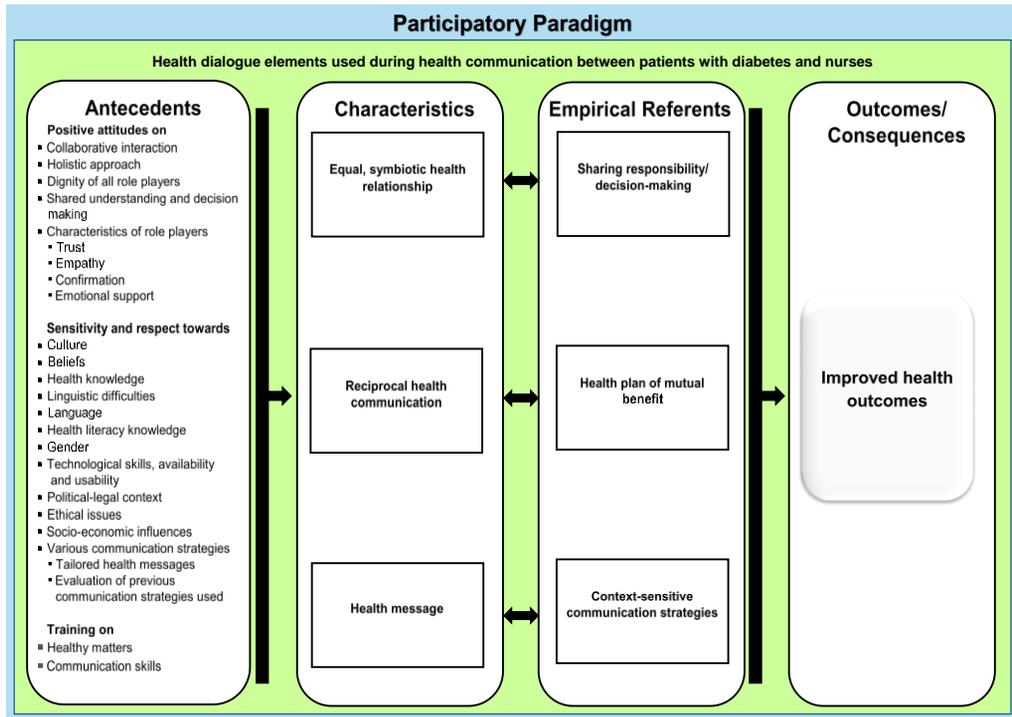


Figure 1: Health dialogue – a concept analysis (Reid 2019)

According to Reid (2019), the characteristics of health dialogue are the manifestation of a mutually cooperative health relationship and partnership that develops between patients with a chronic health condition and health workers. This relationship is established through the occurrence of reciprocal and participatory health communication during the delivery of health messages with the aim of improving health outcomes. However, before the benefits of health dialogue can be realised, it is essential that health workers and patients both demonstrate the antecedent behavioural values that underpin the concept of health dialogue. Figure 1 highlights, amongst others, two critical areas of the study, namely, antecedents and empirical referents. The antecedents, each with sub-elements, encompass the important point that, in reality, both health workers and patients should present with a positive attitude about the inclusion of the mechanism of dialogue during health communication. Furthermore, they should display sensitivity and respect towards each other, as people who each have unique belief systems, backgrounds and sociocultural influences, and should receive training, especially with regard to health matters and communication skills. The use and establishment of these antecedents by both health workers and patients will enable the realisation of improved health outcomes through dialogue. The empirical referents, in this instance, refer to the presence of a shared responsibility and decision-making between health workers and patients; the determination of a mutually beneficial health plan; and the application of context-sensitive communication strategies during health

communication. The presence of these empirical referents indicates that health dialogue has occurred and is compliant with the characteristics of the concept (Reid 2019).

Objective of the Study

The objective of the study was to identify the use of the following health dialogue elements between nurses and patients with diabetes:

- antecedents, which include a positive attitude, sensitivity and respect, and training; and
- empirical referents, which comprise shared responsibility and decision-making, a mutually beneficial health plan, and context-sensitive communication strategies.

Definitions of Keywords

- **Health communication** is the sharing of ideas, information, opinions, emotions and beliefs through messages that are created during ongoing transactional and dialogical processes involving a sender and receiver in an equal relationship, with the aim of creating mutual understanding to improve health outcomes using negotiation (Rensburg and Krige 2011, 78).
- **Health dialogue elements** refer to antecedents and empirical referents as presented within the concept analysis of health dialogue and captured in the Observational Checklist of Health Dialogue Elements (OCHDE) (Reid, Joubert and Nel 2019).
- **Nurses** are registered and enrolled nurses employed by health facilities that provide a health service to patients with diabetes.
- **Patient-centred health care** is a holistic approach to health care delivery, attends to the bio-psychosocial-spiritual aspects of individuals and pursues the development of collaborative health partnerships within a therapeutic environment (Morgan and Yoder 2012, 8).

