CASE STUDY

Exploring experiences of fostering positive work environment in Norwegian nursing homes: A multi method study

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ABSTRACT

Objective: The aim of the study is to explore what characterizes the work culture in Norwegian nursing homes and what promotes the positive aspects in the work culture.
Methods: Research design: Multimethod research. Two surveys (N = 105) and interviews with 11 informants at three Norwegian nursing homes were conducted. We included the questionnaires: The Systematizing Person-Group Relations, that seek to explore which aspects dominate the particular work environment identifying challenges, limitations and opportunities and The Sense of Coherence (SoC) that was used as an indicator for overall quality of working life with a salutogenic orientation. The data were analyzed using independent samples student's *t*-test and factor analyses, the material from the interviews was systemized and worked through using well known analytical methods.
Results: The results showed that the informants feel more meaning, manageability and comprehensibility in their work environment, when they are engaged and focused on goal orientation. In the interviews the informants expressed engagement related to their work environment and to patients and colleagues. They mentioned that being a team and working together was positive for their perception of their work environment. A positive work culture was characterized by solution orientation and the experiences of better opportunity to "attend to the patients in a good way".
Conclusions: It seems like healthcare workers as individuals has both a positive attitude and ways to express this in the work culture, such as humor and positive thinking. But the work culture itself seems to create some negative issues.

Key Words: Work culture, Nursing homes, Positive experiences, Positive health care personnel

1. INTRODUCTION

The rapidly increasing population of older adults is expected to continue and accelerate in the next decades. This may lead to an increasing demand for nursing home services, and the quality of care and performance related to nursing homes will be more focused on.[1,2] One of the key factors to influence on the performance is work culture, which contains both organizational culture and organizational climate, and

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working conditions will be of importance.[3] The relationship between nursing leadership and patient outcomes has been described as essential to the development of organisation in health care. Significant associations between positive leadership behaviours, styles and increased patient satisfaction have been found.[4] Researchers have also found that nurses working in contexts with more positive culture, leadership and evaluation reported more research utilisation, staff development and lower rates of patients and staff adverse events.[5] This suggests that management practice can be employed to achieve better patient outcomes. Organizational culture has been defined as the norms, values, and basic assumption shared by members of an organization.[6,7] Organizational climate refers to members' perception of organizational features like decision-making, leadership and norms about the work.[6,8] In this article we use the concept of "work culture" to illuminate both organizational culture and organizational climate. Work culture may be investigated using qualitative and quantitative methods.[9]

Despite numerous clinical and regulatory efforts, problems of poor quality of care in nursing homes continue,[10] which is of special concern since the patient population in nursing homes is vulnerable and fragile.[11,12] Earlier studies has focused on negative factors in the nursing homes work cultures.[13,14] In this present study, we are focusing on positive factors in the work culture in Norwegian Nursing Homes. When gaining insight into the positive factors we may facilitate a positive development of work culture by Norwegian nursing homes differently than if we focus merely on the negative ones. To our knowledge, few studies in nursing homes have focused on the positive factors in the work culture.

A healthy work environment (HWE) strategy is a concept used in health services, and is defined as "a work setting in which policies, procedures, and systems are designed so that employees are able to meet organizational objectives and achieve personal satisfaction in their work environment".[15,16] The "ingredients" for HWE strategy have been found to be nursing administration/leadership, professional practice, and professional development. For nurses working in a hospital, HWE has been found to be associated with significantly lower odds of experiencing burnout, job dissatisfaction, and the intention to leave.[17] Creating cultures of retention and fostering healthy work cultures are major challenges that nurse leaders face today.[18] HWE comprises a setting in which a nurse is able to produce and provide good quality care and where the nurse also has job satisfaction. These are important issues also in Nursing Homes, and must be focused on.[19] In Norway HWE represents a new perspective on work culture.

