Experiences of nurses working at a stroke unit on the tailored implementation of an evidence-based guideline; a qualitative process evaluation

Research thesis

Name:	E.T.A. de Kok
Student number:	3807975
Course name:	Graduation Thesis
Status:	Definitive version
Date:	04-07-2014
Education institute:	University Utrecht, Master Klinische Gezondheidswetenschappen, Masterprogram Verplegingswetenschap, UMC Utrecht, The Netherlands
Research Institute:	Diakonessenhuis, Utrecht, The Netherlands
Supervisor:	dr. R. van Linge & dr. T.B. Hafsteinsdóttir
Tutor:	dr. I.E. Poslawsky
Journal:	Journal Advanced Nursing
Requirements journal:	Reference style: Harvard, Word count: < 5000
Reference style:	Vancouver
Criteria for transparency:	QUAGOL: a guide for qualitative data-analysis
Words:	3500
Words Dutch abstract:	295
Words English abstract:	299

INTRODUCTION

Implementation is a widely discussed topic in health sciences [1-3]. It is important to keep innovating to maintain a healthcare system that is affordable, accessible and of good quality. To introduce interventions, put them into practice successfully and ensure their endurance, implementation strategies are required. The success of innovation depends not only on the solution, but also on the way it is implemented.

Several strategies have been developed to support implementation processes. However, it is unknown which strategies are most effective [1, 4]. This is caused by a lack of theoretical support, which makes it difficult to understand what it is that makes certain strategies successful [5]. Nevertheless, there seems to be a consensus that multifaceted approaches are required [6].

Recently, the interest in multifaceted implementation strategies has increased. A relatively new strategy called tailored implementation consists of tailoring an implementation to the requirements of the setting. By doing this, it effectively addresses the most important determinants of the actual work on the ground and based on this, improvements can be made.

Tailored implementation consists of three key steps [7]: the identification of the determinants, the design of implementation appropriate for the determinants and application and the assessment of the interventions that are tailored to the determinants.

Research shows that tailored implementation positively influences the professional practice [8, 9]. It is, however, unclear how the process is experienced. To get a clear view of an implementation method, it is important to understand whether it is effective, but also whether it is practicable. Understanding this can help to create a support system for working with this method and, if necessary, to the adjustment of the implementation method based on experiences. Therefore effort should be put into learning whether tailored implementation is as effective as it is claimed to be and whether it is experienced as being so.

Nurses play a significant part in the chances of success of an implementation. They fulfil multiple roles within the process, such as: project leader, disseminator or user. Therefore, it is important to understand how they experience the implementation.

During this study a new evidence-based guideline about the educational needs of patients and their caregivers was designed. During the tailored implementation of this

guideline the Innovation Contingency (IC) model of Van Linge was used [10]. The IC-model describes that a successful implementation depends on a fit between the characteristics of the organization, the innovation and the implementation strategy [10].

Problem statement

Although several studies on tailored implementation have been conducted, little is known about the experiences of nurses with implementation processes. It is, however, important to closely monitor their experiences with these processes because nurses are often involved in implementations and therefore influence their chances of success.

AIM AND RESEARCH QUESTION

The aim of this research is to explore how nurses, working in a general hospital in The Netherlands, experience the tailored implementation process of the evidence-based guideline 'Educating stroke patients and their caregivers'. This provides insight in the needs and experiences of nurses during the implementation and contributes to the effectiveness and practicability of tailoring.

Research Question

How do nurses working on the stroke unit of a general hospital in The Netherlands experience the process of the tailored implementation of the evidence-based guideline 'Educating stroke patients and their caregivers'?

METHOD

A qualitative process evaluation [11] was used to provide an overview of the nurses' experiences with the tailored implementation process.
This evaluation method consisted of semi-structured interviews. An evaluation of the implementation process was made using the concepts of process evaluation by Baranowski & Stables [12] (Appendix 1). The implementation of the intervention was tailored by applying it to the specific processes of the ward.

Participants

Five nurses participated in the study. All of them were in direct contact with patients and work at the stroke unit of a general hospital in The Netherlands (Table 1). The participants were selected through purposeful sampling based on available information about the nurses with the aim of obtaining a heterogeneous sample. This sample was based on age, gender, education and work experience. The nurses stated whether they wanted to participate in the study through a questionnaire that was provided to all nurses in the ward. The researcher contacted five out of fifteen nurses that wanted to participate.

