

## EXPLORING A STRATEGY TO PROMOTE NURSES' HEALTH RESEARCH CONTRIBUTION

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### ABSTRACT

*This article is the last in a series of three articles on a strategy to promote nurses' health research contribution in South Africa. This article describes research that was conducted in the Southern District of the North-West Province to explore a proposed strategy to promote the research contribution of nurses. The proposed strategy is the product of a Delphi study, as described in the preceding article. The need for such a strategy is evident from the seemingly limited recognition of the significance of research conducted by nurses. The purpose of this research was to validate the proposed strategy and to explore its viability in the mentioned district. A qualitative, explorative and descriptive design was followed. Purposive sampling according to selection criteria was used to select participants from a population of stakeholders in the above-mentioned district who are perceived to influence and to be influenced by research. Data gathering took place by means of 11 focus group interviews, after which data saturation was reached, and open coding was employed to analyse data. An independent co-coder assisted with data analysis, and consensus was reached on the results of the research. Results could be categorised into the following: a) opinions that the strategy is necessary but that it should be realistic, b) opinions that there are certain obstacles in the implementation of the strategy and c) suggestions for the implementation of the strategy. The recommendations refer back to the results and conclusions, namely that the latter two aspects describe a refined strategy with suggestions for the implementation of the strategy.*

### OPSOMMING

*Hierdie artikel is die laaste in 'n reeks van drie artikels oor 'n strategie vir die bevordering van verpleegkundiges se gesondheidsnavorsingsbydrae in Suid-Afrika. Hierdie artikel beskryf navorsing wat in die Suidelike Distrik van die Noordwesprovinsie uitgevoer is om 'n voorgestelde strategie vir die bevordering van die navorsingsbydrae van verpleegkundiges, verder te verken. Die voorgestelde strategie is die produk van 'n Delphi-studie, soos beskryf in die voorafgaande artikel. Die behoefte aan so 'n strategie blyk uit die skynbaar beperkte erkenning van die sinvolheid van navorsing deur verpleegkundiges. Hierdie navorsing het ten doel gehad om die voorgestelde strategie te staaf en om die uitvoerbaarheid daarvan in die genoemde distrik te verken. 'n Kwalitatiewe, verkennende en beskrywende ontwerp is gevolg. Doelgerigte steekproefneming, volgens seleksiekriteria, is gebruik om deelnemers uit 'n populasie van belanghebbendes wat beskou word as groepe wat 'n invloed op navorsing het en wat deur navorsing beïnvloed word, te selekteer. Data-insameling het plaasgevind deur 11 fokusgroeponderhoude, waarna dataversadiging bereik is en data-analise deur middel van oop kodering uitgevoer is. 'n Onafhanklike medekodeerder het met data-analise gehelp, en ooreenstemming is bereik ten opsigte van die resultate van die navorsing. Resultate kon in die volgende kategorieë ingedeel word: a) opinies dat die strategie nuttig is, maar dat dit realisties moet wees, b) opinies dat daar sekere hindernisse bestaan in die implementering van die strategie en c) voorstelle vir die implementering van die strategie. Die aanbevelings verwys terug na die resultate en gevolgtrekkings, naamlik dat die laaste twee aspekte*

## BACKGROUND AND RATIONALE

This research forms part of a research project on a strategy to promote the contribution of nurses towards research. Involvement in research is one of the essential roles of the nurse to further develop the scientific body of knowledge of the nursing profession (Wright, 2005:5). However, the perception exists that nurses are not adequately involved in research and that research conducted by nurses generally does not have an impact on the science of nursing (MacVicar, 1998:1305). It is therefore not always recognised in the health sector as research of high quality (Ehlers, 2001:2; Du Plessis, 2007:2). In the preceding phase of this research, the authors conducted a Delphi study to obtain the opinion of a group of research experts on nurses' contribution to research, and on how this contribution might be improved, specifically in the South African context (Du Plessis, 2007:218).

The Delphi study emphasised the need for the formulation and implementation of a strategy to promote nurses' contribution to research. In the context of this study the concept "strategy" refers to a framework or scheme that directs a course of action in a specific situation (Grunig & Repper as quoted by Steyn & Puth, 2000:29). Based on the findings of the Delphi study, a proposed strategy was formulated (refer to Table 2). This strategy implies a clear vision, specific objectives, involvement of key role players and approaches that might be followed in order to promote nurses' contribution to research.

The authors realised that, in order to implement this strategy effectively, a definite "buy-in" into the process is necessary and its feasibility should be verified by means of follow-up research. In line with the view that findings of a Delphi study should be verified in further explorative discussions (Carrol, 2004:33; Hasson, Keeney & McKenna, 2000:1013), the follow-up research was conducted and is described in this article.

## PURPOSE

The purpose of this research was to verify a proposed strategy to improve nurses' health research contribu-

tion and to explore the feasibility of this strategy. This follow-up process was conducted in preparation of the implementation of the strategy in the Southern District of the North West Province.

## RESEARCH METHODOLOGY

The research methodology addresses the research design and the research method. This is described in order that the quality of the research may be evident, and also that the research might be repeated in similar contexts, therefore increasing the reliability of the research. Throughout this study general ethical principles (World Medical Association, 2002:1-5; Brink, 2002:37-54; Strydom, 2002:62-75) were adhered to and guidelines to promote trustworthiness (Krefting, 1991:215) were followed.

## ETHICAL ASPECTS

The researcher obtained permission from the ethics committee of the North-West University (reference no. 04K22). The researcher ensured that she was equipped to conduct the research and she was guided by an experienced promoter to ensure a high level of scientific rigour throughout the research. To ensure that principles of respect, justice and beneficence of participants were adhered to, the researcher viewed participants to be autonomous, and therefore provided adequate information regarding the aims and methods of the research, institutional affiliation, as well as anticipated benefits and potential risks and discomfort. This information created the opportunity for them to choose to participate on a voluntary basis, abstain or withdraw from the research at any time without reprisal. Fair selection and treatment was ensured through scientific sampling, and by clearly indicating what was expected from participants. The researcher also protected participants from possible discomfort by ensuring voluntary participation, anonymity and confidentiality. Audio-taped recordings of interviews and transcripts were marked by means of codes, and discarded after completion of the research.