Research has shown that relation-oriented management, which promotes interaction between nursing home residents and staff, appears to support staff empowerment and can be a foundation to improve quality of care.[20] Interventions that change how people relate to one another, such as communication, participation in decision making, and relationship-oriented leadership, may result in better outcomes regarding work culture and problem solving.[21] Communication and collaboration have been associated with nurses' attachment to their organization and improving nurse retention.[22–25] Improving employees' participating in decision-making, increasing acceptance and meaningfulness and making changes in the management style seem to be crucial factors to improve quality of care in nursing homes. A relationship between empowerment, communication, participation and influence on one hand, and quality of care in nursing homes on the other hand, has been identified.[19] Little is known about the issues that may foster a health promotive or a positive work environment in Norwegian nursing homes. In this study we have aimed to reveal the characteristic of the work environment in Norwegian nursing homes with a survey, and to explore these characteristics more thorough with qualitative research interviews. This is important knowledge to be able to initiate changes.[19]

In this present study we explored, quantitatively, the health care workers perception of their work culture. In our qualitative approach we wanted to explore how positively oriented individuals characterize their work environment.

On this background we investigated the following research questions:

- What characterizes the work culture in Norwegian nursing homes, quantitative approach?
- What promotes the positive work culture in Norwegian Nursing Homes, qualitative approach?

2. METHODS

The research questions will be examined using multiple methods, including data from questionnaires and interviews. We aimed to explore the characteristic of the work environment in Norwegian nursing homes in general. Then the positive aimed characteristics of interests were explored more thoroughly. The study was carried out during autumn 2011 at three nursing homes in Norway.

2.1 Sample

The sample consisted of health care workers such as nurses, special educated nurses, nursing managers, social educators, occupational therapists, physiotherapists, assistant nurses, and assistants with no education. In Norway these groups

are typical for employees in nursing homes.[26] The three nursing homes with in total 210 health care workers are all in one community in the middle of Norway. In this municipality there are 25 nursing homes, some private- and most state funded. Most nursing homes in Norway are state-founded, and they are run by the municipalities. Our sample represents typical nursing homes regarding size and management and all three are state-funded. The three in the sample have both rehabilitation units were the length of stay are from one to four weeks, and units with permanent stay. The management at the three nursing homes volunteered to participate in the study. The nursing homes have 3-4 units each with a total of 318 patients. Calculations showed that at least three of the nursing homes of that size in the municipality had to participate in the study to have a satisfactory number of respondents. The respondents received an E-mail with a link to the study's web-site and questionnaires. Two follow ups were sent to non-responders. All health care workers in the municipality receives an E-mail address when they start to work for the municipality, this E-mail address was used to contact the respondents. All health care workers at the tree nursing homes were included.

In the interviews 11 health care workers participated, the number of informants were settled by saturation.[27] They represented the three nursing homes in the sample and were purposively selected to find informants with knowledge about the phenomenon under investigation.[27] The interviewed health care workers were recruited by nursing home management. They had fewer sick leave days and were known to have a positive attitude. The researchers were given a list of potential informants from the management and contacted them. All the informants volunteered to participate and were informed about the topic before the interview. A more detailed description of the informants is given in the result part.

2.2 Questionnaires

The Strengthen Person-Group Relation Instrument (SPGR) was used for data collection and analyses.[28,29] The method is based on a factor analytical space where the evaluation of different objects is placed according to the evaluation from the respondent. The respondent rates the statements according to a total of 24 items.[29,30]

The outcome places the site in the factor analytical space, which in this paper consists of a total of 12 factors, all rating different impressions related to the test site, as shown in Table 1. Validity is confirmed,[31,32] and the instrument has been used in different settings.[33,34] This method focuses on important issues in an organization as task-orientation, caring, creativity, criticism, assertiveness, loyalty, acceptance, resignation, self-satisfaction, engagement and empathy in the work culture.[30] These issues can, for instant illuminate the health care workers perception of how they experience the level of acceptance in their work culture, which is important for the development of empowerment.[35] These are important issues in work environment in nursing homes.[19]

Table 1. Elements of group constitution based on SPGR instrument

Dimensions	Behavioral factors
Control	Ruling and task-orientation
Nurture	Caring and creativity
Opposition	Criticism and assertiveness
Dependence	Loyalty and acceptance
Withdrawal	Resignation and self-sacrifice
Synergy	Engagement and empathy

