

Health dialogue elements identified during communication between patients and nurses in a health care facilities in a South African Municipality

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Introduction

Participatory health communication with its transactional and interactional intent is realised through the occurrence of dialogue, a communication technique (Schiavo, 2014: 7-9; Wood, 2012:11). Participatory communication is widely documented as a major contributor towards the achievement of positive health outcomes and patient-centered health care (Mulder, Lokhorst, Rutten, & van Woerkum, 2014:1; Schiavo, 2014: 26-27; Rensburg & Krige, 2011:78; Parchman, Zeber, & Palmer, 2010:410).

Health communication where both patient and nurse are equal partners in the communication and decision-making process is recognised in a number of current day strategic plans guiding service delivery. In particular, those addressing the chronic and non-communicable life style disease, diabetes. Diabetes is an unchecked and growing challenge facing all South Africans and if left unattended will place a massive socio-economic burden on the individual and society in general (South Africa: Department of Health, 2014:14).

Problem Statement

Patients and nurses interact on a daily basis with the purpose of improving health outcomes. However, it is not known to what extent the elements of health dialogue are incorporated into each individual patient and nurse interaction. A concept analysis of "health dialogue", depicted in Figure 1, (Reid, 2015) laid the foundation to identify the presence of these health dialogue elements during health communication between patients with diabetes and nurses.

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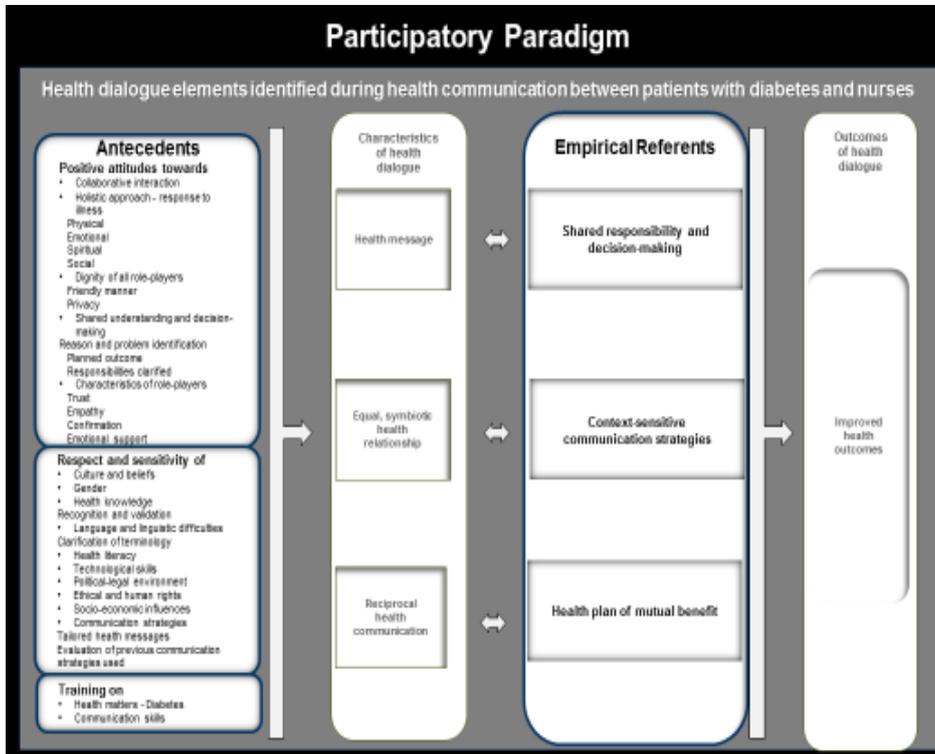


Figure 1. Health dialogue within a participatory framework. Adapted with permission from “Health dialogue: A concept analysis” by Reid (2015).

Aim and objectives

The aim of the study was to identify the presence of health dialogue elements during health communication between patients with diabetes and nurses in a South African municipality. The objective was to identify, through observation, antecedents that include a positive attitude, sensitivity and respect as well as training that has taken place. The presence of empirical referents of health dialogue, namely a shared responsibility and decision-making, a mutual beneficial health plan and the use of context sensitive communication strategies were be noted.

Methodology

The study made use of a cross-sectional research design. Proportional sampling of identified health care facilities (n=19) in the Sol Plaatje Local Municipality resulted in the inclusion of 17 of these facilities. Ethical approval was obtained from the Health Sciences Research Ethics Committee of the University of the Free State (HSREC 22/2016) and the various health departments. Written consent was obtained from nurses and patients. A pilot study preceded the main study.

