PHASE II: DENTAL EDUCATIONAL RESEARCH INTERVENTION

CHAPTER 5 PROPOSED INTERVENTION

5.1 Introduction

The current chapter describes the dental educational research intervention comprising the development of an outcomes-based curriculum in relational communication skills (Figure 8, below).

Until recently, little or no emphasis was placed on the development of interpersonal communication skills because dental students' cognitive and clinical development have always been emphasised. Time restraints and lack of faculty interest also played a part (16; 119). However, an increasing number of proponents of communications skills teaching argue that communication is a core clinical skill rather than an optional extra and should comprise an essential part of the undergraduate dental curriculum. A recent review done by Aspergren for the Association for Medical Education in Europe concludes that there is overwhelming support for the fact that communication can be taught and learned (120). This, however, requires the development of a relevant, *outcomes-based* curriculum in relational communication skills.

It is suggested, however, that instead of continuing to develop communication skills teaching/assessment instruments for each new research project, clinicians and researchers should rather work together to document the reliability and validity of existing instruments. It is strongly recommended that future efforts be aimed at refining existing instruments rather than the development of novel measures (96).

In view of the above, and given the close relationship between dentistry and medicine, the similar nature of doctor-patient and dentist-patient interactions, as well as the integration of medical and dental science in the undergraduate dental curriculum at the University of Pretoria (Figure 4 - Chapter 2, section 2.4), it was decided to explore the literature in terms of currently used doctor-patient communication models in medicine and determine whether such models could be applied in dentistry (91).

5.2 Curriculum development

The process of curriculum development followed in this study is presented in Figure 8 (below).

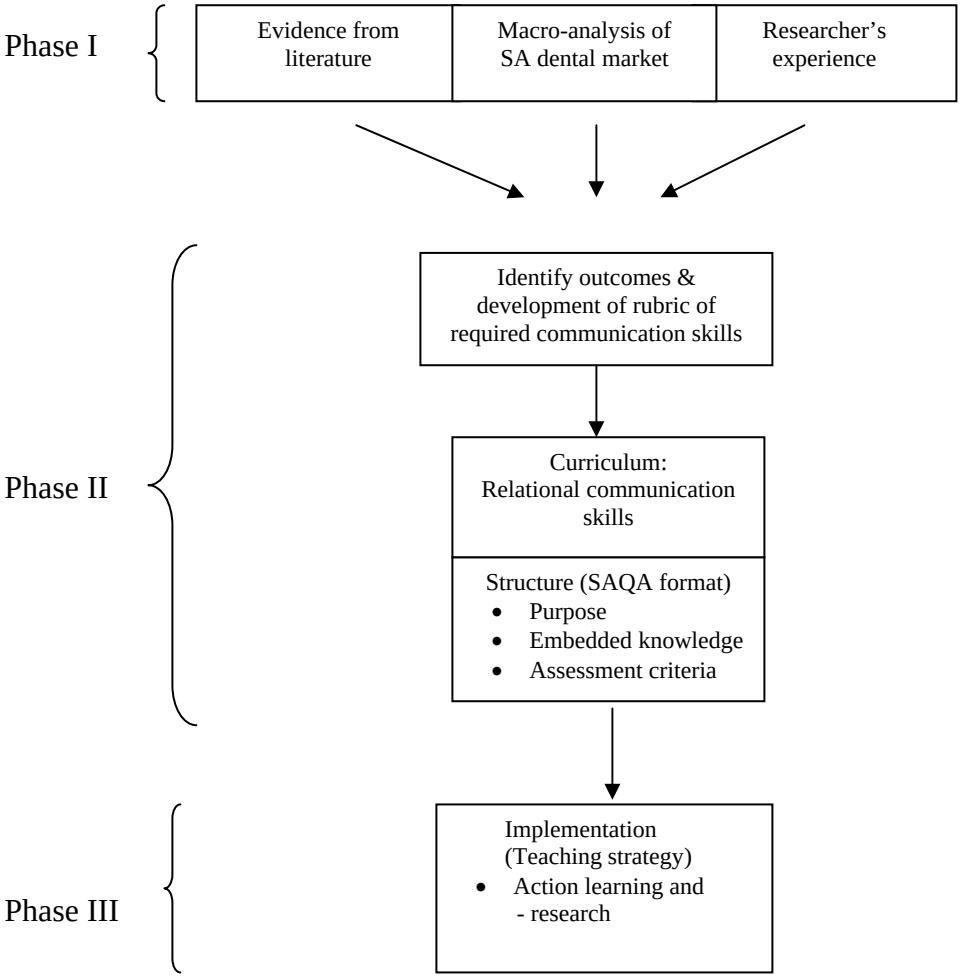

Figure 8 Process of curriculum development in relational communication skills

5.2.1 Identifying outcomes

The first step that was employed in developing an outcomes-based curriculum in relational communication skills was the identification of those specific outcomes and sub-outcomes essential for the dentist to be competitive in the emerging South African dental market in terms of relational communication skills.