## TRUSTWORTHINESS

Guba's model of trustworthiness was followed (Krefting, 1991:215). The following strategies were implemented: prolonged engagement, namely that adequate time was spent with each group of participants and allowing time for the establishment of rapport, so that participants could feel comfortable and safe enough to share opinions that they might have viewed as sensitive. Questions were rephrased and/or repeated as applicable and facilitative communication techniques were used to ensure adequate exploration of the topic. A further strategy, namely reflexivity, was employed, which demands that the researcher writes field notes directly after each focus group interview, specifically on the logistics, method of interviewing and personal feelings and thoughts. This enabled the researcher to maintain a critical, questioning thought process throughout data gathering, thus limiting the threat of becoming over-involved.

Furthermore, the researcher's trustworthiness as a human research instrument was evident through her experience and skills in research, interviewing and scientific writing skills, which she gained during basic and advanced studies and through practicing as a psychiatric nurse and as a lecturer and research supervisor.

A dense description of the research process and of the characteristics of participants is provided, ensuring that the research is auditable. Furthermore, the involvement of co-coders during data analysis, and consensus discussions between these co-coders and the researcher enhanced the consistency of the results. Peer examination and triangulation also contributed to the trustworthiness of the research.

## RESEARCH DESIGN AND METHOD

An explorative and descriptive qualitative design was followed. According to Burns and Grove (2005:232) this design is appropriate when more information about a relatively unexplored field of study is needed, as in this case.

The context within which the research took place was the Southern District of the North West Province. A literature study preceding the Delphi study indicated that there were specific research-related stakeholders

who might play a role in promoting nurses' research contribution (Du Plessis, 2007:251). These stakeholders are entities who influence or are influenced by research. Within the Southern District of the North West Province prominent research stakeholders include academics/educators, clinical facilitators, undergraduate, post-registration and postgraduate students at a nursing department at a local university and a nursing college, a health-research committee steered by the Provincial Department of Health, multi-disciplinary teams, including nurses conducting research or working at health care institutions in this District and nurses practising in clinical settings.

A discussion of sampling, data gathering and data analysis follows.

## SAMPLING

Purposive sampling, as described by Babbie and Mouton (2004:166) was utilised to select potential focus groups from the above-mentioned study population for participation in this research. Selection criteria for inclusion in the focus groups included that those participants:

- should have been willing to participate in a group;
- participated voluntarily after informed consent were obtained; and
- should have formed part of a group of stakeholders who influence or are influenced by research conducted by nurses in the Southern District of the North-West Province.

These selection criteria were developed based on the suggestion by Hasson *et al.* (2000:1013) that it is meaningful to involve participants who might be involved in implementing the results, in this case the strategy. Stakeholders influencing and influenced by research in the specific area where thus recruited. Potential participants were recruited by means of invitation letters followed up by telephone calls.

The sample size was determined by data saturation, as described by Woods and Catanzaro (1988:565). Although recurrent themes could be identified after 11 focus group interviews, the nature of the participating groups was homogenous (refer to Table 1) and had unique foci within their own context. This is noted as a

limitation of the research, and a more comprehensive level of data saturation might have been obtained if stakeholders were not interviewed in homogenous groups (as listed in Table 1) but rather in heterogenous groups with participants from various clusters of stakeholders in each group. Another limitation is that it might have been meaningful to include more “nurses in practice” in the sample, as they seem to be the main target group of the strategy.

## DATA GATHERING

Data gathering took place by means of focus-group interviews. Focus-group interviews are well planned group discussions held to obtain a group’s opinion on a specific topic (Kingry, Tiedje & Friedman, 1990:124), and were therefore appropriate in this research.

After obtaining permission from the ethics committee, relevant authorities were contacted and permission obtained to contact potential individual participants and to conduct the focus-group interviews. In order to obtain voluntary, informed participation the researcher then

sent written invitations to each potential participant in the identified groups. These written invitations were followed by telephonic and/or face to face contact in order to answer questions and make appointments for the focus group interviews. Prior to the focus-group interviews, informed consent was obtained. During the interviews the proposed strategy (see Table 2) were briefly presented.

Participants’ opinions on the strategy itself, as well as on the feasibility of the strategy, were then explored. Their thoughts and ideas were probed by a list of open-ended questions, which was not followed strictly but was used as a point of departure in the discussions. These questions were formulated based on the results of the Delphi technique, and included the following items:

- What is your opinion on the proposed strategy?
- How do you think this strategy could be implemented in your context?
- What related activities are already in place in your context and how can it be linked to the proposed strategy?

**Table 1: Profile of participating groups**

Health research committee (Provincial Department of Health)	6 members: doctors, professional nurses, academics; with varying levels of expertise in research.
Nurse academics at the university’s nursing department	8 members: professional nurses; both novice and experienced researchers.
Nurse educators at the nursing college	4 members: experienced nurse educators with little experience in research.
Clinical facilitators at the university’s nursing department	4 members: professional nurses in practice; little experience in research.
Undergraduate nursing students at the university’s nursing department	6 members: fourth-year nursing students who have to complete a research project as part of their curriculum.
Undergraduate nursing students at the nursing college	6 members: fourth-year nursing students, who received an introduction to research as part of their curriculum.
Post-registration students at the nursing college	20 members present, the whole class volunteered to participate: professional nurses practising in primary health care, with little experience in research.
Post-graduate students at the university’s nursing department	5 members: professional nurses at the beginning phase of post-graduate studies. They have limited experience in research.
Multi-disciplinary research team at the university’s Faculty of Health Sciences	4 members: academics from schools of social work (3) and physiology (1). All are experienced researchers.
Multi-disciplinary team practising in the Southern District of the North West Province	7 members, 4 medical doctors, 2 pharmacists, 1 dietician. Except for one member, these members have little experience in research.
Nurses practising in the Southern District of the North West Province	15 members: professional nurses in management positions. They have limited experience in research.