Insert table 1

Data generation

Data were collected between January 2014 and May 2014. The participants were interviewed semi-structurally at three moments during the process: before (January), during (March) and after (May) the implementation. The interviews conducted before the start of the implementation reviewed the participants' earlier experiences, while the interviews held during and after the process reviewed their experiences with the current implementation. A topic list (Table 2) with a set of open-ended questions (Appendix 2) was used. These were derived from the aims and concepts of the process evaluation [12 -14]. The results of the first interviews determined the further data collection and analysis. An analysis of the interviews determined that saturation was reached, seeing as no new relevant information about the topics was found. Therefore no extra interviews with other nurses were necessary.

Insert table 2

Ethical consideration

A request for exemption was obtained from the Medical Research Ethics Committee of University Medical Centre Utrecht.

In accordance with Dutch law, the participants were selected after being informed by a letter of explanation [15], after which all participants signed written consent. It was emphasised that participation was voluntary and could be withdrawn at any time. All data has been anonymised.

Data-analysis

The method of Strauss & Corbin was used for the data analysis [16]. This method breaks the data down and conceptualizes them, exposing every single sentence, observation and incident [17]. The data analysis consisted of three steps: open, axial and selective coding [18].

After member checking, notes of the interviewer were added to the transcripts. Then the researcher created codes and assigned these in the transcripts. The aim of this was to formulate the codes in the same context as the text to get as close to reality as possible. The codes were then grouped into categories. After encoding the transcripts, it was checked whether the information fitted the research objective and question. Based on this, the most useful information was selected and categories were ranked and checked. The researcher searched for connections between the selected categories in order to make sense of what nurses' experiences with the tailored implementation were. The final categories formed the basis of the 'results' section and constant comparisons were made.

Reliability

A number of quality assurances were embedded [19]: 1) the interviews were tape-recorded and transcribed literally; 2) member checking was done; 3) the researcher took methodological and theoretical memos. These were used to support the researcher in recollecting memories and were also part of the analysis itself; 4) NVivo10® software was used for processing and storing the data and data analysis; 5) a peer review was carried out by the supervisor and served as an evaluation of the work and a form of self-regulation; 6) the researcher reflected her position during the study by keeping journal notes on personal characteristics, feelings and biases. Another researcher also listened to four tape-recorded interviews and gave feedback on the way of interviewing.

RESULTS

The interviews revealed four themes that are described below and are supported by tables with quotes.

Before the implementation

Top-down versus Participation

All five participants had experiences with several implementation processes. In all cases they were introduced top-down into the organisation. The nurses' experiences are that the ways these implementations were introduced caused them to be insubordinate, because they were not allowed to participate in the process (Table 3).
The participants hoped to become more involved with the implementation during this study. This stimulated them because it allowed them to think about the process at an early stage. They expected the process to be smoother as a result.

Passive versus Active

All participants noted that implementations were generally introduced passively. In almost all cases an email was the only way they were informed. This passive way of communicating was experienced as a barrier during the implementation (Table 3).
The meagre amount of information supplied to nurses led to little involvement with the implementations. Announcements of implementations were rarely made at team meetings.
Moreover, participants noted that when a leading figure set an example for an implementation, the rest of the ward's team will follow suit most of the time. The participants also stated that when only part of the team cooperates, the implementation quickly disappears into the background.

Unstructured versus Structured

The implementations witnessed by the participants were experienced as being unstructured. Nobody told the nurses what to do and how to do it. According to a number of participants preconditions to the implementation were often missing as well. This prevented the nurses from actually working with a guideline.
Guidelines were often implemented by trial and error. Guidelines were imposed on the ward by higher-ups and the ward provided feedback on the situation being practicable. This often went back and forth for a long time, delaying and frustrating the implementation process.

Lastly, the participants noted that often no evaluation was made of how a guideline was used or how the implementation went. This was seen as a barrier, because evaluation was regarded as important (Table 3). Evaluation should be used to learn from the past, in order to implement more successfully in the future. The participants stated that they expect this implementation to be evaluated properly.

No importance versus Importance

All participants noted that they expected to be informed about the importance of the implementation. However, this was not done at earlier implementations and this caused the nurses to be resistant. They experienced a high level of stress at work and state only to consent with alterations of processes when they were convinced about the benefit to the patients' wellbeing and a practicable situation (Table 3).
The participants expected that the importance of the implementation was clear, that preconditions would be set and that extra workload would be avoided during the implementation.

Insert table 3

During the implementation

Top-down versus Participation

During the second interview round, it was noted that the participants were more involved with the implementation process and the development of the guideline than they were used to. They noted that this was caused by the implementation being a decision by the ward itself and not by higher-ups. The participants liked being able to participate in the development of the guideline. They remarked that the presence of the researchers at the ward created the possibility of being able to participate and actually be heard (Table 4).

