# Teamwork Style, Leadership Skills and **Environmental Factors that influence Missed** Nursing Care: A qualitative exploratory study on hospital wards

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#### **ABSTRACT**

Title: Teamwork Style, Leadership Skills and Environmental factors that influence Missed **Nursing Care** 

Background: Inpatient nursing teams are constantly challenged and under pressure to provide safe, efficient and cost-effective care while maintaining high-quality standards. As a result, nursing teams cannot always complete all of their duties during their shift, this phenomenon is known as Missed Nursing Care (MNC). Reasons for MNC can be attributed to nurses' work environment factors such as staffing, time to complete an intervention and using available resources. According to literature, teamwork and leadership are factors in inpatient care that positively can influence quality of care and reduce MNC. To achieve effective teamwork in hospitals, it is necessary to understand what teamwork is and how it is performed in nursing wards.

Aim: To explore how nursing teams in clinical inpatient nursing wards use leadership skills regarding teamwork to prevent or reduce MNC and how teamwork is influenced by environmental factors.

Method: This study employed an exploratory qualitative design based on online focus group interviews. Data were analyzed using thematic analysis.

Results: Three online focus group interviews were performed with 16 clinical nurses from 4 Dutch hospitals. Themes demonstrated that working together, informal teaching, influence of formal and informal leaders and work environmental factors were vital for performing teamwork and reduced or prevented MNC. Further, results showed that nurses' performance of leadership skills facilitated teamwork.

Conclusion: This study showed how nurses performed teamwork and how teamwork can prevent or reduce MNC. Results can build on existing literature and provide a theoretical basis for suggestions and interventions regarding improvement programs.

Recommendations: Creating awareness of the influence of teamwork, leadership skills and environmental factors on MNC and further research on and investment in nursing teams are therefore recommended.

Keywords: Missed Nursing Care, Focus Groups, Teamwork, Leadership Skills, Environmental Factors

#### SAMENVATTING

Titel: Teamwerkstijl, Leiderschapsvaardigheden en Omgevingsfactoren die van invloed zijn op Niet Verrichte Zorg

Achtergrond: Intramurale verpleegteams worden voortdurend uitgedaagd en staan onder druk om veilige, efficiënte en kosteneffectieve zorg te bieden, waarbij aan hoge kwaliteitsnormen moet worden voldaan. Hierdoor zijn verpleegteams niet altijd in staat hun werk tijdens hun dienst af te ronden. Dit fenomeen wordt gedefinieerd als Niet Verrichte Zorg (NVZ). Redenen voor NVZ kunnen worden gekoppeld aan werkomgevingen van verpleegkundigen zoals personeel, tijd om een interventie te voltooien en gebruik maken van bestaande middelen. Teamwerk en leiderschap worden gezien als factoren in intramurale zorg die NVZ kunnen verminderen of voorkomen. Voor effectief gebruik hiervan in ziekenhuizen, is het noodzakelijk om te begrijpen wat het is en hoe het wordt uitgevoerd. Doel: Onderzoeken hoe verpleegkundige zorgteams op klinische verpleegafdelingen

leiderschapsvaardigheden met betrekking tot teamwerk gebruiken om NVZ te voorkomen of te verminderen en hoe teamwerk wordt beïnvloed door omgevingsfactoren.

Methode: Dit onderzoek maakte gebruik van een verkennend kwalitatief ontwerp met behulp van online focusgroep interviews. De gegevens werden geanalyseerd door middel van thematische analyse.

Resultaten: Drie online focus groep interviews werden gehouden met 16 klinische verpleegkundigen, werkzaam in 4 Nederlandse ziekenhuizen. Thema's in dit onderzoek toonden aan dat samenwerken, informeel leren, invloed van formele en informele leiders en werkomgevingsfactoren van vitaal belang waren voor het uitvoeren van teamwerk en het verminderen of voorkomen van NVZ. Daarnaast was het gebruik van leiderschapsvaardigheden een facilitator voor teamwerk.