Research Methodology

Design

The study adopted a quantitative, non-experimental, descriptive, cross-sectional research design.

Research Site

The study was conducted at public and private health facilities in a local municipality that provides health services to patients with diabetes. The local municipality was located in one of the five health districts of Northern Cape, South Africa.

Population and Sampling

The population consisted of nurses (N=89) and adult diabetic patients in their care in a local municipality in Northern Cape. Proportional sampling of public and private health facilities ($n=16$) was followed by convenience sampling of nurses ($n=22$). Each nurse was observed interacting with more than one patient. The nurses included were those who: were employed at the health facility at the time; had signed consent to participate; were in consultation with an adult patient diagnosed with diabetes; and were able to speak Afrikaans, English or Tswana during observations. The patients included those who: had provided written consent to participate in the study; were 18 years or older; were attending the health facility for a follow up diabetes related visit; and were able to converse in Afrikaans, English or Tswana. Health communication consultations between patients and nurses resulted in 88 observations, since each nurse consulted more than one adult patient.

Description of the OCHDE

The OCHDE is a validated communication skills assessment tool (Cronbach's $\alpha = 0.779$) that sets a standard of health dialogue elements to be present during health communication between health care workers and patients diagnosed with a chronic disease (Reid, Joubert and Nel 2019). The implementation of the OCHDE was aided by a completion guideline compiled by Reid, Joubert and Nel (2019). The OCHDE consisted of four parts, namely, the nurse and patient profile, antecedents, empirical referents, and interviewer question. The OCHDE is available from the authors on request.

OCHDE measurements were recorded according to observations ($n=31$) and questions ($n=12$). Observations were measured according to a 3-point Likert rating scale and yes/no options. Questions likewise posed yes/no options with resultant motivations. The antecedent data was recorded using observations, whilst the empirical referents and interviewer response used questions.

Data Collection

The data was collected by means of the OCHDE from February 2017 to June 2017. Each nurse was observed individually interacting with different patients. Questions were posed individually to each nurse and patient in private before and after observation of health communication. No changes were made to the OCHDE after the pilot study. The pilot data was incorporated in main study.

Data Analysis

Data analysis was managed by the Department of Biostatistics at the University of the Free State. Descriptive statistics, namely, frequencies and percentages for categorical data and medians were calculated per group, and the nurse and patient responses were compared. The groups responses' were compared by means of Bhapkar's (1966, 228–

235) test (see Table 1a) and McNemar's (1947) test (see Table 1b). Measurement of observer agreement for categorical data was described by McNemar's or Bhapkar's test and <0.05 had statistical significance for the study.

Ethical Considerations

Ethical clearance for the study was obtained from the Health Sciences Research Ethics Committee of the University of the Free State (HSREC 22/2016). The Northern Cape Department of Health and three private health facilities all approved the execution of the study at the respective health facilities. Informed consent was obtained from all participants. The responsibilities of researchers, as indicated in the Singapore Statement on Research Integrity (2010), were upheld.

Results

The study results will be discussed by way of demographic data that includes the nurse and patient profiles, antecedents, empirical referent results and interviewer question.

Demographic Data

The median health communication duration was six minutes (range 1.0-20.0). The median patient participant age was 59 years (range 32.0-97.0). Most (67%) of the patients were women and most (65.9%) had been diagnosed with Type 2 diabetes. The median duration of diabetes as a diagnosed illness was seven years (range 1.0-30.0). Most (70.5%) of the participants had no formal education or had left school before completing Grade 10. Almost half (52.3%) of the patients spoke Tswana at home, with a further 39.8% recorded as using Afrikaans as home language. Interestingly, most (57.9%) of the communication took place in Afrikaans. A language other than the patient's home language was used in just over half (58.1%) of the health communications.

The median nurse age was 45 years (range 31.0-60.0). Most (94.3%) of the nurses were women. Few (27.3%) of the nurses were in possession of degrees – most (67%) had diplomas and 5.7% had certificates. The median number of years the nurses had spent consulting patients with diabetes was 12 years (range 0.16-30.0).