Passive versus Active

The participants mentioned that a difference with earlier implementations was that they had the possibility to actively provide feedback. This was experienced very positively because this way barriers can be removed quickly, which allows the nurses to concentrate on working with the guideline instead of having to focus on the implementation process. All participants stated that the researchers were open to the feedback provided and that they were also invited to provide it to them. It was noted that colleagues actively use the possibility to provide feedback (Table 4).

A barrier, according to the participants, was that the team determined its own pace in starting to use the guideline. The participants indicated that the guideline was not yet actively used at the ward. They stated that this was because the interviews were held shortly after the kick-off meeting. Moreover, the lead figure was not yet putting the guideline into practice. They saw this as a requirement for the entire team to participate.

Unstructured versus Structured

The participants experienced the implementation to be more structured than they were used to. They noted that, in contrast to earlier implementations, informational sessions had been organised and all materials necessary to start working with the guideline were present beforehand. One participant also noted that informal meetings were held to fine-tune practical matters. The participants positively regarded that their attention was asked through different methods and channels. An adequate amount of training was offered as well and this will remain an important factor to determine the guidelines' endurance (Table 4).

No importance versus Importance

All participants were aware of the importance of the guideline that was being implemented, due to clear communication.

The participants noted that their colleagues also saw the importance of the guideline and that they viewed matters the same as a group (Table 4). The will to work with the guideline was apparent; the nurses only needed to put it into practice now.

Insert table 4

After the implementation

Top-down versus Participation

During the final interviews the implementation process was evaluated. The participants noted that they had a positive experience being actively involved. They were able to participate and provide feedback on the guideline and its implementation. Furthermore, they saw that the researchers were present at the ward regularly.

Because the current guideline was implemented with a different approach than earlier implementations, it has not caught on as well as it could have. Four

participants mentioned that this was caused by a lack of initial guidance. They stated that more regulation from the group or higher-ups was needed.
The participants stated that they worked very independently and prioritised their own work. Working with the guideline was too open-ended for them. Not taking it into practice did not bear any consequences (Table 5).

Passive versus Active

During the implementation, the participants were offered the opportunity to be actively involved in the process. They were able to influence the guideline and its implementation. Nevertheless they stated that they were insufficiently active. The stroke group as well as the nurses should have been more active (Table 5).
It was also noted that at the start of the implementation process a lot of attention went to the subject. However, after the nurses had been facilitated and had to start working with the guideline, their attention faded away. The informational packages were handed out on the ward, but they were not actively made aware and no reports were made. Nurses did not address one another and were on their own in determining whether they would work with the guideline or not.

Unstructured versus Structured

All participants stated to have experienced the implementation method as satisfactory, mainly because it was more structured than earlier implementations. One participant indicated that it consisted of a well thought-out process (Table 5). During earlier implementations, guidelines were imposed on the ward without structure.
Nurses were kept informed by the researchers about new developments by sending newsletters. This was received positively, as it allowed them to anticipate changes. The implemented guideline was structured and had sufficient tools. Yet, three participants indicated that some steps in the guideline were too open-ended. The other participants, however, indicated that they did not want to report everything and a certain freedom of interpretation should remain.

No importance versus Importance

The aim and importance of the intervention were clear from the beginning. However, the participants indicated that during the implementation, it became clear that the ward did not support the guideline. This was seen as resistance of the ward. The participants had not expected this, because the nurses had a large say in the process (Table 5). According to one of the participants this was one of the main

causes of the attention fading away. Another cause was that the involved nurses were mainly thinking about short-term and less about long-term improvements. Participants indicate that more attention should be paid to repeating the aim and importance of the guideline to keep the nurses on board.

Insert table 5

DISCUSSION

This study demonstrates that nurses experienced the tailored implementation of the evidence-based guideline positively. A shift in the nurses' experiences with implementations was observed from one measuring moment to another. During the first interviews, previous experiences were characterised as top-down, passive, unstructured and no importance. Participation, activity, structure and importance were used to characterise experiences with the current implementation during the last interviews. This is a positive shift. Different than with earlier implementations, the nurses were involved in the process and were able to provide input. Moreover, the implementation was structured, the nurses were kept informed about changes and they saw the relevance of the implementation of the guideline.

It was noted that although the participants changed their attitude towards the tailored implementation, no change occurred in their behaviour. This might be caused by the implementation method differing from earlier implementations, which requires time to adjust.