Sense of Coherence (SoC) was assessed by a six-item version[36] of the Orientation to Life Questionnaire (items are numbered 8, 10, 15, 22, 24 and 27 in the longer, 29-item version of this questionnaire) by Antonovsky.[37] The six-item measure covers the three aspects of SoC; comprehensibility, manageability and meaningfulness, and these items are described and developed by Kivimäki for assesing SoC in work-life (2002). The respondents were asked to check their level of agreement with items on a seven-point semantic differential scale with two anchoring phrases.[36] The six-item version corresponds well with the results derived using the original Orientation to Life Questionnaire. For the six-item version in Kivimäki study the Cronbach's a was .76 and in the 3-year follow-up study the correlation was .62.[36] When developing health care workers' work culture their perception on meaning, manageability and comprehensibility can give an indication if the heath care workers function well together in their work situation.[36] These are important issues in work environment in nursing homes.[19]

2.3 Qualitative method

The qualitative research interview is an interpersonal situation, a conversation between two partners about a theme of mutual interest.[27,38] The interviewer attempts to verify the interpretation of the informant's answers in the course of the interview.[39,40] The individual interviews were held over a 2-month period and each interview lasted from 40 to 50 minutes each, one interview for each informant. The informants were told that their experiences and perceptions were important to study. In addition, they were assured that their information would be treated anonymously and would have no effect on their working situation at the unit. The interviews were taped by the researcher and transcribed by professionals. To obtain an overview over the total amount of

experiences from the three nursing homes in the sample, we made sure that the informants participating in the interview represented different nursing homes and professions. The interviewer used a semi-structured interview guide so that the informants could speak more freely around the subject.[27] The background of the interview were the findings in the survey. The informants were for example asked if they could describe situations where they felt successful, experienced meaning and engagement.

2.4 Data analyses

Based on the SPGR results the means were reported according to the different factors.[30] The SoC data were analyzed and correlated with the SPGR data to find covariance.[41] Independent samples student's t-test was conducted to explore differences between findings. Then the two instruments were correlated. The relevant data was analyzed using the Statistical Package for Social Sciences (SPSS Inc., Chicago, IL, USA) version 21.0 for Windows. All research questions were tested at the 0.05 significance level for the two-tailed test. When we checked the sample for normality, our test gave acceptable results.

The material from the interviews was systemized and worked through and the information from each of the informants in the sample and from each of the themes were discussed by the researchers following Kvales approach to qualitative analysis.[42] To secure the confirmability of the material, at least two perspectives from two researcher on each interview were made.[38] Dependability and confirmability are major factors in understanding the implications of the study, and a large part of the effort was to examine these issues. Thereafter, the material was condensed and analyzed by two researchers. Five approaches were used for this purpose: categorization of meaning, condensation of meaning, structuring of meaning, interpretation of meaning, and ad hoc methods for generating meaning.[38] The categories emerged from the data and then the meanings of the statements were highlighted and condensed into groups, still with their original words intact. After the material was condensed, we constructed narratives in each theme. In this process, the interpretation of meaning took place in connection with the total statement before the final selection and range were made.[40]

Multimethod research includes the use of more than one method of data collection or research in a study or set of related studies. Equally important is the fact that different research methods offer possible solutions for another's problems.[43] In this study we have used å multiple method approach to reveal supplementary explanations or solutions to the subject under investigation.

2.5 Ethical considerations

The ethical guidelines of voluntary participation, informed consent and the possibility of withdrawal at any point were followed. The participants were informed about the purpose and aim of the study. All data gathered was anonymized. For the interviews confidentiality were discussed with the informants. The Regional Committees for Medical and Health Research Ethics in Norway approved the study. Based on that the actual department management at each nursing home ethically reviewed and sanctioned the study.

3. RESULTS

3.1 Subjects

In this survey 210 of the health care personnel working at the three nursing homes received the questionnaire, 105 (50%) filled out the questionnaire. There were more women than men working in these units, and the age ranges from 20 to 59.

In this study 39% of the health care workers had less than 3 years university study. Most of the health care workers work full time (37%), while 34% work between 50%-75%. As much as 60% of the respondents work only their time position. Concerning sick leave 37% of the respondents had 1-3 sick days and 12% reported more than 10 sick days during the last 6 months. As many as 98% of the health care workers in these nursing homes, speak native Norwegian. A more detailed description of the respondents is given in Table 2.