Conclusie: Deze studie liet zien hoe verpleegkundigen teamwerk uitvoerden en hoe teamwerk NVZ kon verminderen of voorkomen. Resultaten kunnen bestaande literatuur aanvullen en een theoretische basis bieden voor interventies gericht op NVZ.

Aanbevelingen: Bewustwording creëren van de invloed van teamwerk, leiderschapsvaardigheden en omgevingsfactoren op NVZ en verder onderzoek naar en investeringen in verpleegteams wordt aanbevolen

Trefwoorden: Niet Verrichte Zorg, Focusgroepen, Teamwerk, Leiderschapsvaardigheden, Omgevingsfactoren

## INTRODUCTION

Unsafe care is among the most important causes of morbidity and mortality around the world<sup>1</sup>. As a result of it, patients are harmed by medical care that is designed to help them<sup>2,3</sup>. The World Health Organization (WHO) noted that millions of patients worldwide suffer injury or death annually due to unsafe care<sup>2,3</sup>. In addition to immediate patient damage and increased hospital costs, unsafe care can affect patients' confidence in the healthcare system<sup>1-4</sup>. Most of the problems that the WHO has identified as leading to adverse patient outcomes such as medication errors, decubitus and pulmonary complications are preventable<sup>1-4</sup>. In Europe, limiting health expenditure growth is a major policy objective despite concerns about its adverse effects on the quality and safety of patient care<sup>4</sup>.

Inpatient nursing care teams are constantly challenged and under pressure to provide safe, efficient and cost-effective care while maintaining high-quality standards<sup>5-8</sup>. When tasks are added, the available resources for providing care often remain the same<sup>5-13</sup>. As a result, nursing care teams are not always able to complete all of their assigned tasks and duties during their shift. As a result, role conflicts as well as feelings of guilt arise<sup>14</sup>. This phenomenon is called Missed Nursing Care (MNC)<sup>15</sup>. The latter term was first described by Kalish et al. (2009) as "any aspect of care that is omitted or delayed in part or whole" 15. Missed Nursing Care can be considered a global issue<sup>6-8,16</sup>. Jones et al. (2015) reported that 55% to 98% of nursing personnel worldwide leave at least one task incomplete during their shift<sup>16</sup>. Frequently MNC tasks include ambulation, turning, delayed or missed feeding, patient education, discharge planning, emotional support and hygiene. Reasons for MNC can be attributed to nurses' work environment factors such as staffing, time to complete an intervention and use of available resources<sup>15</sup>.

To counter the global issue of MNC and help nursing care teams achieve optimal performance, effective strategies are needed<sup>5-9,16</sup>. According to literature, teamwork is a factor in inpatient care that positively can influence quality of care and reduce MNC<sup>5,8,9</sup>. Teamwork is dynamic and involves two or more people with complementary backgrounds and skills working towards common goals<sup>17</sup>. Several studies found that leadership can enable more effective teamwork<sup>5,8,9,17-21</sup>. Leadership is a process whereby an individual influences' a group of individuals to achieve common goals<sup>18</sup>. Occurring in the context of a group, it can foster quality of patient care, create open communication and provide clarity about roles within a team<sup>18</sup>. This point is supported by Salas et al. (2005), who conducted a conceptual framework for teamwork<sup>17</sup>. The framework includes 5 core components (team leadership, team orientation, mutual performance monitoring, backup behaviour and adaptability) and 3 coordinating functions (shared mental models, closed loop communication and mutual trust) of teamwork whereby team leadership in the framework is placed at the  $top^{17}$ .

The effective use of teamwork in hospitals requires understanding what it is and how it is performed by nursing care teams<sup>5,8,9</sup>. Therefore, this study suggests broadening the understanding of how nursing care teams perform leadership skills regarding teamwork in prioritizing their actions in the face of MNC and how teamwork is influenced by environmental factors<sup>8,9</sup>. Understanding this phenomenon can help build on existing literature and increase knowledge regarding MNC literature. For the development of sustainable improvement programs aimed at reducing or preventing MNC, and in turn, help nursing teams provide the best care to their patients.