**Table 2: A proposed strategy to promote nurses' research contribution**

<p><b>Vision</b></p> <p>The vision of the strategy is that nurses make a significant contribution in health research, by engaging in relevant, high-quality research that leads to:</p> <ul style="list-style-type: none"> <li>• improvement of the discipline of nursing;</li> <li>• improvement of health and health care;</li> <li>• personal and professional development of nurses;</li> <li>• refinement of research methodologies;</li> <li>• recognition of nurses as researchers;</li> <li>• recognition of nurses as leaders in research; and</li> <li>• recognition of health research conducted by nurses.</li> </ul>
<p><b>Objectives</b></p> <p>The objectives of the strategy are to promote the significance of the contribution of nurses in health research by means of the following:</p> <ul style="list-style-type: none"> <li>• promoting nurses' level of competence, confidence and motivation regarding research;</li> <li>• increasing the degree to which a focussed, coordinated and collaborative effort is followed; and</li> <li>• promoting the dissemination and utilisation of research.</li> </ul>
<p><b>Key role player</b></p> <p>The research supervisor/educator might play a key role, acting as a research leader and mentor for developing researchers.</p>
<p><b>Approaches</b></p> <p><b>Research capacity building</b> at undergraduate, post-basic, post-graduate and practice level.</p> <p><b>Building partnerships</b> to create cross-functional, multi-disciplinary, multi-sectoral teams who:</p> <ul style="list-style-type: none"> <li>• conduct collaborative research;</li> <li>• promote and advocate for health research; and/or</li> <li>• design and implement evidence-based practice strategies.</li> </ul>

- What would you say are obstacles in the implementation of this strategy?
- Who do you think should take ownership to initiate and drive such a strategy?

The interviews were conducted by the researcher, who has proven skills and experience in conducting qualitative research interviews. Communication techniques, such as clarifying, summarising and reflection, as described by Kneisl, Wilson and Trigoboff (2004:154-155), were used to facilitate the discussion. The interviews were conducted at the various groups' work/study places, as convenient to the participants, and were audio-taped and transcribed for the purpose of data-analysis. Field notes were taken by the researcher and were used in conjunction with transcriptions during data analysis. Throughout this process confidentiality and privacy were ensured.

## DATA ANALYSIS

Data analysis took place by means of open-coding (Babbie & Mouton, 2004:499). Categories of results, with sub-categories, were created by coding words and themes - as units of analysis - and grouping these codes together in logical themes. An independent co-coder

assisted in data analysis and a consensus meeting between the researcher and the co-coder was held to verify the consistency of the results.

## LITERATURE CONTROL

A literature control was performed in order to ground findings in literature, as well as to identify similarities and differences, as explained by Burns and Grove (2005:95).

## RESULTS

Recurrent themes were evident in all interviews, to which different groups gave varying emphasis, depending on their unique contexts and current focus. Recurrent themes could be grouped into categories, namely opinions on the strategy, obstacles in the implementation of the strategy and suggestions regarding the implementation of the strategy (refer to Table 3).

The detail of the results is discussed below and quotes from participants – in italics and in brackets – are presented to further explain the categories.

## Opinions on the strategy (Table 3, Column A)

### ***The strategy is seen as necessary, relevant and valuable***

Participants verified that the strategy is necessary, relevant and valuable: *"Ek dink persoonlik dat so 'n strategie, um, baie nodig en sinvol is"* (I personally think that such a strategy is necessary and meaningful). They confirmed that the strategy might be valuable in promoting nurses' competence and confidence regarding research, and added that it might also strengthen nurses' perception of themselves as professionals *"We must be competent enough to say: 'We say ...'"*. Several authors (Camiah, 1997:1194; Zeelie, Bornman & Botes, 2003:6; Hackman, 2000:222) also refer to the necessity of research-related strategies to bring about recognition of the nursing profession, but they focus more on strategies to improve research utilisation and strategies for education in research, indicating that the strategy proposed in this research does not focus on isolated aspects, but suggests a more comprehensive approach. Another viewpoint from literature on research-related strategies is that of Kitson (1996:1647), who warns that putting too much emphasis on research alone to gain recognition for the profession poses the risk of neglecting the equally important aspect of the practice of nursing care.

### ***The strategy should be realistic and practice-oriented and its implementation might be a challenge and will take time***

Although participants in the focus groups viewed the strategy as valuable, they questioned the feasibility and strongly emphasised that the strategy should be realistic, and should aim to benefit health care practice: *"dit klink nice op papier, 'n ideaal"* (It sounds nice on paper, an ideal). Participants in the focus groups viewed the implementation of the strategy as a challenge and mentioned that it will take time: *"but to have it implemented in practice that would be the challenge"*. These opinions are similar to the opinions of participants in the Delphi study (Du Plessis, 2007:237).

Furthermore, similar to the opinions voiced in the Delphi study (Du Plessis, 2007:237), participants in the focus groups viewed nurses as having the potential to make a significant research contribution. Nurses are seen as having the potential to make a research contribution as

they play a primary role in health care and they are directly involved in patient care where they are in a position to identify trends and implement research results *"Hulle kan tendense agterkom, op grondvlak"*. (They can identify trends at grassroots level). Additionally, they have clinical skills and knowledge that enable them to judge treatment and practice *"... and the treatment that the doctor ordered for that patient, as a nurse you'll be seeing that this is not helping"*. Furthermore, nurses are already involved in research-related activities, for instance observation and taking statistics, although they might not be aware of the research potential of these daily activities *"They take statistics on almost everything. They have these flow sheets – that's going to be in their files. I mean, in other words they actually are already doing research"*. These views are supported in literature, by authors such as Monturo (2003:28).