These specific outcomes and sub-outcomes were identified through a combination of evidence from the literature (Chapter 4), a macro-analysis of the South African dental market (Chapter 2) and the researcher's 25 years' personal experience of the South African dental market (Figure 8, above). As was described in the literature review (Chapter 4), the five currently used models of doctor-patient communication (Table 22 - Chapter 4, section 4.22) were combined in The Kalamazoo Consensus Statement (Table 23 - Chapter 4, section 4.22) which represents the essential elements of physician-patient communication. However, The Kalamazoo Consensus Statement was further developed by combining it with the Competency Keys: Actualizing the Gold Standards of Communication Skills (121) (Table 24, below), as well the researcher's 25 years' personal experience of the South African dental market.

Table 24 Competency keys: Actualizing the gold standard of communication skills

Introduces self clearly and appropriately
Empathises with and supports the patient
Uses non-verbal communication to make the verbal communication more effective
Avoids the use of medical jargon throughout the interview
Confirms the basic diagnosis
Explores patient's knowledge base of the diagnosis
Prioritizes treatment options and educates the patient to these options
Elicits the patient's preferences and commitment to a treatment plan
Reviews the treatment plan and obtains a mutual statement of commitment
Establishes the treatment plan time-line and follow-up care
Encourages me to ask questions and responds appropriately to my questions throughout the interview
Responds appropriately to the patient's feelings throughout the interview
Accepts the legitimacy of the patient's perspective (non-judgmental)

The abovementioned developmental process resulted in those required specific outcomes and sub-outcomes essential for the dentist to be competitive in the emerging South African dental market in terms of relational communication skills (Table 25, below).

Table 25 Outcomes and sub-outcomes essential for the dentist to be competitive in the emerging South African dental market

Specific outcomes	Sub-outcomes
Opening the interview	▪ Greets the patient ▪ Obtains the patient's name ▪ Introduces self ▪ Attends to physical comfort (here and throughout interview) ▪ Identifies and confirms patient's problem
Gathering information: Structuring the interview	▪ Negotiates an agenda for consultation ▪ Progresses from one section to another using transitional statements (includes rationale for next section) ▪ Attends to timing
Gathering information: Exploration of problems	▪ Encourages patient to give history of chief complaint ▪ Uses open questioning technique(s) ▪ Uses closed questioning technique(s) ▪ Listens attentively (no interruptions; time for patient to think before answering) ▪ Facilitates patient's responses (use of encouragement, silence, repetition, paraphrasing, interpretation) ▪ Clarifies patient's statements which are vague and need amplification ▪ Summarises at end of a specific line of inquiry to verify own interpretation of what patient has said to ensure no important data was omitted
Understanding the patient's perspective	▪ Determines patient's expectations regarding each problem ▪ Picks up verbal cues (patient's need to contribute information/ask questions; information overload; distress) ▪ Picks up non-verbal cues (patient's need to contribute information/ask questions; information overload; distress) ▪ Encourages expressions of feelings ▪ Encourages patient to contribute ideas/suggestions/preferences/beliefs ▪ Accepts legitimacy of patient's views/beliefs (non-judgmental)
Sharing information	▪ Discusses options ▪ Discusses consequences of no action ▪ Provides information (procedures; processes; benefits & advantages; value & purpose) ▪ Uses easily understood language (avoids or adequately explains jargon) ▪ Shares own thoughts; ideas/dilemmas/thought processes
Reaching an agreement on problems and plans	▪ Elicits patient's understanding about plans and treatments ▪ Obtains patients' view of need for action (perceived benefits) ▪ Takes patient's lifestyle, beliefs, cultural background and abilities into consideration ▪ Negotiates mutually acceptable plan (encourages patient to make choices; address concerns) ▪ Encourages patient to be involved in implementing treztment plan (to take responsibility and be self-reliant) ▪ Asks about patient's support network for decision-making
Providing closure	▪ Summarises session briefly ▪ Contracts with patient regarding next step(s) for patient and ▪ dentist ▪ Explains possible unexpected outcomes and safety-nets ▪ appropriately
Building the relationship	▪ Demonstrates interest ▪ Demonstrates respect ▪ Communicates warmth ▪ Demonstrates appropriate non-verbal behaviour (for example eye contact, posture & position, movement, facial expression, use of voice) ▪ Reading, writing, use of computer do not interfere with dialogue/rapport ▪ Shows empathy with patient ▪ Deals sensitively with embarrassing and disturbing topics ▪ Bonds with the patient

5.2.2 Development of Rubric

The next step was to convert the Table of specific outcomes and sub-outcomes - Table 25, above - into a logical and sensible structure (rubric) for teaching and assessing communication skills. This resulted in a *combined* rubric representing an example or template of the required relational communication tasks and skills. It comprises seven communication tasks. For each of the seven communication tasks, various skills are listed, resulting in a total of 43 skills (Table 26, below; Appendix A).