Another possible cause is that it was not explicitly communicated that the IC-model was used. The participants were aware that the implementation would be different and observed the actions that were taken, but did not understand why exactly they were taken.

Furthermore, the implementation took less than three months, which is very short for a comprehensive implementation.

A remarkable aspect of these results is that before the start of the implementation, the participants indicated that they would prefer a bottom-up implementation type. This was because guidelines are often imposed top-down and in an unstructured way. However, during the evaluation of this implementation, participants indicated that they wished for more guidance from higher-up. It was noted that the implementation had become very open-ended, which led to it not being put into practice.

It can be questioned whether top-down implementations should be reinstated or that an attitude change of the nurses is required. The paradox is that the nurses state to dislike guidance from higher-ups, while at the same time, they do not take responsibility to actively implement a guideline without it.

Engagement, commitment and ownership were the most important characteristics for participants during an implementation, as is also indicated in the research by

Dogherty et al. [20] and Janssen et al. [21]. When these characteristics are missing, this affects an implementation negatively. If nurses want to participate more, they should change their attitude in regard to the implementation of these characteristics.

It is also remarkable that the nurses saw the importance of the implementation and said to be willing to co-operate. However, during the implementation the ward did not support it at all. This unexpectedly caused resistance. The importance of supporting an implementation is reaffirmed by the research of Dogherty et al. [20]. It states that 'nurses who identified the need were more motivated to participate in the implementation' [20]. During a future implementation, a ward-supported decision should be made, as this prevents resistance and will ensure a smoother implementation process.

A strength of this study is the member check by the participants of their transcribed interviews. This benefits the quality of the research because it ensures the authenticity and credibility of the data.
Another strength is the peer review on the interviews, the topics and interview questions. This provided an external audit and increased the quality of the study.
The use of software is a third strength of this study. The researcher created a codification system for structured storage of the gathered data. The encoding of the text fragments allowed combinations with less chance of error.

A limitation of this study is that the researcher was also a participant in the implementation process and the development of the guideline. This might have caused the researcher to not always be unprejudiced. But since the researcher took memos (theoretical, methodological and journal notes) during the interviews and another researcher gave feedback on the interviewing method, the researcher was aware of the prejudice and adapted to this during the study.
A second limitation of this study is that the findings are not translatable to all nurses working on a stroke unit, since the aim of qualitative studies is to describe the individual views of the participants. Yet, the overall findings partially match with two other studies on how participants experience implementation processes [20, 21].

CONCLUSION

Because a positive shift in the four themes was observed from one interview to another, it can be concluded that the tailored implementation method was experienced positively. This shift is ascribed to the fact that the steps of the tailored implementation were adapted to the needs and expectations of the nurses. The nurses felt they were in control during the implementation because they participated in the stroke group or were provided with the possibility to give feedback. Despite the fact that the nurses still do not properly work with the guideline, the implementation method was experienced as more successful than previous used methods. An attitude change was observed, yet this effect did not cause any behavioural change.

RECOMMENDATIONS

Although this study provides an overview of the experiences of nurses with tailoring, more research is required. This study focuses on the experiences of nurses in one hospital in The Netherlands and only on the Innovation Contingency (IC) model [10]. The tailored implementation of an innovation is never the same, because there are many methods available and implementation conditions vary. Therefore, it is important to explore the experiences of nurses working at several hospitals and with other methods than the IC-model.

REFERENCES

(1) Francke, A., Smit, M., Veer, A. & Mistiaen, P. Factors influencing the implementation of clinical guidelines for health care professionals: A systematic meta-review. BMC Medical Informatics and Decision Making, 2008; 8(1): 38.

(2) Prior, M., Guerin, M. & Grimmer-Somers, K. The effectiveness of clinical guideline implementation strategies: A synthesis of systematic review findings. J Eval Clin Pract, 2008; 14(5): 888-897.

(3) Grimshaw, J., Thomas, R., MacLennan, G., Fraser, C., Ramsay, C., Vale, L., et al. Effectiveness and efficiency of guideline dissemination and implementation strategies. Health Technology Assessment, 2004; 8(6).

(4) Hakkennes, S. & Dodd, K. Guideline implementation in allied health professions: a systematic review of the literature. Quality and Safety in Health Care, 2008; 17(4): 296-300.

(5) Eccles, M., Grimshaw, J., Walker, A., Johnston, M. & Pitts, N. Changing the behavior of healthcare professionals: the use of theory in promoting the uptake of research findings. Journal of Clinical Epidemiology, 2005; 58: 107–112.