#### AIM

The aim of this study is to explore how nursing care teams in clinical inpatient nursing wards use leadership skills regarding teamwork to prevent or reduce MNC and how teamwork is influenced by environmental factors.

## **METHOD**

#### Study design

This study employed an exploratory qualitative design<sup>22,23</sup>. This design was selected based on its capacity to explore the findings regarding the phenomenon of interest<sup>22</sup>. This study took place between January and March 2021. For reporting this study, the Consolidated Criteria for Reporting Qualitative research (COREQ) checklist was followed<sup>24</sup>.

# Population & domain

Participants in this study were registered nurses who worked on clinical inpatient wards in 4 Dutch hospitals. For collecting rich data for analysis, a purposeful sample<sup>22</sup> was employed between January and March 2021. Contacts of the lectureship<sup>25</sup> in the hospitals and a contact of a Dutch National Nurses Council were approached for recruitment. Nurses were eligible if they: were 21 years of age or older, worked in a clinical inpatient ward (not specialized) and were part of a nursing care team with permanent employment to ensure complete familiarity with the team context and nursing care. To obtain breadth and depth in the collected data, maximum variation technique was applied with regard to nurses' demographic characteristics such as: gender, age, education level, hospital, ward, work experience and role designation<sup>22</sup>. To ensure heterogeneity, a variety of perspectives, and to

reach data saturation, a sample size of 18 participants, divided into 3 focus groups, was expected to be performed<sup>23,26</sup>.

## Study procedure

Nurses were approached via e-mail by contact persons of the participating hospitals or via an invitation on the website of the Dutch National Nurses Council. Nurses interested in participating in the study could approach the student researcher (CB) by e-mail. Thereafter, they received an e-mail from the student researcher with the day and time of the study, an informed consent form and an online invitation. After study eligibility was established based on the inclusion criteria, participants were divided into 3 heterogeneous focus groups. Each participant participated once, and the same interview guide was used for all Focus Group Interviews (FGI). The online FGIs were performed once per week with a maximum of two participants from the same ward to ensure heterogeneity<sup>22</sup>.

#### **Data collection**

In March 2021, three mixed FGI with a maximum of six participants per focus group from different inpatient wards were performed<sup>22,23</sup>. Before the start of each FGI, recorded informed consent was obtained. Focus group interviews allow the researcher to interview several participants in one session and can create an environment where participants' responses can stimulate peer discussion to generate meaningful data<sup>23</sup>. Given the exploratory character of this study, a semi-structured interview guide was designed based on literature and expertise of the lectureship<sup>5,8,9,17-20,25</sup>. The interview guide contained guestions and topics related to the phenomenon of interest (insert Table1). The main questions were open ended intended to stimulate peer discussion<sup>23</sup>. Topics focused on thoughts, experiences, reasons for acting and strategies related to MNC and how teamwork and leadership skills influenced them. To acquaint participants with the topic of MNC, the interview started with an icebreaker question<sup>22,23</sup>: "Can you give an example of a situation when you were unable to provide all the care patients needed?" The subsequent five questions were focused on feedback, providing help, consultation moments, information exchange and collaboration. The interview guide was pilot tested once by the student researcher among four clinical nurses<sup>23</sup>. The FGIs were performed in a private room at participants' workplace or home<sup>23,27</sup>. The FGIs were video recorded and conducted via ZOOM video program<sup>27</sup>. The student researcher performed the role of moderator and led the conversation based on the interview guide<sup>22,23</sup>. A second senior researcher from the research team (RA or TH) affiliated with the lectureship<sup>25</sup> observed participants' verbal and non-verbal expressions and group interaction and took field notes<sup>22,23</sup>. Fieldnotes were analysed and discussed after each FGI in preparation for the next FGI<sup>22,23</sup>. No adjustment of the interview guide was necessary. Member checking took place

at the end of every FGI to ensure the reality of participants' input was presented<sup>22,23</sup>. The demographic data of participants were collected before each interview by e-mail. The duration of the interviews was approximately 90 minutes. After three FGIs, saturation was reached and the inclusion ended<sup>22,23</sup>.