### ***Nurses should be research-minded in order to play a significant role in research***

In order to fulfil a significant role in research, nurses, especially those in practice, should become more research-minded. They should have inquiring minds, question practice, be committed to be actively involved in research and take the initiative to identify research problems in practice by observing trends and linking observations that might have professional significance: *"Nurses should have inquiring minds and identify research problems from practice, they must question practice itself"*. Watson, Clarke, Swallow and Forster (2005:1043) also express this opinion, but add that while there is a need for nurses to be research-minded, they are also expected to cope in dynamic, demanding health care settings.

## Obstacles in the implementation of the strategy (Table 3, Column B)

### ***Nurses are generally not recognised as researchers or professionals and tend not to be research-minded***

A main obstacle mentioned by participants in the focus group interviews is that nurses in practice are generally not recognised as researchers, by themselves or by other professions, and they tend not to be research-minded or to be involved in research. Uys (as quoted by Webb, 1998:485) as well as Micevsky, Sarkissian, Byrne and Smirnis (2004:229) share this opinion. Participants in this research explained their

Table 3: Results of the focus group interviews

A. Opinions on the strategy	B. Obstacles in the implementation of the strategy	C. Suggestions for the implementation of the strategy
<p>The strategy is seen as necessary, relevant and valuable, as it might promote nurses' competence and confidence in research and contribute to the recognition of nurses as professionals.</p> <p>The strategy should be realistic and practice-oriented and its implementation might be a challenge and will take time.</p> <p>Nurses have the potential to play a significant role in research. In order to fulfil this role, nurses should be research-minded.</p>	<p>Nurses are generally not recognised as researchers or even as professionals, and they tend not to be research-minded or involved in research.</p> <p>The lack of research-mindedness is the result of a number of factors, which at the same time, further strengthen the limited research-mindedness. These factors include the following:</p> <ul style="list-style-type: none"> <li>• nurses do not see research as part of their role;</li> <li>• nurses do not see the value of research in practice;</li> <li>• nurses do not always have the knowledge, skills or resources to do research.</li> <li>• nurses fear research as being difficult and lack confidence to get involved in research.</li> <li>• nurses focus on surviving in difficult work circumstances, rather than on research;</li> <li>• nurses are not encouraged by nurses in management positions to become involved in research;</li> <li>• nurses tend not to disseminate and/or implement research results; and</li> <li>• formal training in research at <i>undergraduate and post-registration</i> level is being offered but does not emphasise the importance of being involved in research and does not foster interest in research.</li> </ul>	<p><b>Demystifying research as an integral part of practice and as being of value</b></p> <p>An intrinsic need to be involved in research should be stimulated by creating awareness of the value of research, and by demystifying research as being an integral part of the role of the nurse and as feasible.</p> <p><b>Encouraging nurses to disseminate and utilise research results</b></p> <p>The following should be encouraged at practice level, to further facilitate mind shifts about research as integral part of the role of nurses, as well as to improve the recognition of research conducted by nurses:</p> <ul style="list-style-type: none"> <li>• Guidance should be given to nurses regarding dissemination and utilisation of research.</li> <li>• Nurses should take responsibility to initiate the dissemination and utilisation of their own research.</li> <li>• Nurses should disseminate their research in an accessible way to nurses in practice, the academic sector and the public as beneficiaries of research.</li> <li>• Nurses should be encouraged to utilise research results, as well as to conduct research with the intention of implementing the results and conducting follow-up research on the implementation.</li> </ul> <p><b>Facilitating research-mindedness by means of research capacity building</b></p> <ul style="list-style-type: none"> <li>• This process might already start at high-school level.</li> <li>• Nurse education at undergraduate level should specifically promote newly qualified nurses' commitment to the profession, as well as practice-oriented research. This might be achieved by means of the following: <ul style="list-style-type: none"> <li>▪ Research should be integrated into nursing curricula, from the first year level, where research-related concepts should be introduced, to the final year, where students should be expected to complete a research project of limited scope.</li> <li>▪ Approaches in nursing education and in teaching research as a subject should stimulate research-mindedness and interest.</li> </ul> </li> <li>• In formal research training programmes, whether at undergraduate or post-graduate level, the programme should be well structured and organised, expectations should be clarified and communication among facilitators as well as between facilitators and students should be clear.</li> </ul>

	<ul style="list-style-type: none"> <li>• There should be a preparatory programme before nurses enter the post-graduate programme.</li> </ul> <p><b>Partners in the strategy should fulfil specific roles</b></p> <ul style="list-style-type: none"> <li>• Nurses in the academic setting should initiate the implementation of the strategy. They play an important role as mentors for developing researchers. They should be involved in practice in order to identify relevant research problems and conduct research on these problems in collaboration with nurses in practice. They should be empowered to conduct, teach and supervise research. A research forum/committee to support these role players should be created.</li> <li>• The clinical facilitator might play an important role as a link between practice and the academic institution.</li> <li>• Nurses in management positions in the clinical practice setting should promote research interests among own staff members and empower nurses to do research by being involved in research. They should create open relationships with staff members as well as working environments in which nurses are enabled to conduct research.</li> <li>• Research-related committees are needed as important partners in enabling nurses to be involved in research by providing infrastructure and resources, and as partners in the dissemination and utilisation of research.</li> <li>• Collaboration with multi-disciplinary team members is necessary and feasible. It provides opportunities for mentorship, funding and the recognition of nurses as equal research partners. Nurses should initiate research-related collaboration with multi-disciplinary team members.</li> <li>• It seems that research in collaboration with relevant corporations should be considered, as this might lead to patents and products that make a visible difference in practice.</li> </ul>	
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opinion by saying that nurses are generally not motivated to do research or to take leadership in research. Nurses seemingly have a clinical, practical aptitude rather than an aptitude for research “*Nurses, they are doers, they are not thinkers*”.