(6) Os-Medendorp, H. van, Eland-De Kok, P., Linge, R. van, Bruijnzeel-Koomen, C., Grypdonck, M. & Ros, W. The tailored implementation of the nursing programme 'Coping with itch'. J Clin Nurs, 2008; 17(11): 1460-1470.

(7) Wensing, M., Oxman, A., Baker, R., Godycki-Cwirko, M., Flottorp, S., Szecsenyi, J., et al. Tailored implementation for chronic diseases (TICD): A project protocol. Implementation Science, 2011; 6(1): 103.

(8) Baker, R., Camosso-Stefinovic, J., Gillies, C., Shaw, E., Cheater, F., Flottorp, S., et al. Tailored interventions to overcome identified barriers to change: effects on professional practice and health care outcomes. The Cochrane Library, 2010; (3).

(9) Davies, P., Walker, A., Grimshaw, J. A systematic review of the use of theory in the design of guideline dissemination and implementation strategies and

interpretation of the results of rigorous evaluations. Implementation Science, 2010; 5(1): 14.

(10) Linge van, R.H. (2006) Innoveren in de Gezondheidszorg: Theorie, praktijk en onderzoek. Hoofdstuk 9: Integrerende benaderingen: contingenties en configuraties. Maarsen: Elsevier Gezondheidszorg. Page 153-175.

(11) Grol, R. & Wensing, M. (2011). Implementatie. effectieve verbetering van de patiëntenzorg. Hoofdstuk 22: Evaluatie van het proces van implementatie. Vierde editie. Amsterdam: Reed Business. Page 537-566.

(12) Baranowski, T. & Stables, G. Process evaluations of the 5-a-day projects. Health Education & Behavior, 2000; 27; 157-166.

(13) Boeije, H. (2008) Analysis in qualitative research. *Data collection.* First edition. Nederland: Boom onderwijs. Page 61-63.

(14) Polit, D.F. & Beck, C.T. (2008) Nursing research; Generating and Assessing Evidence for Nursing Practice. *Designing and conducting qualitative studies to generate evidence for nursing.* Eight Edition. Principles and Methods. Wolters Kluwer I Lippincott Williams & Wilkins. Page 537.

(15) Centrale Commissie Mensgebonden Onderzoek (CCMO). Stappenplan toetsing TC. Available at: http://www.ccmo-online.nl/main.asp?pid=10&sid=30&ssid=51. Accessed February 2014.

(16) Strauss, A. & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA: Sage.

(17) Polit, D.F. & Beck, C.T. (2008) Nursing research; Generating and Assessing Evidence for Nursing Practice. *Qualitative data analysis.* Eight Edition. Principles and Methods. Wolters Kluwer I Lippincott Williams & Wilkins. Page 573.

(18) Boeije, H. (2008) Analysis in qualitative research. *Doing qualitative analysis.* First edition. Nederland: Boom onderwijs Page 93-121.

(19) Polit, D.F. & Beck, C.T. (2008) Nursing research; Generating and Assessing Evidence for Nursing Practice. *Trustworthiness and integrity in qualitative research.* Eight Edition. Principles and Methods. Wolters Kluwer I Lippincott Williams & Wilkins. Page 582-597.

(20) Doherty, E.J., Harrison, M.B., Graham, I.D., Vandyk, A.D., Keeping-Burke, L. Turning Knowledge Into Action at the Point-of-Care: The Collective Experience of Nurses Facilitating the Implementation of Evidence-Based Practice. Worldviews on Evidence-Based Nursing, 2013; 10:3, 129–139.

(21) Janssen, M.A.P., Achterberg, T. van, Adriaansen, M.J.M., Kampshoff, C.S., Schalk, D.M.J., & Mintjes-de Groot, J. Factors influencing the implementation of the guideline Triage in emergency departments: a qualitative study. Journal of Clinical Nursing, 2011; 21, 437–447

TABELS AND FIGURES

Table 1. Demographics of the participants

Participant	Age	Gender	RN or RN bachelor*	Years of nursing	Years working at the ward	Part-time or Fulltime
1	27	M	RN bachelor	4	4	P
2	45	F	RN	21	20	P
3	31	F	RN	11	10	P
4	31	F	RN bachelor	10	10	F
5	35	F	RN bachelor	11	6	P

**RN (registered nurse without bachelor of nursing degree), RN bachelor (registered nurse with bachelor of nursing degree)*