Nurses (n=32) were observed whilst they interacted one on one with patients. Each nurse saw more than one patient during the study. The first author and Tswana speaking trained fieldworker used an observation checklist to record findings observed during the interactions (n=93) and audio recordings of interactions were used to verify and support observations. After completion of the interaction, the patient and nurse were interviewed individually. The observed presence of tailored health messages was rated by the observer at the end of each patient and nurse interaction. Elements were compared by means of paired tests (McNemar (1947)) and (Bhapkar 1966) for 1/2/3 answers as indicated.

Findings

Patient profile

The median patient participant age was 58 years (range 32.0-97.0). Most (66.7%) were female and most (64.5%) diagnosed with Type 2 diabetes. The median duration of diabetes as a diagnosed illness was 7 years (range 1.0-30.0). Almost half (49.5%) of the participants spoke Tswana at home with a further 37.7% recorded as using Afrikaans as home language. Most participants (71.1%) had no formal education or had left school before completing grade 8.

Less than half of the patients (47.3%) received diabetes information, and few (3.2%) of the patients received communication based information.

Nurse profile

The median nurse age was 45 years (range 31.0-60.0). Most (94.6%) nurses were female. Less than half (45.5%) of the interactions were conducted by Tswana speaking nurses with nurses using Afrikaans as a home language, conducting 44.1% of the interactions. English speaking nurses conducted few (10.8%) of the interactions. The

median number of years the nurse had spent consulting patients with diabetes was 12 years (range 0.16-30.0). Few (15.1%) of the nurses were in possession of a degree, most (63.4%) had a diploma and 9.7% had a certificate. Regarding diabetes training few of the nurses (18.3%) received training, and some (29.0%) received communication based training.

Interaction

The median interaction duration was 6 minutes (range 1.0-30.0) with most (60.2%) conducted in Afrikaans. A language other than the patient's home language was used in just over half (58.1%) of the interactions. Privacy was noted in only 46.2% of interactions.

Tailored health messages were rated poor to very poor (40.9%) and good to very good (58.1%). More than half of interactions (58.1%) was deemed as being tailored according to patient's needs.

The following antecedents that include a positive attitude, sensitivity and respect as well as training that has taken place, were observed. See Table 1.

Table 1 Antecedents observed during nurse/patient communication (n=93)

ELEMENT	NURSE			PATIENT			Statistical test	P - VALUE	
	Not observed	Observed not consistent	Consistly	Not observed	Observed not consistent	Consistly			
	%	%	%	%	%	%			
Positive attitude towards									
Collaborative interaction	8.6	37.6	53.8	24.7	29	46.2	Bhapkar		
Holistic approach - response to illness									
Physical	25.8	34.4	39.8	34.4	34.4	31.2	Bhapkar	<0.01	
Emotional	15.1	50.5	34.4	33.3	35.5	31.2	Bhapkar	<0.01	
Spiritual	68.8	18.3	12.9	76.3	10.8	12.9	Bhapkar	0.07	
Social	22.6	47.3	30.1	35.5	43	21.5	Bhapkar	<0.01	
Shared understanding and decision-making									
Planned outcome	6.5	39.8	53.8	15.1	38.7	46.2	Bhapkar	<0.01	
Responsibilities clarified	5.4	32.3	62.4	11.8	47.3	40.9	Bhapkar	<0.01	
Characteristics									
Trust	6.5	37.6	55.9	11.8	34.4	53.8	Bhapkar	0.01	
Empathy	8.6	45.2	46.2	20.4	41.9	37.6	Bhapkar	<0.01	
Confirmation	6.5	43	50.5	20.4	48.4	31.2	Bhapkar	<0.01	

Emotional support	16.1	39.8	44.1	23.7	41.9	34.4	Bhapkar	0.01
Respect and sensitivity of								
Language								
Terminology clarified	9.7	21.5	68.8	21.5	45.2	33.3	Bhapkar	<0.01
Culture and beliefs								
Health beliefs	33.3	36.6	30.1	40.9	34.4	24.7	Bhapkar	0.02
Health knowledge								
Validated understanding	7.5	53.7	38.7	19.4	59.1	21.5	Bhapkar	<0.01
Health Literacy								
Ability to read	19.4	34.4	46.2	22.6	54.8	22.6	Bhapkar	<0.01
Ability to understand	6.5	45.2	48.4	15.1	59.1	25.8	Bhapkar	<0.01
Technology								
Electronic devices	67.7	18.3	14	69.9	25.6	7.6	Bhapkar	0.14
Political/legal context								
Consult within legal frame	8.6	34.4	57	11.8	37.6	50.5	Bhapkar	0.15
Ethical Issues								
Discussion of sensitive issues	66.7	21.5	11.8	72	15.1	12.9	Bhapkar	0.09
Socio-economic issues								
Influence on treatment	23.7	46.2	30.1	26.9	48.4	24.7	Bhapkar	0.1
Communication strategies								
Strategies used	30.4	30.4	39.1	36.6	32.3	31.2	Bhapkar	0.02
ELEMENT	NURSE		PATIENT		Statistical test	P - VALUE		
	Yes	No	Yes	No				
	%	%	%	%				
Positive attitude towards								
Friendly manner	61.3	38.7	72.0	28.0	McNemar	0.03		
Shared understanding and decision-making								
Reason for visit	85.0	15.1	82.8	17.2	McNemar	0.32		
Problem identification	75.3	24.7	72.0	28.0	McNemar	0.18		
Respect and sensitivity of								
Gender	3.2	96.8	3.2	96.8	McNemar	1.0		
Health knowledge								
Recognition	81.5	18.5	77.2	22.8	McNemar	0.05		