Additionally, nurses in practice are currently not viewed as professionals or independent practitioners and are not involved in research projects as equal partners, which discourage them even further from getting involved in research “*Verpleegkundiges word nie erken as professionele lui [nie]*”. (Nurses are not acknowledged as professionals); “*They tend to play a submissive role.*”; “*We are not involved as equal partners, and not informed about the outcome of research*”. This opinion is verified by Dolan (1999:1009) and Uys (as quoted by Webb, 1998:486), who confirm that nurses tend to be submissive in the presence of, specifically, medical professionals.

### **The lack of research-mindedness is the result of a number of factors**

Participants mentioned factors that might be both the cause and the result of a lack of research-mindedness. One of these factors are that nurses seemingly do not see research as part of their role, but view research as the responsibility of academic institutions “... *sien dit as taak van universiteit, akademici, wag vir ander om navorsing vir ons te doen, en ons is eintlik die mense wat met pasiënte werk ...*” (... see it as the task of the university, academics, wait for others to do research for us, and actually we are the people who work with patients ...). Furthermore, although nurses value research as necessary to practise scientifically and cost-effectively and to contribute towards their ability to engage in scientific conversations with multi-disciplinary team members, they currently do not see how research improves practice, and therefore do not regard research as something worth doing (“*[Navorsing is] soos ‘n hond wat karre jaag*”. ([Research is] like a dog chasing cars); “*Resultate word nie geïmplementeer, indien wel sal ons belangstel in navorsing*” (Results are not implemented, if it were, we would be interested in research). Olade (2003:14) also refers to these factors.

Another factor, mentioned in both the Delphi and the focus-group studies, is that nurses in practice do not always have the necessary resources, knowledge or skills to do research. Participants in the focus groups

also emphasised that nurses may lack confidence to conduct or be involved in research because they perceive and fear research as something extensive and difficult: “*Nurses lack knowledge and skills in research, all nurses at work should be empowered with knowledge and skills*”; “... *we are scared of making fools of ourselves*”; “*Ek is bang vir navorsing*” (I am scared of research). These obstacles are also described in literature (Olade, 2003:14), but not specifically mentioned in relation to one another as described above.

Furthermore, participants in the focus groups pointed out that nurses currently focus on surviving difficult work circumstances, namely work overload, staff shortages and lack of time, and view research as additional work for which they do not have time or energy: “*Current work circumstances are difficult*”; “*[Daar is] eerder ‘n kultuur van oorlewing, navorsing moet voorgestel word as iets wat koste en tyd spaar*” ([There is] rather a culture of survival, research should be presented as something saving cost and time). Pienaar (2005) discusses the difficult work circumstances of nurses, while Micevsky *et al.* (2004:229) confirm that these difficult work circumstances limit nurses’ involvement in research.

At the same time, the perception exists that nurses in management positions usually do not support nurses to conduct research, as they tend not to show interest in research and do not encourage staff members to be involved in research: “*They are just too busy to even consider nursing research*”. Olade (2003:14) also refers to this barrier, indicating that a lack of encouragement from management leads to a lack of interest in research.

Another major obstacle is that nurses who are involved in research tend not to disseminate or implement research results. A revealing result was that nurses in practice who are involved in practice-oriented research do not view it as important, or do not have the confidence to disseminate the results of research, even if they utilise research results. Furthermore, nurses who conduct research for the purpose of obtaining an advanced qualification tend to not implement results. This phenomenon is also described in the Delphi study (Du Plessis, 2007:237-238). Rolfe (2001:49) on the other hand, explains that this lack of dissemination and utilisation might stem from the social sciences para-

digm that the purpose of research is to develop theory, rather than to improve practice. He therefore argues that it is not necessarily because of limited research-mindedness that research is not utilised in practice, but rather that current research does not answer to the needs of the ever-changing practical context (Rolfe, 2001:52).

A further gap is that, although formal training in research at undergraduate level is being offered, the importance of being continuously involved in research is not necessarily emphasised enough and interest in research is not fostered enough: *"I don't think there's enough, um, urge to the students, they don't urge students enough to be part of research, to read research, to get a bit more information"*. Participants also mentioned that there seems to be a significant gap between training in research methodology at undergraduate and post-graduate level: *"You have lost some of the basic research skills, and to start afresh, is a big, big challenge, and that is why some of us don't complete, you know, the post-graduate [education]."*

### **Suggestions for the implementation of the strategy (Table 3, Column C)**

In order to improve the feasibility of the strategy, participants made suggestions regarding the implementation of the strategy. These suggestions could be grouped together into suggestions on demystifying research as an entwined part of practice and as being of value, encouraging nurses to disseminate and utilise research, facilitating research-mindedness by means of research capacity building and opinions on partners with specific roles in the strategy.

#### ***Demystifying research as an integral part of practice and as being of value***

Participants in the focus groups were of the opinion that research should be demystified and should be shown as being an integral part of the daily activities and professional role of the nurse, and being practically realisable and manageable. This entwinement of research within professional practice should be emphasised: *"Kommunikeer vervlegtheid"* (Communicate entwinement). Rolfe (2001:55) also argues that theory and practice cannot be separated, and that theory and practice are mutually enhancing.

Participants further suggested that an intrinsic need to be involved in research should be stimulated: *"Research should not be imposed on you, it should come from within"; "... need to get nurses interested in research, by raising awareness of the value of research to improve practice, to strengthen nurses' confidence as practitioner, and to improve the acknowledgement of nurses as professionals and researchers"*. This need might be stimulated by creating an awareness of the personal reward and practice value of research. Hundley, Milne, Leighton-Beck, Graham and Fitzmaurice (2000:87) also found that nurses do not appreciate the importance of research unless its value is clear to them. MacVicar (1998:1314) specifically describes the personal reward of being involved in research, namely a feeling of control, self-direction and autonomy; backing for questions; being able to speak to other professions about research; access to knowledge and keeping up to date. This implies that being involved in research might address the need of nurses to be regarded as professionals and to be assertive in practice and in research.