Table 2. Main topics of the semi-structured interviews

Before the implementation	During the implementation	After the implementation
Implementation method	Implementation method	Implementation method
Barriers/facilitators implementation process	Barriers/facilitators implementation process	Barriers/facilitators implementation process
Educating stroke patients and caregivers	Educating stroke patients and caregivers	Educating stroke patients and caregivers
Expectations implementation guideline		Expectations implementation guideline
Expectations guideline		Expectations guideline

Table 3. Quotes of the participants before the implementation process

Theme	Quote*
Top-down versus Participation	'Then we were immediately like: well, have they even thought about this? What do we do with that patient? How do we handle that, what does that mean, what will be done with the results? It was like they hadn't thought of the consequences of suddenly telling us, this is how we're going to handle it. So that's where it fell short, so to speak' (Participant 2).

Passive versus Active	'So then you read the e-mail again and try to understand it a bit, but then you're confused again and that's very… I think it takes a lot longer for me to understand it because there is no explanation or presentation' (Participant 1).
Unstructured versus Structured	'Yes, it's very important to hear from the team, because we're the ones that have to work with it, so what do we think about it or what could be changed or done differently?' (Participant 1).
No importance versus Importance	'Yes, of course it's often the case that a nurse has to do extra things. I mean, we already have so many check lists and things that we, just, administration. Then something else is added to that and generally, we're not happy about that. Because it means you can spend even less time by the beds and well, we're busy enough as it is, so that's not something we like very much' (Participant 4).

** Quotes have been slightly edited to increase readability*

Table 4. Quotes of the participants during the implementation process

Theme	Quote*
Top-down versus Participation	'Well, very active. I've worked here for 3-4 years and until now I haven't experienced something being implemented so actively. But other than that, as I said before, it is recited once, then reported once and then we have to start working with it. But now I hear about it more often and I also see you actively contributing, so to speak' (Participant 1).
Passive versus Active	'No, the opposite, keep it open and the fact that you would like to know, so it's a safe environment if you ask me' (Participant 4).
Unstructured versus Structured	'Yes, as I said in the previous interview, it remains most important to continue to bring it to people's attention. This is going on at the moment, so now it's been mentioned and that's it' (Participant 5).
No importance versus Importance	'So especially that it's in people's minds now, so that they will recognize the problem. And the implementation. I haven't seen it being used before, but it is talked about and people's opinions differ' (Participant, 3).

** Quotes have been slightly edited to increase readability*

Table 5. Quotes of the participants after the implementation process

Theme	Quote*
Top-down versus Participation	'Well what I am trying to explain a bit, but well, I think it's a very difficult target group, I'm not sure what it is exactly. That's worth researching as well, I believe. But as nurses, they are stubborn, we are quite autonomous, you know, you start your day pretty independently. You come in, you look up where you'll be working, see you have 4 halls and you have to fill your day, so to speak. So a nurse also decides what he does and what he doesn't do. What he wants to do, so to speak' (Participant 1).
Passive versus Active	'Well that has probably been discussed in the team, I think, but I haven't noticed it in the department or with nurses, no' (Participant 5).
Unstructured versus Structured	'There was the, sort of the idea that there was a timeline, so to speak, that you had planned that, by and large how you would build that up. Or, you know, that you start by planting a seed with the, with the department like, this is what we are going to do, you know, we need some information, that sort of plays out and people will look for what they can expect, while I had the idea that there was a process' (Participant 1).
No importance versus Importance	'In my experience, at least, this was a subject that well, people needed, you know, or well, that providing information to patients should be more structured and that it should be more clear what information patients get. And then still, there is some resistance within the team, like, well we already give them information and you know, as it went along people do agree that things could be better and that it should be more structured etcetera, but that, yeah, that kind of disappointed me' (Participant 2).

** Quotes have been slightly edited to increase readability*

Samenvatting

Achtergrond: Verschillende strategieën zijn ontwikkeld om het implementatieproces te ondersteunen. Een van deze strategieën is tailored implementatie. Om de effectiviteit van tailored implementatie te bepalen is het van belang te weten hoe verpleegkundigen dit ervaren. Hier is echter weinig over bekend. Het is belangrijk om te weten hoe verpleegkundigen dit ervaren, omdat ze een grote rol spelen bij de kans op succes van een implementatie.

Doel: Dit onderzoek verkent de ervaringen van verpleegkundigen in een algemeen ziekenhuis in Nederland met de tailored implementatie van een evidence-based richtlijn.

Onderzoeksvraag: Hoe ervaren verpleegkundigen die werken op de stroke unit van een algemeen ziekenhuis in Nederland het proces van de tailored implementatie van de evidence-based richtlijn ‘Voorlichting aan CVA patiënten en hun naasten'?