# **Analysis**

The student researcher (SR) analyzed the demographic data using the SPSS statistical program<sup>28</sup>.

Thematic analysis according to consistent with Braun and Clarke<sup>29</sup> was conducted to identify, analyse and report themes within the data (insert Table 2). All video-recorded FGIs were transcribed verbatim after their completion by the SR. The analysis was a non-linear (iterative) process whereby the research team (CB, RA, TH) moved back and forth between steps in analysis to refine the data<sup>29,30</sup>. During all phases of the analysis, codes and themes were discussed by the research team until consensus was reached<sup>29,30</sup>. First, the research team familiarized itself with the data by (re)reading transcripts<sup>29,30</sup>. To achieve conformability, data from the FGIs were coded line by line independently by the research team<sup>29,30</sup>. Second, the SR generated initial codes on relevance to the phenomenon of interest which were sorted into potential themes<sup>29,30</sup>. The SR collated coded data extracts within the identified themes<sup>29,30</sup>. Thereafter, the SR reviewed the themes, some themes were excluded and others were added together or split into separate themes<sup>29</sup>. Constant comparison was applied to define the themes<sup>30</sup>. Subsequently, the SR identified the essence of the themes and determined which aspect of the data captured each theme<sup>29</sup>. The SR then generated sensitizing concepts out of the data<sup>29,30</sup>. Credibility was enhanced through researcher triangulation<sup>30</sup>. Peer-debriefing of the data was applied during the research team's consultation moments and with members of the Lectorship<sup>25,30</sup>. The computer software ATLAS.ti version 8 was used to organize the data<sup>31</sup>.

## **Ethical considerations**

This study was conducted according to the principles of the Declaration of Helsinki<sup>32</sup>, the Medical Research Ethics Committee of Medical Centre Leeuwarden and the Regional Review Committee Patient-Related Research Leeuwarden. It was stated as non-Medical Research Involving Human Subjects (protocol number 20210009)<sup>33</sup>.

## **FINDINGS**

In total, 18 participants met the inclusion criteria and were interested in participating in this study, of whom 16 actually participated. Two FGIs of 6 participants and 1 FGI of 4 participants were performed. Table 3 summarizes participants' demographic characteristics. The nurses who participated in this study worked in 4 different hospitals. The senior ward nurses had additional tasks such as arranging sufficient staff and supporting ward nurses. During all FGIs, at least 1 senior nurse participated. The age and years of work experience of the nurses varied in all FGIs. The nurses worked on 9 different inpatient wards and 12 worked in the same hospital. In total, 7 nurses worked in the same inpatient ward. During 1 FGI, three nurses of the same ward participated; in the remaining FGI, 2 nurses of the same ward participated.

Themes and sub-themes with relevant quotes describe the results of this study (insert table 4).

# Theme 1: Nurses working together

#### **Team effort**

Nurses collaborated differently. Depending on the organizational structure of the ward, some nurses worked in pairs, while others worked individually. Nurses who worked in pairs had double the number of patients compared to nurses who worked individually.

All the nurses who worked in pairs perceived that doing so contributed to their being aware of each other and, in turn, of which patientcare (e.g., General Daily Living Needs, arranging patients' admission and discharge and administering medication) still needed to be done. This awareness led to both enhanced confidence and effective teamwork among nurses.

"The fact that the other person knows what I'm doing gives me confidence. That if I'm busy and can't leave my patient, the other also knows what I'm doing and helps me (P2)"

Most nurses who worked individually mentioned not always being aware of their team members, the work progress or patient calamities. Some nurses mentioned that when they needed help they sometimes searched for a team member to consult with or asked the senior nurse. However, more nurses mentioned not searching for a team member to consult with or provide help due to time constraints. As a result, not all patient care could be completed on time or at all.

"We work individually, when there is a calamity the other care is suspended for a while" (P8)".

# Consulting and helping each other

During consultation moments, nurses discussed offering or receiving help, workload, work progress, problems and questions. The number of consultation moments varied among nurses.