Participants suggested ways to enable nurses to experience research as an integral part of practice as well as to experience the value of research. These suggestions include that nurses should be encouraged to identify research problems in practice and to initiate informal research in practice, which may develop into more formal research, and that they should be made aware of the academic setting as a resource and link to the academic sector for mentorship and support: *"... needs support in interpretation, analysis of findings"; "... then link interdisciplinary and work together"*. Research approaches that might be followed to illustrate the feasibility and value of research in practice include quality assurance, action research and case studies. The dissemination and utilisation of research results should be emphasised, to ensure that the importance of research in improving practice is communicated, and interest and positive attitudes are nurtured: *"I think the sooner also that [research] presentations happen, the better, because that is going to make us see how important is research"*. Rolfe (2001:56) supports this view, while he also emphasises that this type of approach is only possible if partnerships exist between the academic setting and practitioners.

### **Encouragement of nurses to disseminate and utilise research results**

Participants in the focus groups emphasised, more than in the Delphi study, that the dissemination and utilisation of research conducted by nurses should be encouraged at practice level, to further create a mind shift that research could be part of everyday practice, as well as to make other members of the multi-disciplinary team aware of the nature and value of research conducted by nurses.

Practical suggestions by participants on how to achieve this are described in Table 3 (Column C). Guidance in dissemination and utilisation should include scientific writing workshops and raising awareness among nurses in practice of the importance of documenting research. Furthermore, nurses should not wait to be invited to disseminate and/or implement their research, but should initiate this and even market their research and their expertise in research. Research results should not only be disseminated in academic nursing journals, but also in medical journals, and in lay terms in more informal publications. Media such as radio and television should also be used. Presentations of research to nurses in practice and the general public should be practice-oriented and not high-sounding. Similar suggestions are made in the Health Research Policy of South Africa (South Africa, 2001:16).

Nurses should also be encouraged to conduct research with the intention of implementing the results – and not only to focus on attaining qualifications – as well as to evaluate the impact of implementing research findings by means of follow-up research. Estabrooks, Floyd, Scott-Findlay, O’Leary and Gushta (2003:517) and Zeelie *et al.* (2003:9) support this view.

### **Facilitating research-mindedness by means of research capacity building**

While participants in the Delphi study mentioned research capacity building in practice, at undergraduate level, post-registration level and post-graduate level (refer to Table 2), participants in the focus groups mainly focussed on research capacity building at undergraduate level. This may point to the current need expressed by the focus group participants, namely that attention should first be given to preparing undergraduate students as research-minded nurses.

It seems that participants in the focus groups emphasised that research capacity building should specifically aim to instil research aptitudes, as explained in the following discussion.

Two groups of participants in the focus groups mentioned that research-mindedness might already be instilled at high-school level by means of the outcomes-based teaching approach that is currently followed in the education sector and by creating and encouraging research as a career option: “*You can even at school level you can try to promote research*”. This seems to be a unique finding in the context of this research.

Participants expressed the need that nurse education at undergraduate level should specifically promote newly qualified nurses’ commitment to the profession, as well as practice-oriented research: “*So, it’s really necessary for all the education institutions to really put some more emphasis on the role of research also for the betterment of patient care*”. Rolfe (2001:176) confirms that nurses in practice need nurses in education to provide a research course with a strong clinical base.

Several practical suggestions were made regarding education in research at undergraduate level. These include the following:

Research should be integrated into nursing curricula. From the first year of training, research related concepts, such as questioning, observation, improvement of patient care and identifying research problems in practice, should be fostered. Students should also be equipped with language skills, skills in literature searches, scientific writing skills and computer skills. It should be a requirement that students should have completed a research project of limited scope on completion of the undergraduate programme in nursing: “*En dat hulle voor hulle hier uitstap dit [navorsing] wel doen, maar dit moet lekker wees*”. (And that they, before they leave here do it [research], but it should be enjoyable”). Zeelie *et al.* (2003:4-11) formulated standards for nursing education in research, and the above-mentioned opinions are similar to these standards.

Some participants in the focus groups suggested that students might experience research more positively if the research project evolves from student nurses’ involvement in practice, and if it forms part of both the

theoretical and practical requirements of the curriculum, allowing them time for the completion of the project. MacVicar (1998:1307) describes a similar approach, and argues that such an approach leads to the perception of research as being merged within practice, giving meaning to being involved in research.

Further practical suggestions were that approaches that might stimulate research-mindedness, such as problem-based teaching, should be considered, as nursing education should stimulate the identification of relationships and trends. Furthermore, in teaching research as a subject, the theory of this module should be presented simultaneously with the execution of the research project expected of students, so that they can equip themselves with theoretical knowledge while executing the research process. The rationale for conducting research should be clarified with the students, and the "success stories" of research, demonstrating the professional and personal rewards of research, should be shared with students. Nurse educators should be up to date with newest trends in their subject and communicate these with students, and convey enthusiasm regarding research. Students should also have an opportunity to present their research results, as part of learning and motivational opportunities.

In formal research training programmes, whether at undergraduate or post-graduate level, the programme should be well structured and organised, expectations should be clarified and communication among facilitators as well as between facilitators and students should be clear: *"The way they're organised in a programme, some of the things are very, um, it's not structured ... sometimes there are expectations that you can't really meet"*. In addition, there is a need for a preparatory stage, such as a workshop or a bridging course to clarify expectations and perceptions and to reinforce basic research knowledge and skills. A similar opinion was raised in the Delphi study, namely that the honours level should be re-introduced in nursing programmes (Du Plessis, 2007:237).

### **Partners in the strategy should fulfil specific roles**

Participants' opinions on key role players, collaborative efforts and approaches (refer to Table 2), as well as on ownership of the strategy (refer to list of open-ended

questions) could be grouped together to form this category of results about partners in the strategy (refer to Table 3, Column C). Participants were of the opinion that a number of partners should be involved in the execution of the strategy. These partners have specific roles and include nurses in the academic setting, clinical facilitators, nursing management in the practice setting, research committees, members of the multidisciplinary team and relevant corporations.