Measurement of observer agreement for categorical data was described by McNemar's or Bhapkar's tests (<0.05 has statistical significance)

As can be seen from Table 1 the antecedents observed differed significantly between the nurse and patient.

Empirical referents (see Figure 1) were noted during the interaction (See Table 2). These are elements which, as a result of the presence of antecedents and characteristics, will

be observable entities to enable the recognition of the characteristics (Walker, Avant (2011)).

Table 2 Empirical referents observed during nurse/patient communication (n=93)

ELEMENT	NURSE		PATIENT		Statistical test	P - VALUE
	Yes	No	Yes	No		
	%	%	%	%		
Shared responsibility and decision-making	64.5	35.5	66.7	33.3	McNemar	0.62
Health plan of mutual benefit	76.3	23.7	78.3	21.7	McNemar	0.53
Context-sensitive communication strategies	70.6	29.4	65.2	34.8	McNemar	0.25

As can be seen from Table 2 the referents were similarly as noted by patient and nurse.

Conclusion

Given the resource restrained health system in South African, a median length of interactions of 6 minutes observed, was expected but still of great concern. The interaction on a daily basis with the purpose of improving health outcomes is therefore a challenge.

The extent to which the elements of health dialogue were incorporated into each individual patient and nurse interaction was noted similarly for both, seemingly implying both are content with this grave situation for spending 6 minutes in interaction. However, participatory communication, a major contributor towards the achievement of positive health outcomes, was hampered in the process.

The initial response to the research findings will hopefully stimulate an awareness into present-day health communication and the occurrence of health dialogue elements used during interaction between the patient with diabetes and the nurse in health facilities in a South African Municipality.

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References

- Bhapkar, V.P. (1966). A note on the equivalence of two test criteria for hypotheses in categorical data. *Journal of American Statistical Association*, 61, 228-235.
- Landis, J.R. & Koch, G.G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 33, 159-174.
- McNemar, Q. (1947). Note on the sampling error of the difference between correlated proportions or percentages. *Psychometrika*. 12 (2);, 153-157.
- Mulder, B.C., Lokhorst, A.M., Rutten, G. E. H. M. & van Woerkum, C.M.J. (2014). Effective nurse communication with type 2 diabetes patients: A review. *Western Journal of Nursing Research*, DOI: 10.1177/0193945914531077, 1-32.
- Parchman, M.L., Zeber, J.E. & Palmer, R.F. (2010). Participatory decision making, patient activation, medication adherence, and Intermediate clinical outcomes in type 2 diabetes: A STARNet Study. *Annals of Family Medicine*, 8(5), 410-417.
- Reid, M. (2015). Health Dialogue: A concept analysis. *Royal College of Nursing 20-23 April 2015*. Nottingham, United Kingdom.
- Rensburg, R. & Krige, D. (2011). Aspects of health communication. In K. Tomaselli, & C. Chasi (Eds.), *Development and public health communication*. (pp. 77-100). Cape Town: Pearson Education.
- Schiavo, R. (2014). *Health communication from theory to practice* (Second edition ed.). San Francisco: Jossey-Bass.
- South Africa: Department of Health. (2014). *Strategic Plan 2014/15-2018/19*. Retrieved July 22, 2016, from <https://www.health-e.org.za/wp-content/uploads/2014/08/SA-DoH-Strategic-Plan-2014-to-2019.pdf>
- Walker, L.O. & Avant, K.C. (2011). *Strategies for theory construction in nursing*. Boston: Pearson.
- Wood, J.T. (2012). *Communication in our lives* (Sixth edition ed.). Boston: Wadsworth, Cengage Learning.