Less than half (42%) of the health communication consultations were conducted by nurses using the Tswana language, whilst nurses who used Afrikaans as a home language, conducted 46.6% of the consultations. Nurses with English as a home language, conducted few (11.4%) of the health communication consultations.

Antecedents

The antecedents, namely, a positive attitude, sensitivity and respect, and training regarding health knowledge and communication skills, were recorded for both nurses

and patients. Tables 1a and 1b summarise the antecedent data observed during nurse-patient communication ($n=88$).

Table 1a: Antecedents observed during nurse-patient communication according to Bhapkar's test

Elements and sub-elements	Nurse observations			Patient observations			p-value
	Not observed	Inconsistent	Consistent	Not observed	Inconsistent	Consistent	
	%	%	%	%	%	%	
Positive attitude							
Collaborative interaction	9.1	34.1	56.8	25	26.1	48.9	<0.01*
Holistic approach – response to illness							
Physical	27.3	30.7	42	35.2	31.8	33	<0.01*
Emotional	15.9	47.7	36.4	34.1	33	32.9	<0.01*
Spiritual	67.1	19.3	13.6	75	11.4	13.6	0.07
Social	23.9	44.3	31.8	36.3	41	22.7	<0.01*
Shared understanding and decision-making							
Planned outcome	6.8	36.4	56.8	13.6	37.5	48.9	<0.01*
Responsibilities clarified	5.7	28.4	65.9	10.2	46.6	43.2	<0.01*
Characteristics							
Trust	6.8	34.1	59.1	11.4	31.8	56.8	0.22
Empathy	9.1	42	48.9	20.4	39.8	39.8	<0.01*
Confirmation	6.8	39.8	53.4	20.4	46.6	33	<0.01*
Emotional support	17.1	36.4	46.6	23.9	39.8	36.4	<0.01*
Respect and sensitivity							
Language							
Terminology clarified	5.7	21.6	73.7	18.2	46.6	35.3	<0.01*
Culture and beliefs							
Health beliefs	35.2	33	31.8	40.9	33	26.1	0.05

Health knowledge							
Validated understanding	6.8	52.3	40.9	18.2	59.1	22.7	<0.01*
Health literacy							
Ability to read	15.9	35.2	48.9	19.3	56.8	23.9	<0.01*
Ability to understand	6.8	42.1	51.1	13.6	59.1	27.3	<0.01*
Technology							
Electronic devices	68.2	17	14.8	70.4	21.6	8	0.14
Political/legal context							
Consult within legal frame	5.7	35.2	59.1	8	38.6	53.4	0.29
Ethical issues							
Discussion of sensitive issues	64.8	22.7	12.5	70.5	15.9	13.6	0.09
Socio-economic issues							
Influence on treatment	25	43.2	31.8	27.3	46.6	26.1	0.13
Communication strategies							
Strategies used	32.2	26.4	41.4	37.5	29.5	33	<0.03*

Table 1b: Antecedents observed during nurse-patient communication according to McNemar's test ($n=88$)

Elements and sub-elements	Nurse observations		Patient observations		<i>p</i> -value
	Yes	No	Yes	No	
	%	%	%	%	
Positive attitude					
Friendly manner	59.1	40.9	75	25	<0.01*
Shared understanding and decision-making					
Reason for visit	88.6	11.4	86.4	13.6	0.32
Problem identification	76.1	23.9	72.7	27.3	0.18
Respect and sensitivity					

Gender	1.1	98.9	1.1	98.9	1
Health knowledge					
Recognition	82.8	17.2	80.5	19.5	0.16

Note: Measurement of observer agreement for categorical data was described by McNemar's or Bhapkar's test (<0.05* had statistical significance).

Tables 1a and 1b depict that 10 of the 14 (71.4%) positive attitude sub-elements and five of the 12 (41.7%) respect and sensitivity sub-elements were displayed inconsistently between the nurses and patients during health dialogue.

Elements not depicted in the tables include privacy and training. Privacy was noted in only 46.6% of the observations. Training included diabetes related information and communication skills. Few (19.3%) of the nurses and less than half (48.7%) of the patients received diabetes information. Some (30.6%) of the nurses received training in communication skills with only few (3.4%) of the patients receiving this type of training.

Empirical Referents

Responses were recorded for the yes and no options of each question. Table 2 depicts the empirical referents observed during nurse-patient communication.