### ***The nurse in the academic setting (research supervisor/nursing educator)***

The proposed strategy indicates that the nurse in the academic setting should be a key role player in the strategy (refer to Table 2). Participants in the focus groups agreed with this suggestion, and a recurrent theme was that the research supervisor/nurse educator should initiate the implementation of the strategy. Participants suggested that a starting point should be that nurses in academic settings should reach out to nurses in practice, including those working in academically isolated health facilities, to raise awareness regarding research, to demystify research and to identify and partner with groups/individuals who are already interested in research: *"They should not only reach out to nurses in academically isolated hospitals but also to research-active groups in practice"*. They should reach out in such a manner that the nurse in an academic setting should become involved in practice as equal members of the health care team. This will enable them to identify research problems and to nurture practice-oriented research. Murphy (2000:705-706) agrees that the nurse in the academic setting should liaise with nurses in clinical practice, and also indicates that mutual trust is a prerequisite for collaboration.

Additionally, participants in the focus groups confirmed the findings of the Delphi study (Du Plessis, 2007:238) that nurses in academic settings, whether they act as research supervisors or nursing educators, play an important role as mentors in research: *"Adequate mentorship is the key for the development of any person"*. According to participants this role should facilitate the motivation of nurses in clinical settings to be involved in research and to support them: *"Then [her] motivation it's what pushed me, then I said really if other people see the potential in me to develop, why should I say I'm not doing this, so let me go for it ..."*. It



also involves a responsibility to nurture a positive attitude towards research and a research aptitude, including breaking the fear surrounding research. Nurses conducting research need to experience that the research supervisor/nurse educator, as someone who has knowledge, skills and insight in research, is available to them for respectful guidance and support. Uys (as quoted by Webb, 1998:485) adds that fulfilment of the role of mentor contributes to the creation of an environment in which research is encouraged.

Furthermore, nurses in the academic settings should act as role models by being actively involved in research themselves and by facilitating the implementation of research findings: *"He or she should do research in order to be able to teach research"*. They therefore need to be empowered to fulfil this role. Participants suggested that a research forum or committee might be formed to support these role players.

#### **Clinical facilitator**

The clinical facilitator – a nurse working in practice and guiding nursing students in practical settings – is also seen as an important role player in improving the involvement of nurses in research. This partner acts as a role model for nursing students with regard to nursing care, but also with regard to being research-oriented. The clinical facilitator might fulfil this role, as he/she has contact with both the academic and practice settings: *"Ja, as ons saam met die kliniese begeleiers die prakties doen, en nie net die teorie nie ... as ons ingaan en navorsing doen dat hulle ons daarmee help ..."* (Yes, when we do practicals together with the clinical facilitator, and not just the theory ... when we go in and do research that they help us ...). This suggestion was made by undergraduate students, but not specifically mentioned by clinical facilitators themselves. A similar opinion found in literature is that there should be liaison between the teacher and practitioners to create a good learning environment (Murphy, 2000:712).

#### **Nurses in management roles in the clinical setting**

According to the participants, nurses in management roles in the clinical setting should play an important role in the strategy in creating an environment conducive to research, by fostering research interest and open relationships with staff members. This might encourage nurses to be interested and involved in research: *"... to have nursing managers promote research*

*amongst their own staff members"*. Specific suggestions included that regular, structured communication between nurses in the academic sector and nursing management is necessary and that a manager in a particular health care institution, who has an interest in terms of research, should be identified as a leader to promote research in that institution. Such a leader could act as a mentor in practice, and not only focus on administrative tasks, but also act as role model in improving patient care. Health-care institutions should take responsibility to keep staff members up to date with current information, for instance by means of in-service training. Similar opinions were found in literature (Olade, 2003:14; Camiah, 1997:1198). Hundley *et al.* (2000:87) specifically describe the value of creating an enabling environment, as it creates opportunities for the value of research to be communicated, as well as sensitivity for staff morale and commitment.

#### **Research committees**

Existing research committees or envisaged research committees are viewed by participants as important partners in encouraging nurses to be involved in research by demystifying research and raising awareness about research. *"I think that it's very clear that we [research committee] want to really, the various, you know, tactics, you know, of raising the profile around research"*. Research committees might also be useful as vehicles for the dissemination and utilisation of research, and they might have a positive influence on the implementation of results: *"Ideally spoken we want to see the [committee] having lots of influence in the implementation of research and the better of things"*, for example, by creating and maintaining databases of all health-related research in a specific geographical area and by using these databases to inform health-care institutions, preferably after translating research findings into practical guidelines. They could also provide an environment where policy decision-making could actually be based on research findings. They should communicate funding opportunities to nurses in practice and play a role in research capacity building. The Health Research Policy of South Africa (South Africa, 2001) prescribes the formation of research committees on provincial level, with similar tasks as suggested by the participants in this research.

#### **Multi-disciplinary team members**

The multi-disciplinary team has a role to play, specifi-

cally in collaborative research-related efforts. Participants in both the Delphi study and the focus-group study viewed collaborative research as being feasible, valuable and as providing opportunities for mentorship, funding and development of nurses as researchers. Research in a multi-disciplinary milieu was also seen as an opportunity for promoting recognition of nurses as equal research partners, learning about each other's roles and developing an appreciation for each other's knowledge and skills: "*And this collaborative approach will also bring people into recognising our profession as also making a big contribution because if we then have that collaborative approach, we go to him, we present what we are doing, what we have been doing, so they can see we are improving our practice and we are here to stay*". Several authors support the idea of collaborative research-related activities (Uys, as quoted by Webb, 1998:485; Olade, 2003:14).

Participants in the focus group also emphasised the importance of nurses taking responsibility to initiate collaborative research, to delineate roles in such research and to be assertive regarding their own inputs in this research. This approach might limit the risk that nurses are only involved as field workers, and not as recognised researchers, as pointed out in the Delphi study (Du Plessis, 2007:238).