All nurses working in pairs consulted each other frequently.

"I regularly consult my team members, I have done this, what should we be doing next" (P4).

Consultation moments created insight into the work progress, enabling nurses to help their team members when needed. Patientcare such as General Daily Living Needs, arranging patients' admission and discharge and administering medication continued and was nearly always completed. In addition, nurses perceived they could start a conversation with a patient when needed because the other team member would take care of their other patients.

"We deliver sometimes quite complex care in our department and it is really nice that you can do it together. We did find out than when we worked individual more care was not finished, because we didn't have time to complete it. Now we consult each other, if you do this I do that" (P13).

Most of the nurses who worked individually had a few planned consultation moments, resulting in them not always being aware of their team members. During these circumstances, nurses didn't offer or receive help from team members. According to the nurses, the reason for this was that there were only two planned consultation moments during a shift, with other consultation moments voluntary and rarely performed. As a result, nurses didn't complete patientcare or competed it later than scheduled.

#### Acceptance of help

Some team members did not accepted help. All nurses recognized this fact and found it difficult to handle. Not accepting help resulted in one team member finishing care while the other team member went out for a break. As a result, not all patientcare was finished on time. The act of not accepting help created negative feelings among nurses. Most of the nurses didn't discuss the reason for not accepting help from their team members.

"I sometimes find it quite difficult that when I see that a colleague is very busy and I offer help 3x and she says no I can manage it myself but she is not there for coffee or food (P1)".

#### Theme 2: Nurses as informal teachers

## **Sharing information**

Being informed enabled nurses to provide patientcare according to the latest guidelines and carry out work agreements as discussed during ward consultations. Some were informed by the team manager via e-mail or team sites. All nurses were informed during consultation moments (interprofessional, multi-disciplinary or ward consultations). Most nurses mentioned that they shared and discussed new information with each other.

"What I like, that when something has changed, it happens immediately. As we work with splash goggles from now on, 50 goggles will be in the team unit the next day. Then you can no longer ignore it and you are also addressed by everyone if you don't wear one (P3)".

## Mutual learning

All nurses perceived that mutual learning was tremendously valuable on the nursing wards. Most nurses used the expertise of team members. Most of the nurses shared their knowledge and skills with other team members, including novices, to help them to learn new skills (e.g., catheterization, wound care, stoma care). As a result, patientcare was performed correctly and eventually more team members were capable to perform these skills.

"Every team has members who are handy with the computer, infusion or other things, you should take advantage of that, we must learn from each other, that makes a team" (P4).

## **Feedback**

All nurses found it difficult to give feedback or communicate their issues with other team members. In some situations, they mentioned avoiding giving feedback at all, citing not wanting to hurt team members' feelings and the perception that feedback would be useless because the team member would not change their behaviour. This created friction among team members and was a barrier to teamwork. Nurses mostly didn't check reasons for the behaviour of team members.

"Feedback is always a recurring item that is more difficult than most people think. We always have quality themes, wearing big earrings is also an item. People think it's easy to give someone feedback about it but then you have to do it in practice and that's not easy" (P9).

#### Theme 3: Influence of formal and informal leaders on teamwork

# **Team managers**

All nurses identified team managers and ward managers on duty as formal leaders who had power to achieve or prevent changes, that could influence teamwork and MNC. Nurses perceived that the leaders should provide structure and support at the ward level and throughout the hospital.

#### Presence of the senior nurse

All nurses who worked in the same hospital saw the senior ward nurse as the informal leader of the nursing team. Nurses agreed on which tasks the senior nurses performed: checking the workload, assigning patients to nurses, facilitating appropriate communication in safe work environments, obtaining an overview of the ward and having consultation moments with the team manager. Senior nurses perceived that the information they received by performing these tasks, allowed them to intervene if necessary to arrange help in the form of additional nursing staff.

"In the morning we have a consultation moment with the ward manager on duty. She has an overview of the entire hospital and knows which department needs help and can offer help. This works well for us" (P10).