This combined rubric has been chosen as the basis for the proposed curriculum for the purpose of teaching relational communication skills to 3rd years dental students at the University of Pretoria for the following reasons:

- Most of the elements included in this framework are present in each of the five currently used models (Table 22 - Chapter 4, section 4.22) for doctor-patient communication. It represents the collaboration and consensus of individuals with a variety of backgrounds and interests in medical education;
- It provides a logical and sensible structure for teaching and assessing communication skills;
- It focuses on the required knowledge, skills, behaviour and attitudes necessary for establishing a sound dentist-patient relationship;
- It emphasises a patient-centered approach by focusing on the patient's expectations, emotional and psychosocial issues (7), and
- It emphasises a facilitative - as well as an action dimension (74).

Table 26 Combined rubric: combination of The Kalamazoo Consensus Statement (91), the Competency Keys: Actualizing the Gold Standards of Communication Skills (121) as well as researcher's 25 years' experience of the South African dental market

Item number	
	A. Opening the interview
1	Greets the patient
2	Obtains the patient's name
3	Introduces self
4	Attends to physical comfort (here and throughout interview)
5	Identifies and confirms patient's problem
	B. Gathering information
	(i) Structuring the interview
6	Negotiates an agenda for consultation
7	Progresses from one section to another using transitional statements (includes rationale for next section)
8	Attends to timing
	(ii) Exploration of problems
9	Encourages patient to give history of chief complaint
10	Uses open questioning technique(s)
11	Uses closed questioning technique(s)
12	Listens attentively (no interruptions; time for patient to think before answering)
13	Facilitates patient's responses (use of encouragement, silence, repetition, paraphrasing, interpretation)
14	Clarifies patient's statements which are vague and need amplification
15	Summarises at end of a specific line of inquiry to verify own interpretation of what patient has said to ensure no important data was omitted
	C. Understanding the patient's perspective
16	Determines patient's expectations regarding each problem
17	Picks up verbal cues (patient's need to contribute information/ask questions; information overload; distress)
18	Picks up non-verbal cues (patient's need to contribute information/ask questions; information overload; distress)
19	Encourages expressions of feelings
20	Encourages patient to contribute ideas/suggestions/preferences/beliefs
21	Accepts legitimacy of patient's views/beliefs (non-judgmental)
	D. Sharing information
22	Discusses options
23	Discusses consequences of no action
24	Provides information (procedures; processes; benefits & advantages; value & purpose)
25	Uses easily understood language (avoids or adequately explains jargon)
26	Shares own thoughts; ideas/dilemmas/thought processes
	E. Reaching an agreement on problems and plans
27	Elicits patient's understanding about plans and treatments
28	Obtains patients' view of need for action (perceived benefits)
29	Takes patient's lifestyle, beliefs, cultural background and abilities into consideration
30	Negotiates mutually acceptable plan (encourages patient to make choices; address concerns)
31	Encourages patient to be involved in implementing treatment plan (to take responsibility and be self-reliant)
32	Asks about patient's support network for decision-making
	F. Providing closure
33	Summarises session briefly
34	Contracts with patient regarding next step(s) for patient and dentist
35	Explains possible unexpected outcomes and safety-nets appropriately
	G. Building a relationship
36	Demonstrates interest
37	Demonstrates respect
38	Communicates warmth
39	Demonstrates appropriate non-verbal behaviour (for example eye contact, posture & position, movement, facial expression, use of voice)
40	Reading, writing, use of computer do not interfere with dialogue/rapport
41	Shows empathy with patient
42	Deals sensitively with embarrassing and disturbing topics
43	Bonds with the patient

5.2.3 Structuring the curriculum

The curriculum was structured according to the format required by the South African Qualifications Authority (SAQA) and compiled as a study guide (Appendix C). Each student was issued with a copy of the study guide. The structure of the curriculum comprises the following three dimensions:

5.2.3.1 The *purpose* of a curriculum in relational communication skills was stated.

5.2.3.2 *Embedded knowledge* representing the supporting evidence from the literature was defined.

5.2.3.3 *Assessment criteria* were derived from the outcomes and sub-outcomes.

5.3 Conclusion

Chapter 5 described the dental educational research intervention, namely the development of an outcomes-based curriculum in relational communication skills.

Chapter 6 will describe the planning cycle of Phase III of the study - implementation and evaluation of the dental educational research intervention. This planning cycle is part of an action learning and -research paradigm characterised by a process of planning, implementation, observation, reflection and re-planning (Table 27 - Chapter 6, section 6.1).