#### **Collaboration with relevant corporations**

Another suggestion, although not emphasised by participants in the Delphi study (Du Plessis, 2007:237), was that nurses should collaborate with corporations to conduct research which leads to the development of products that might be used to improve practice. These products might generate funds, promote the recognition of nurses as researchers and demonstrate the value of research: "... *letterlik 'n behoefte wat daar bestaan korporatief saam met daardie maatskappye navorsing doen, en dit in 'n produk terugploeg*" (... literally a need that exists corporately do research together with those companies, and plough it back as a product). This suggestion was only mentioned in two focus-group interviews, but it will be useful to explore this concept further.

## **CONCLUSIONS**

Conclusions may be drawn by synthesising the results of the Delphi study (proposed framework), the findings

obtained through focus groups, field notes made during and after the interviews and the literature control. Two broad themes emerged, namely the conclusions on the value of the particular research methodology and conclusions on the proposed strategy and its implementation.

Additionally, a prominent research theme in the Southern District of the North West Province may be identified, namely that nurses currently experience difficult working conditions and are concerned about the future of the nursing profession, while there is a lack of communication between nursing management, nursing staff and the academic sector as a support system.

## **The value of the research methodology**

This discussion of the research methodology specifically refers to the value of using particular groups who participated in the research, as well as the data-gathering technique, namely focus-group interviews.

Individuals in groups, as well as groups as a whole, participated enthusiastically and made meaningful, practical suggestions. However, it was observed that they tend to see the strategy to improve nurses' research contribution as idealistic, and did not offer to share ownership to initiate such a strategy. This phenomena is described by MacVicar (1998:1310-1313) as a "pre-merged" state, which exists when nurses have not experienced the practice value of research and have not cognitively merged the integrated nature of research and practice and/or realised the importance of research to improve practice.

Furthermore, it was noted that group dynamics are a determining factor in groups' attitude towards research and the willingness to conduct research as a group. It seemed that group dynamics, such as group cohesion (both enmeshment and limited trust) and group atmosphere (underlying conflict), could possibly derail groups from being task focussed. It was observed that group dynamics such as trust and shared experiences in being involved in research as a group contributed to a more positive attitude towards research.

The use of focus-group interviews as a method of verifying the feasibility and acceptability of the strategy to improve nurses' contribution to research also proved to

be significant. This method not only served as a data-gathering method, but also created opportunities for groups to ventilate feelings, it stimulated interest in research and some participants remarked that their perceptions regarding research – especially regarding research as something extensive and difficult – changed. The focus-group interview in itself proved to serve as a valuable tool in the implementation of the strategy, specifically in the initiating phase.

## **CONCLUSIONS ON THE PROPOSED STRATEGY**

### **Cyclic nature of the strategy**

It is clear that the barriers to the strategy are also the factors that illustrate and confirm the necessity of the strategy. It is also clear that the commitment of relevant stakeholders to the strategy needs to be obtained. These aspects imply that the strategy needs to be cyclic in nature, spiralling from a focussed, contextual starting point, to a wider platform through repetitive cycles of (i) building partnerships within which research-related activities are executed and the results implemented and experienced positively, creating mind shifts and commitment regarding research, (ii) communicating these research results and the value of research to a wider audience, and (iii) creating further partnerships and obtaining further support for the strategy.

### **Initial focus**

The initial focus of the strategy should be that nurses in academic positions should reach out to and build partnerships with other nurses in academic positions, nurses in management positions and research committees by creating forums for discussion. Specific tasks might include building trust, clarifying expectations, roles, needs, misunderstandings and perceptions regarding research in order to formulate objectives and align perceptions of research as being an integral part of nursing practice and being cyclic in nature. This cyclic nature refers to the process of conducting research, disseminating and translating research results, implementing research results and conducting research on this implementation, in order to promote the impact of research in health care. This cyclic approach should be expected as the standard practice in research.

Another task may be the empowerment of these partners in research methodology and/or research supervision. This might take place simultaneously with a further task, namely identifying research problems in practice, conducting collaborative research (initially informal and limited in scope), assisting in the translation and implementation of results and conducting follow-up research. The shared experience of this research might lead to a commitment to research within these initial partnerships. Furthermore, the communication of the impact of this research in improving practice as well as the communication of partners' positive experiences might create the opportunity for further partnerships on a similar or wider level.

### **Obtaining commitment to and support for a strategy to promote nurses' research contribution**

The described cycle might lead to wider commitment to and support for a strategy to promote nurses' research contribution, allowing for the collaborative formulation of a vision and objectives for such a strategy. These objectives should focus on creating research awareness among nurses, as well as creating an environment within which nurses are encouraged and enabled to be involved in research.

Creating research awareness should include research preparation of nurses in practice, as described in the initial focus of the strategy. It should also include preparing research-minded nurses by means of a research-based nursing curriculum, specifically in undergraduate programmes.

The creation of an environment conducive to research by nurses should include providing infrastructure and support, research capacity building, mentorship and encouragement by partnerships of nurses in academic and management positions, and encouragement of practice-oriented, cyclic research.

### **Outcome of the strategy**

The outcome of the strategy should be that nurses experience the personal rewards and practice value of research, and are motivated and equipped to be involved in research, leading to meaningful research involvement by nurses. This meaningful involvement should be dis-

seminated and results implemented in a way that demonstrates the significance of research by nurses, contributing to the recognition of nursing as a profession.

## SIGNIFICANCE OF THIS RESEARCH

Although broad guidelines for strategies to promote research exist at national and international level, not one of these strategies describe the specific coordinated processes that should be followed within a specific context, and this research is significant in this respect. The proposed strategy (refer to Table 2) could also be refined – as described in the conclusions – in preparation of the implementation of the strategy in the Southern District of the North-West Province.

## RECOMMENDATIONS

Recommendations for practice, education and research are integrated in the discussions on the results and conclusions. It is foreseen that these recommendations will be implemented in the Southern District of the North West Province as a strategy to promote nurses' research contribution, and that further research will be conducted on the implementation and the outcomes of the implementation.

The authors would like to encourage wider implementation of the recommendations of this research, and welcome critical comments and feedback.

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