Table 2: Empirical referents observed during nurse-patient communication ($n=88$)

Element	Nurse		Patient		Test	p-value
	Yes	No	Yes	No		
	%	%	%	%		
Shared responsibility and decision making	67	33	68.2	31.8	McNemar	0.79
Health plan of mutual benefit	79.5	20.5	81.6	18.4	McNemar	0.53
Context-sensitive communication strategies	73.6	26.4	67.8	32.2	McNemar	0.25

Note: Measurement of observer agreement for categorical data was described by McNemar's test (<0.05* had statistical significance).

The empirical referents showed no significant difference between nurse and patient responses, even though different motivations were provided as to why an element was perceived to be either present or not present. Table 3 displays the motivation provided by nurses and patients for each of the three empirical referent elements.

Table 3: Motivations provided by nurses and patients for each empirical referent element

Element	Motivation of element	Nurse		Patient	
		N=65	%	N=53	%
Shared responsibility		N=65	%	N=53	%
Yes	Co-responsibility	13	22.8	10	20
	Self-care	14	24.6	8	16
	Discussion of problems	10	17.5	10	20
	Acceptance of instructions	20	35.1	22	44
No	Lack of self-care	5	62.5	0	0
	Communication barrier	3	37.5	3	100
Health plan of mutual benefit		N=70	%	N=69	%
Yes	Task completed	29	43.2	25	37.3
	Positive feedback	22	32.8	23	34.3
	Self-care	8	12	13	19.4
	Knowledge shared	8	11.9	6	9
No	Communication barrier	3	100	2	100
Context-sensitive communication strategies		N=65	%	N=58	%
Yes	Self-care management	31	49.2	33	62.3
	Socio-economic impact	32	50.8	20	37.7
No	Communication barrier	2	100	5	100

Although not all nurses or patients motivated their yes/no option answers, the authors were able to group the motivations provided thematically. Those results not depicted in Table 3 included tailored health messages where a third (37.5%) of the subjective responses indicated that the patients' needs were not addressed during health communication.

Discussion

Demographically, the study has predominantly replicated the multilingual and multicultural South African society within which the study took place. In a discussion of intercultural communication in South Africa, Ntuli (2012, 29) draws attention to the potential for misunderstanding and conflict during health communication involving people from diverse languages and cultures. Ntuli (2012) proposes that, to avoid misunderstandings, health communication should take place in a situation characterised by mutual respect and understanding. Würth and Schuster (2017, 1773) recommend approaching health communication with humility, which in turn creates the environment for non-judgemental listening, receptiveness and openness. Pre-conceived ideas often associated with cultural, socioeconomic and languages differences are therefore suspended enabling mutual understanding and negotiation.

The mean length of nurse-patient health communication reported in the study was a mere six minutes. Participatory communication is packed with discussion, feedback,

compromise and shared decision-making (Govender 2011, 60) and, thus, this short duration is a source of concern to the authors. The Society for Endocrinology, Metabolism and Diabetes of South Africa (SEMDSA 2017, S20-S21) guideline includes a structured and standardised outline for a diabetes consultation in health facilities. The short duration reported in the study appears inadequate to fulfil the requirements of the guideline.

In the current study, the antecedent element, a positive attitude, was critical to the creation of a therapeutic environment; however, it was displayed inconsistently. Similar results have noted in other studies. Health workers and patients enter the health environment with the need and desire to participate, yet they are overwhelmed by earlier health experiences. As a result, health workers and patients succumb to a paternalistic and non-participatory approach (Delaney 2018, 119; Murphy et al. 2015, 4; Tobiano et al. 2016, 367–368). However, when health communication was initiated and based on individual patient concerns and goals, participation of both the health worker and patient were boosted (Mabuto, Charalambous and Hoffman 2017, S23). The patient in this instance becomes the focus of attention. Patient autonomy and authority is respected. Responsibility and decision-making regarding self-management of the chronic disease can now be jointly shared by the nurse and patient in an empowering environment (Fasulo, Zinken and Zinken 2016, 917–918).

Fundamentally, a holistic approach to care is able to facilitate the focus on patient needs. Byatt (2008, 169) mentions that a holistic approach to care enables the patient to actively use “inner resources” to improve the quality of health. The disparity in nurse and patient presentation of the holistic care elements in the study is troublesome. A possible explanation for this is noted in a recent study which reported that patients viewed the diabetic consultation as a biomedical consultation only. Although not averse to discussing the psychosocial aspects of how to implement and live with recommended biomedical adjustments, the patients did not believe they were permitted to (Van Dijk-de Vries et al. 2016, 58–59). Conversations with the patients also tended to be planned and focused on health worker preferences. In addition, the health workers were unfamiliar with the use of communication strategies to encourage patient participation (Stans et al. 2018, 8–9). However, context sensitive communication messages can only be meaningfully delivered once the biophysicosocial context within which the health care goals are to be addressed, is understood (Schiavo 2014, 366).