# Theme 4: Factors in nurses' work environment influencing teamwork

## **Team composition**

Most nurses cited novice team members and lack of work experience as factors in work environments influencing teamwork and MNC negatively and, in turn, resulting in fewer offers of help among team members. Nurses who worked in a team with many novice team members felt more responsible and perceived they couldn't expect help in all circumstances from the novice team members. All nurses perceived that novice team members should have the opportunity to learn.

"Working with new team members makes me feel more responsible for even more patients because the new team members have to learn. I don't say to new colleagues you just do the vital checks then I do the other care, because you have to teach someone how to perform daily care and what are important observations for the patients. So, if I work with new team members and it is very busy, then there is a problem in offering help (P16").

# Layout of the department

The layout of hospital wards was perceived by some nurses as an environmental factor influencing whether nurses helped and were aware of each other. A nurse who worked on a ward with only single-patient rooms mentioned that it was not possible to observe her team members. One nurse explained:

"So, when I work in a single-person room, I have little insight into what is happening with my team members in the multi-person rooms" (P9).

## DISCUSSION

This study's findings provided insight into how nursing care teams in Dutch hospitals used leadership skills regarding teamwork to reduce or prevent MNC and how teamwork was influenced by environmental factors. The themes in this study demonstrated that nurses working together, nurses as informal teachers, the influence of formal and informal leaders and work environmental factors are vital for performing teamwork and reducing or preventing MNC. These findings are supported by several studies that found that a good work environment requires effective teamwork, which reduces the probability of MNC<sup>34-38</sup>. Factors contributing to teamwork were team effort, consulting and helping each other, sharing information and mutual learning. Findings demonstrated that teamwork was influenced by nurses' performance of leadership skills and environmental factors in nursing wards.

Findings showed that leadership skills performed by nurses improved teamwork and reduced MNC. Leadership is described as "an individual who influences' a group of individuals to achieve common goals 18. Leadership skills were visible during collaboration and consultation moments of nurses and in nurses teaching each other and sharing work-related information<sup>17,18</sup>. In these circumstances, nurses were visible and profiled themselves as experts in their work environment stimulating team members to achieve common goals<sup>17,18</sup>. Senior ward nurses demonstrated leadership skills by being visible to team members, getting insight in the workload and discussing the workload with the team manager.

On the other hand, nurses perceived that lack of leadership skills were a barrier to teamwork and MNC, as with the nurses who neither provided feedback nor inquired about the

behaviour of team members. As a result, the behaviour continued and friction arose between team members. For improving the performance of these leadership skills, more awareness of the influence of leadership skills on teamwork and MNC is recommended. In addition, creating opportunities for more meaningful dialogue between team members, reinforcing positive work environments by learning how to provide constructive feedback and being open and transparent could contribute to improving these leadership skills<sup>18,35,39</sup>. This point corresponds with the findings of Zeleníková (2020), who stated that communication should be improved for stronger teamwork<sup>37</sup>.

Team composition was an influencing environmental factor on teamwork. The presence of many novice team members was perceived as a barrier to teamwork and MNC. Lack of experience and knowledge contributed to reducing the capacity to offer help among team members and increased feelings of responsibility. These findings are in line with a study conducted by Bragadóttir (2017)<sup>38</sup>. Awareness of the influence of team composition on teamwork among leaders and senior nurses is therefore recommended. To balance team composition, senior nurses should have an opportunity to maintain balance in staff resources between inexperienced and experienced team members<sup>39</sup>.

# Strengths and limitations

This study has several strengths. For reporting this study, the COREQ criteria were followed<sup>24</sup>. The use of the maximum variation technique contributed to heterogeneity and the inclusion of a variety of perspectives among participants<sup>30,40</sup>. The conceptual framework provided by Salas (2005)<sup>17</sup> was used to design an interview-guide that covered all elements of teamwork. This study also has some limitations. The researcher and several participants worked on the same ward, which may have caused confirmation bias<sup>40</sup>. To reduce the risk of confirmation bias, the research team discussed and evaluated this after each FGI in preparation for the next one. In addition, most of the participants worked in the same hospital. Which may represent selection bias in the study population<sup>40</sup>. To reduce the risk of selection bias, the researchers scheduled a maximum of 2 to 3 participants from the same department per FGI.