Methode: Een kwalitatieve procesevaluatie is uitgevoerd. Vijf participanten zijn door middel van semigestructureerd interviews op drie momenten gedurende het implementatieproces geïnterviewd (voor, tijdens en na de implementatie). De data-analyse van de getranscribeerde interviews bestaat uit open, axiaal en selectief coderen.

Resultaten: Top-down versus participatie, passief versus actief, ongestructureerd versus gestructureerd en geen belang versus belang waren de vier belangrijkste thema’s die terugkeerden tijdens de interviews.

Conclusie: Gedurende het implementatieproces heeft er een positieve verschuiving tussen de vier thema’s plaatsgevonden. Deze verschuiving wordt toegeschreven aan het feit dat de stappen die genomen zijn tijdens de implementatie werden afgestemd op de behoeften en verwachtingen van de verpleegkundigen. De verpleegkundigen merkten op dat ze de controle hadden gedurende de implementatie. Hoewel deze studie een overzicht geeft van de ervaringen van de verpleegkundigen met tailored implementatie is hierover meer onderzoek nodig. Een tailored implementatie is nooit hetzelfde vanwege de verschillende implementatie methodes om te tailoren en de condities die per implementatie verschillen. Daarom is het belangrijk om de ervaringen van verschillende verpleegkundigen met verschillende tailored implementatiemethoden te onderzoeken.

Trefwoorden: ‘Tailored implementeren’, ‘Verpleegkundige ervaringen’, ‘Evidence-based richtlijn’

Abstract

Background: Several strategies have been developed to support the implementation process. One of these strategies is tailored implementation. Despite several studies on tailored implementation having been conducted, little is known about the experiences of nurses with implementation processes. It is important to closely monitor their experiences with the implementation processes because the nurses are often involved in implementations and therefore influence their chances of success.

Aim: This study explores how nurses working in a general hospital in The Netherlands experience the process of the tailored implementation of an evidence-based guideline.

Research question: How do nurses working on the stroke unit of a general hospital in The Netherlands experience the process of the tailored implementation of the evidence-based guideline 'Educating stroke patients and their caregivers'?

Method: A qualitative process evaluation was done. Five participants were interviewed semi-structurally at three moments during the implementation process (before, during and after the implementation). The data analysis of the transcribed interviews consisted of open, axial and selective coding.

Results: The interviews revealed four themes; Top-down versus participation, passive versus active, unstructured versus structured and no importance versus importance.

Conclusions: A positive shift in the four themes was observed between the interview moments. It can therefore be concluded that the tailored implementation method was experienced positively. This shift is ascribed to the fact that the steps of the tailored implementation were adapted to the needs and expectations of the nurses. The nurses felt they were in control during the implementation. Although this study provides an overview of the experiences of nurses with tailoring, more research is required. The tailored implementation of an innovation is never the same, because there are many methods available and implementation conditions vary. Therefore it is important to further explore the experiences of several nurses and with several implementation methods.

Keywords: 'Tailored implementation', 'Nurses experiences', 'Evidence-based guideline'

APPENDIX 1 The concepts of process evaluation by Baranowski & Stables [12]* **

Table 1. Concepts in Process Evaluation

Components of Process Evaluation	Qualitative Aspect(s)	Quantitative Aspect(s)	Composite Score(s)	Significance for Conduct of Research
Recruitment: attracting agencies, implementers, or potential participants to participate in corresponding parts of the program	Types of resources (messages or incentives) employed to attain participation	• Numbers of potential participants • Differences between recruited sample and population on selected characteristics	• Participant rate (percentage of potential participants agreeing to participate) • Participation resource rate (numbers or costs of resources employed per participant)	• Low statistical power • External validity of experiment (sample recruitment bias)
Maintenance: keeping participants involved in the programmatic and data collection aspects of a program	Types of resources (messages or incentives) employed to attain participation maintenance	• Numbers of participants who continue to a point in time • Differences among maintained sample, recruited sample, and population on selected characteristics	• Maintenance rate (percentage of participants who maintain participation to a point in time) • Maintenance resource rate (numbers or costs of resources employed to achieve participation maintenance to a point in time)	• Low statistical power • External validity of experiment (sample maintenance bias)
Context: aspects of the environment of an intervention	Types of contextual factors	Levels on contextual factors		• Moderation of effects • Generalizability • Potential targets for intervention
Resources: the materials or characteristics of agencies, implementers, or participants necessary to attain project goals	Types of resources	Numbers or levels of resources	Resource adequacy	• Screening criteria • Moderation of effects • Potential targets for intervention