Empathy and validation of understanding, that is, characteristics upon which participatory relationships are built, also presented inconsistently in the study. Patients with Type 2 diabetes require social support to develop coping skills and reduce the level of emotional distress associated with living with the condition. Patient and health worker relationships built on empathy and participatory communication lead to greater social support for the patient and an improvement in patient coping skills and overall well-being (Ramkisson, Pillay and Sibanda 2017, 8).

A partnership between the patient and health worker forms the foundation of shared understanding and joint decision making. The partnership develops during the participatory communication process and endorses the underlying principles of primary health care, namely, autonomy and self-determination (Delaney 2018, 119). Jointly, problems are identified; options are discussed; understanding is checked; and the best choice for implementation is chosen. Both the health worker and patient are made aware of their respective roles during health communication. The patients are the experts on themselves, their needs, beliefs and opinions. They will also often know best which treatment plan is most fitting for them. The health worker, in turn, is seen as the enabler and supplier of a variety of treatment plans and clinical expertise (Da Silva 2012, 2). In the study, shared understanding and joint decision making were observed inconsistently and hindered the development of a health partnership. The absence of sharing expertise between both parties leads to an inadequate health plan which could pose challenges to patient implementation (Coulter, Roberts and Dixon 2013, 7).

The establishment of a mutually participative environment in the study was also hampered by the prevailing lack of attention to privacy and friendliness towards each other. Of note, patients who felt satisfied with their care identified the values of privacy, nurses listening to them and addressing them politely as being important. Satisfied patients were also more likely to participate, adhere to treatment plans and pursue additional ways and means to improve personal health status (Nunu and Munyewende 2017, 1).

Awareness and demonstration of respect and sensitivity towards language, health knowledge and health literacy, were observed inconsistently during nurse and patient communication. Mutual participation, focussed on the patients' needs, has the ability to not only improve health literacy and health knowledge, but also simultaneously improve participatory communication (Schiavo 2014, 74). Hibbard, Mahoney and Sonet (2017, 1276) report on the value of assessing each patient's knowledge, skill and confidence, or level of activation, for managing their own health soon after diagnosis. This finding suggests that patients who are more activated are also more likely to discuss matters of concern; manage the illness symptoms; and implement the health workers' recommendations.

Training and information on communication skills and disease-related matters are essential components of the participatory communication process. However, in the study, the majority of nurses and patients had received minimal or no training and information covering these two important aspects. Similar findings were noted in a recent study by Murphy, Mash and Malan (2016, 249). Due to a lack of appropriate knowledge and skills, South African health workers are poorly prepared to facilitate the shift to a patient-centred care approach enabled by active patient engagement. Training patients in communication skills proved to be an effective means to increase their level of active participation during health communication – these patients then tended to be

more receptive to receive disease information from the health workers (D'Agostino et al. 2017, 1247).

Tailored health messages were not used consistently in the study to address the patients' individual health needs. However, in a recent study by Berenguera et al. (2016, 2330), patients with diabetes showed a preference for tailored health messages based on individual needs and sociocultural and economic circumstances to enable better self-management of the disease.

Conceptually, health dialogue occurs in the presence of identified empirical referents, resultant characteristics and antecedents (Reid 2019). However, the antecedent health dialogue elements were observed inconsistently in the study. In spite of these results, the participants perceived the presence of all three empirical referents during health dialogue.

Recommendations

Capacity building of nurses and patients regarding participatory communication and health dialogue together with further research is required.

Limitations

Generalisation to the target population should be done cautiously. Further similar observational descriptive research is needed to compare the study results; enhance generalisation; and contribute to the development of a health dialogue model for application in nursing practice.

Conclusion

Health dialogue, imbedded within the participatory communication paradigm, is instrumental in facilitating patient-centred health care. The absence of information with regard to the use of health dialogue elements during communication between nurses and patients indicated that an investigation was required.

Generalisation of the results should be done cautiously, since the population represented one geographical district of Northern Cape with convenience sampling of participants. Nurses' unavailability during data collection resulted in a reduced number of interactions being included.

The participatory nature of health dialogue, in turn, dictated the need for a simultaneous identification of health dialogue elements between nurses and patients. The OCHDE, an instrument with a strong theoretical foundation, created the opportunity to observe both nurse and patient in health communication. Thus, the study has contributed knowledge regarding to the use of health dialogue elements of both nurse and patient during communication.

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