#### *Implications*

Drawing on the results of this study, nursing leaders could find innovative ways to help their teams become more effective while maintaining staff and patient care. Further research on and investment in nursing teams' education and learning experiences regarding teamwork and leadership skills is recommended.

# Conclusion

In their complex work environment, nursing teams are challenged to provide safe and complete patient care. Exploring how nurses performed teamwork, we conclude that teamwork can reduce or prevent MNC and that teamwork is influenced by leadership skills and environmental factors. The results of this study build on the existing literature and provide a theoretical basis for suggestions and interventions that can optimize teamwork and reduce MNC.

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# **TABLES**

# Table 1: semi-structured interview guide

## Questions

- 1: Can you describe a situation when you were not able to provide all the care the patients needed?
- 2: Can you give an example of a situation in which you received help from other team members and a situation in which you offered help to team members? How did this influence teamwork and MNC?
- 3: Can you tell something of dealing with strengths and weaknesses of your team members and how this influence teamwork and MNC?
- 4: Can you give an example of how in your team ideas are discussed and information is shared with each other, how does this affect MNC?
- 5: Can you tell something about trust and respect in your team and how you deal with receiving and giving feedback, how does this influence teamwork and MNC?
- 6: Can you give an example of how goals and visions are determined in your team and how this information is provided by team managers, how does this influence teamwork and MNC?

Table 2: Thematic analysis of Braun and Clarke<sup>29</sup>

Description of the process
All data was transcribed verbatim, transcripts
were (re)read, initial codes were noted.
Coding interesting features of the data in a
systematic fashion across the entire data set
and collating data relevant to each code
Collating codes into potential themes,
gathering all data relevant to each potential
theme.
Checking if the themes work in relation to the
codes extracts and the entire data set,
generating a thematic 'map' of the analysis.
Ongoing analysis to refine the specifics of
each theme, and the overall story the
analysis tells, generating clear definitions
and names for each theme.
The final opportunity for analysis selecting
appropriate extracts, relating back of the
analysis to the research question and
literature, producing a report for analysis.

Table 3: Demographic characteristics (n=16)

Demographic characteristics	N			
Gender:				
Female	16			
Age(years):				
21-30	4			
31-40	3			
41-50	4			
51-60	5			
Role designation:				
(Senior) Ward nurse	5			
Ward nurse	5			
Ward nurse combined with inpatient care nurse function	4			
Ward nurse combined with research function (Msc.)	2			
Experience in nursing care (years):				
1-5	2			
6-10	2			
11-15	3			
16-20	1			
21-25	3			
26-30	2			
>30	3			
Highest educational qualification in nursing*:				
Inservice Educated	2			
Secondary Vocational	4			
Higher professional	10			
14/2				
Ward	7			
Urology and Head and Neck surgery	7			
Lung diseases	1			
Corona	2			
Clinical geriatrics	1			
Cardiology	1			
Thorax surgery	1			
Abdominal surgery	1			
Gynaecology	1			
Medical Psychiatric Unit	1			
•				

<sup>\*</sup>Inservice educated: (in Dutch: inservice opgeleid); \*Secondary vocational: (in Dutch: MBO-verpleegkundige); \*Higher professional: (in Dutch: Bachelor HBO-verpleegkundige);

Table 4: Themes and connecting subthemes

Themes	Subthemes
Nurses working together	<ul> <li>Team effort</li> <li>Consulting and helping each other</li> <li>Acceptance of help</li> </ul>
Nurses as informal teacher	<ul><li>Sharing information</li><li>Mutual learning</li><li>Feedback</li></ul>
Influence of formal and informal leaders on teamwork	<ul><li>Team managers</li><li>Presence of the senior nurse</li></ul>
Factors in nurses' work environment influencing teamwork	<ul><li>Team composition</li><li>Layout of the department</li></ul>