(continued)

** The word 'intervention' mentioned in this table was used as a synonym to treatment method. In this study, the word intervention was regarded as an organizational intervention.*

*** This table also contains a part focused on quantitative studies. This part will not be used for this study because of the qualitative nature of the research.*

Table 1 Continued

Components of Process Evaluation	Qualitative Aspect(s)	Quantitative Aspect(s)	Composite Score(s)	Significance for Conduct of Research
Implementation of program: extent to which the program was implemented as designed	Fidelity (quality of delivery on one or more scales)	Extent (number or amount of units delivered or provided)	Dose (Fidelity × Extent)	• Internal validity of experiment • Ineffective interventions due to low implementation
Reach: extent to which the program contacted or was received by the targeted group	Depth (aspects or components of the intervention received)	Spread (number or percentage of participants receiving a component)	Penetration	• Participation bias due to reach • Inefficient intervention
Barriers: problems encountered in reaching participants	Types of barriers	Difficulty per type	Obstruction	• Explains low values in other components of process • Identifies targets for change efforts
Exposure: the extent to which participants viewed or read the materials that reached them	Component preference (how much each activity was liked)	Extent of Exposure	Receptiveness	Moderation of effect
Initial use: extent to which a participant conducted activities specified in the materials	Types of activities specified	Amount of use (number of activities conducted)	Activity	Moderation of effect
Continued use: extent to which a participant continued to do any of the activities	Types of activities continued (to a point in time)	Amount of activities continued (to a point in time)	Habituation	Moderation of effect
Contamination: extent to which participants received interventions from outside the program; extent to which the control group received the treatment	• Types of components of competing programs reaching participants • Types of components of treatment programs reaching control group participants	• Number of competing programs reaching participants • Number of control participants learning about treatment program	• External contamination rate (average numbers of competing program components) • Internal contamination rate (average numbers of treatment components reaching control group participants)	• Internal validity of experiment

APPENDIX 2 Topic list open-ended questions

Personal Information

- Naam
- Leeftijd
- Functie
- Hoeveel jaar werkzaam als verpleegkundige
- Hoeveel jaar werkzaam op deze afdeling

Before the implementation

- Met welke implementaties heeft u in het verleden te maken gehad?
- Was/waren deze implementatie succesvol?
- Wat waren belemmerende/stimulerende factoren van die implementatie?
- Wilt u verder nog wat kwijt over implementatieprocessen die zijn uitgevoerd op de afdeling?
- Hoe gaat de huidige voorlichting bij jullie op de afdeling?
- Hoe tevreden bent u over de manier van voorlichten nu?
- Wat zijn uw verwachtingen van het implementeren op maat van een richtlijn over voorlichting aan patiënten en hun contactpersonen?
- Wilt u verder nog wat kwijt over implementatieprocessen die zijn uitgevoerd op de afdeling?
- Wat zou u nog willen weten over het onderzoek?

During the implementation

- Wat heb u gemerkt tot nu toe van de implementatie van de richtlijn?
- Wat vindt u van dit proces tot nu toe?
- Wilt u de huidige implementatie eens vergelijken met andere implementaties op uw afdeling?
- Wat zijn factoren die volgens u een stimulerende/remmende invloed hebben tijdens dit implementatieproces?
- Bent u tevreden met het implementatieproces tot nu toe?
- Wat vindt u van de richtlijn?
- Op welke wijze werkt u op dit moment met de richtlijn?
- Zijn er nog aspecten die u mist of die anders zouden kunnen wat betreft de richtlijn?
- Wilt u verder nog wat kwijt over het implementatieproces tot nu toe?

After the implementation

- Wat heeft u gemerkt van de implementatie van de richtlijn?
- Wat vindt u van dit proces?
- Wat zijn factoren die volgens u een stimulerende/remmende invloed hadden tijdens dit implementatieproces?
- Bent u tevreden met hoe het implementatieproces is verlopen?
- Zijn de verwachtingen van de implementatie die u had uitgekomen?
- Gaat u op dit moment anders om met de voorlichting aan patiënten en hun naasten?
- In hoeverre komt dat volgens u door de nieuwe richtlijn?
- Op welke wijze werkt u op dit moment met de richtlijn?
- Zijn er nog aspecten die u mist of die anders zouden kunnen wat betreft de richtlijn?
- In hoeverre bent u tevreden over hoe het implementatieproces is gegaan?
- Wilt u verder nog wat kwijt over het implementatieproces?