3.2 Quantitative data

Only 60 of the 105 respondents (57%) fulfilled the SPGR and SoC surveys. We found no significant differences in age, education, work experience, and sick days between responders and non-responders. The SoC data were correlated with the SPGR data. This was done to verify the findings in the two instruments and there were significant correlations between the SPGR and SoC findings. The SoC data was inverted to make positive correlations.

The findings displayed in Table 3, show that there were correlations between several factors in SPGR and the dimensions in SoC. The synergy factors in SPGR correlates positively with the meaning, the manageability, and the comprehensibility dimensions in SoC. The control factors in SPGR correlates positively with manageability and meaning dimensions in SoC. High scores in opposition factors in SPGR correlates with weak SoC on both manageability and comprehensibility dimensions. In the opposition factors in SPGR, all three dimensions in SoC, comprehensibility, manageability and meaning correlates negatively. The withdrawal factor in SPGR correlates negatively with the meaning, manageability

and comprehensibility dimensions in SoC.

Table 2. Demographic data about the respondents (N = 105)

Year	2011 (%)
Sex	
• Female	91
• Male	9
Education	
• Less than 3 year university	39
• 3 year university	34
• More than 3 year university	28
Age	
• 20-39 years	56
• 40-59 years	44
Work experience	
• 0-5 years	24
• 6-20 years	52
• Over 20 years	24
Time position	
• Less than 29%	11
• 30%-49%	0
• 50%-75%	34
• 76%-99%	18
• 100%	37
How much do you actually work	
• 10% more than time position	19
• 20% more than time position	6
• 40% more than time position	4
• 50% more than time position	10
• Only the time position	60
Number of sick days last 6 months	
• None	31
• 1-3 days	37
• 4-6 days	12
• 7-10 days	7
• Over 10 days	12
Speaking native Norwegian	
• Yes	98
• No	2

3.3 Qualitative data

The informants described a range of areas of their work environment. The informants comprised of six nurses, four assistant nurses and one social educator. All the informants were working with patients care on a daily basis. Their experience with working in nursing homes varied from 11 to 29 years, with a mean of 20 years. All the informants were speaking native Norwegian, 10 were female and one male.

The findings are organized in five categories that emerged from the data. These are: caring for patients as a positive aspect in the work culture; humor and positive thinking; characteristics among colleagues; meaningful to go to work; and negative aspects concerning their work environment.

3.3.1 *Caring for patients as a positive aspect in their work culture*

Common for several of the informants were that they often mentioned patients and relating to patients when they talked about positive aspect in their work culture, as two of them stated:

"when I get to help the patient with realizing that she needs to be in a nursing home, it is good for her - then I think - what a good job I did - then I feel that we have succeeded."[4]

"I look forward to meeting patients and therefore – yes - I feel like I contribute to make a difference for them."[6]

It was obvious that working with patients was a source for positive feelings for the health care personal, as one stated:

"that's when the patient is satisfied and happy yes - I really feel that I have succeeded."[2]

3.3.2 *Humor and positive thinking*

About themselves as health care personnel the informants mentioned that positive thinking, good mood and not to take everything so seriously are important aspects, as one said:

"I try to be positive and happy, and I think that humor is important."[11]

Another way of describing this is:

"it is good to have some challenges at the job, but it's good to have some fun and maybe to take some dance moves- I like to be involved - I am bored quickly."[5]

3.3.3 *Characteristics in colleagues*

When the health care workers talk about their colleagues they state that some characteristics are positive and important, that different behavior can be of importance, as one stated:

"I have trustworthy and good colleagues and feel that we accept each other's differences - we can discuss all kind of things with each other and it is important that all our colleagues are present when it is intended that they should be."[2]

Some of them also tell about a professional and good work environment with colleagues they are fond of, as one stated:

"I love my colleagues - when working together every day we know each other well and we have a good environment with many discussions."[3]

3.3.4 *Meaningful to go to work*

Important for the good work environment is that it is meaningful to go to work, that they have to be engaged, and that informed cooperation is important, as one stated:

"it must be experienced meaningful to go to work - I feel that the tasks are useful and I feel that I have co-participation in relation to decisions taken."[3]

Table 3. Correlations between SPGR and SoC

SPGR (dimensions)	SoC		
	Comprehensibility	Manageability	Meaning
Control (C)	- .096	.024**	.141*
Nurture (N)	- .027	.142	.111
Opposition (N1)	- .336**	- .338*	- .347
Dependence (N2)	- .129	.134	.266
Withdrawal (O1)	- .297**	- .397**	- .538**
Synergy (S2)	.089**	.270**	.485**

* $p < .05$; ** $p < .001$ (2-tailed, n = 54)

The informants also described that the work load can be heavy and that working together is important to reach their goals, as one said:

"although we are busy all the time so - when we speak well together and offer each other help and when we pull together, we will usually reach the aim."[10]

3.3.5 *Negative aspects concerning their work culture*

When the informants reflected over negative aspects concerning their work culture they mentioned stress, negative thinking, difficult to work together, discussions of difficult issues, poor communication and organization, as stated:

"negative discussions with colleagues where things get blown up and no one can find good solutions."[6]

"I have so much to do and I'm so stressed that it burns under my feet - I feel that there may be poor communication and organization."[8]

Caring for the patients are also related to negative aspects:

"if one cannot do a good enough job related to the patients when you are being thrown into something that you did not prepare for - it's hard."[9]

"when family members are unhappy and complain and if I did not feel my supervisor supports me - then it will be tough - if there are persistent family members who are not satisfied, it is important to have and feel support."[1]

4. DISCUSSION

This study has focused on health care workers characterization of their workplace in three Norwegian nursing homes and how positively oriented health care workers in nursing homes will characterize their work culture. We used mixed methods, including quantitative data collection based on The SPGR and SoC instruments, and qualitative data collection based on individual interviews to examine the research questions.

4.1 Characteristics of the work environment in Norwegian nursing home

Education is an important factor for empowerment, participation in decision making and individual responsibility.[6, 19, 44] In this study as much as 39% had less than 3 years University education. Sick leave can lead to unstable work conditions, higher level of work stress, accident rates, burnout rates, and higher adverse event related to patient quality issues.[45, 46] We found that half of the staff had a sick leave from 1 to 6 days the past 6 months and that 12% were sick more than 10 days. When the health care personnel had less than full-time position it can lead to less flow and continuity in the work environment, and less overview and control in the work situation. Colleagues' significance for their work environment and their well-being were reported in the interviews. Furthermore, the results showed that only 37% worked full-time, and 59% never worked more than their time position. When employees don't work full-time they do not participate much in the work environment, and the co-workers therefore have less "shared experiences", as mentioned in the interviews. Due to the amount of sick leave and the high amount of health care workers working less than full time it will be difficult to be a strong united colleague group. Discussions among colleagues were mentioned in the interviews as a positive incitement in their work environment. The importance of colleagues to be present when they are supposed to be present were also emphasized. Stability and closeness among colleagues are reported to be positive factors in the work environment. Satisfaction at work, with professional and personal development are important for the work environment.[47]

4.2 Health care workers' perceptions of positive experiences in the work environment in Norwegian nursing homes

When we look closer at the positive work experiences we see that the relationship with the patients represent many positive values for the health care workers, which is congruent with earlier findings.[19] The synergy factors in SPGR

correlates with both the meaning, manageability and the comprehensibility dimensions in SoC, which is positive for the work environment, since synergy stands for engagement and constructive goal-orientation behavior. The respondents feel more meaning, manageability and comprehensibility in their work environment, when they are engaged and focused on goal orientation. In the interviews the informants expressed engagement related to their work environment and to patients and colleagues. They mentioned that being a team and working together was positive for their perception of their work environment, which also is a part of the HWE strategy.[15,16] Positive discussion, without stress can increase the positive experience with the work environment, as found earlier.[45,46]

The informants mentioned in the interviews that "accepting each other and discussion of all kind of things" were important positive factors in the work environment. This can facilitate the health care workers' ability to use their potential and creativity in their work, an important factor to obtain job satisfaction.[15,16] Both meaning and co-participation were stated by the informants to be crucial factors for a positive work environment. Empowerment and participation have proven to be very important factors for a good working environment.[19,21]

Avoiding withdrawal oriented behavior, such as restriction from contribution and commitment, is crucial to ensure a positive work environment. The informants mentioned in the interviews that it was important for them "being there for the patients" and "feeling they could mean a difference" for them. All this positive engagement and positive attitude related to quality of care is significant for the work environment and for the implementing of the HWE strategy.[15,16,18] The health care personnel mentioned in the interviews that humor and "having some fun" are vital for the work environment and for their contact with the patients. Thus, it will be central for the health care workers to put the use of humor and "having some fun" into action in the work environment. The positive engagement the health care workers identified is a positive factor for the work environment. In comparing SPGR and SoC, we found that high scores on positive factors such as the synergy correlated positively with meaning, manageability and comprehensibility (see Table 3). Also some of the informants stated in the interviews that both meaning and challenges to go to work, and the level of involvement were essential for the experience of a good work environment.

The correlations between SPGR and SoC indicate that when opposition factors are high the heath care workers experience less meaning, less manageability and less comprehensibility. Opposition factors is in focus when resignation, self-sacrifice, critical and assertive behavior dominates.[29] Such behavior is negative for the work environment and it is logical that the dimensions in SoC are influenced by this. High scores on, for instant, self-sacrifices, may influence negatively on the sense of meaning. Also in the interviews the respondents described negative discussions, stress, lack of support and poor communication in their work environment. These findings are present both in the surveys and the interviews, and describe challenges in the work environment. When the respondents scored the withdrawal factors in SPGR high, their sense of meaning, manageability and comprehensibility in SoC weakened. Withdrawal factors is characterized by resignation and self-sacrifice restriction as the dominant behavior[29] and these are negative for the work environment. To have "acceptance from each other as colleagues" in discussions was stated as essential in the interviews. Taking interest in, and supporting each other in the working environment, are of value when promoting a positive work environment. These are very important values for a HWE.[18,19]

4.3 Limitations of this study

This study was conducted in Norway in three nursing homes. The response rate in the quantitative studies were 50% and it seems like the health care workers in nursing homes are not familiar with using their work E-mails and answering questionnaires on E-mail. The questionnaire was distributed on their formal E-mail address which was given the staff from the municipality. It seems like several of the health care workers use only their private E-mail address which we had no access to. The trustworthiness of this study, related to the qualitative findings may be limited by the selection of the "positive" staff members. Other members of the staff may have other positive experiences of the work environment. The sample is rather small and studies will be needed with larger samples in order to draw more generalized conclusions. The present findings may, however, give an indication as to the direction that research ought to follow in subsequent studies.

5. CONCLUSIONS

The informants expressed engagement and positive energy related to quality of care for patients and to colleagues. This can be used to create positive work environment so that health care personnel working in nursing homes can achieve personal satisfaction and provide satisfactory quality of care. Use of humor and other behaviors that take some of the pressure away from the health care personnel were highlighted. In the future, health care personnel ought to encourage and improve these types of behaviors, as a counterweight to the negative findings in this study. The findings also highlighted several negative aspects of the work culture. When comparing the quantitative and qualitative findings in this study it

seems like the individual health care worker have a positive attitude and points out several factors that can facilitate a positive work culture. The work culture on the other hand represents some negative aspects such as resignation and self-sacrifices. It seems like the health care workers as an individual has both a positive attitude and ways to express this in the work culture, such as humour and positive thinking, but the work culture itself seems to create some negative issues. To fosterer a positive work culture it seems important to address several of these negative issues. The HWE strategy can be used to focus on creating positive work cultures and fostering HWE also in nursing homes. The main findings in this study suggests that the work environment in Norwegian nursing homes may be influential to foster a more positive and health promotive work environment. The HWE strategy have been used with success in hospitals, and may also be used in nursing homes. Further research may show whether this can be used in nursing homes and whether it will contribute to a more positive and health promotive work environment.

Conflicts of Interest Disclosure

The authors declare they have no conflicts of interest.

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