How implementation of "Joy of Life" are experienced by the employees: A qualitative study

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Abstract

Background: Nursing homes are under strong pressure to provide good care to the patients. In Norway, municipalities have applied the ‘Joy-of-Life-Nursing-Homes’ strategy to increase a health-promoting perception that focuses on the older persons’ resources. Implementations represent introducing changes to the health professionals; however, changing one’s working approaches, routines and working culture may be demanding. On this background we explored how the ‘Joy-of-Life-Nursing-Homes’ strategy is perceived by the employees, before and after the implementation and which challenges the employees experience with this implementation.

Method: We used a qualitative approach and interviewed 14 healthcare personnel working in nursing homes in one Norwegian municipality which had implemented the ‘Joy-of-Life-Nursing-Homes’ strategy. The analysis was conducted following Kvale’s approach to qualitative analysis.

Results: The main categories after the data condensing were (a) the characteristics of care activities before implementations of ‘Joy-of-Life-Nursing-Homes’, (b) how ‘Joy-of-Life-Nursing-Homes’ influenced the care activities, and (c) challenges with the implementation of ‘Joy-of-Life-Nursing-Homes’. Some of the informants spoke well about the implementation concerning the quality of the care, as one stated “to see the joy in the eyes of the patient then I feel we have succeeded”. For informants who experienced resistance toward the implementation, they feel that it is too much to document, it is too complicated, and the requirements are too many.

Conclusions: Quality of care for the patients seems to have increased after the implementation. Nevertheless, the fact that the informants seemed to be divided into two different groups related to their main perspective of the implementation is concerning. One group has positive experiences with the implementations process and the benefits of it, while the other group focuses on lack of benefits and problems with the implementation process.

Background

Contributions to the literature

- Positive attitudes to the implementation of Joy-of-Life-Nursing-Homes are important for a successful implementation
- To achieve a successful implementation, focus on the benefits of the implementation were significant
- In overcome resistance interventions targeting the work environment must be inserted

Employees in nursing homes (NH) are under strong pressure to provide good care to the patients (1, 2). It is difficult to recruit and retain qualified workers (3, 4). The focus on professional development and attitudes is therefore of great importance for NHs to appear as an attractive workplace for health professionals (1). Eldercare concept positions that municipalities need to properly poise their eldercare
innovations into three key groups; improving the quality of care for the elderly, improving the working environment, and societal efficiency (5).

In Norway, almost 40,000 people were admitted to NHs in 2019 (6). Based on this, the strategy ‘Joy-of-Life-Nursing-Homes’ (JoLNH) was established in Norway. The JoLNH is a national strategy for endorsing comfort, meaning-in-life and quality of life (QoL) among NH patients (7). Several Norwegian municipalities have applied the JoLNH strategy. JoLNH is founded on a health-promoting perception that focuses on the older persons’ resources. The Norwegian government strongly endorses introduction of the JoLNH authorization to the municipal health services (7). To convert into a qualified JoLNH, the NH must accomplish nine standards established by the Joy of Life (JoL) foundation. Consequently, implementation of the JoLNH certification strategy represents introducing changes to the health professionals in the NHs. To change one’s working approaches, routines, working culture etc., may be demanding, but may also be experienced positively (1). Structural willingness for change is a critical ancestor to the successful implementation of complex change in healthcare settings (8-10). Structural willingness has been labeled a common psychological state (9), where an organization efforts to influence the beliefs, attitudes, intentions, and finally the behavior of their organizational members (9-11). Innovations and changes may also lead to pressure (12). Implementations of innovations may be stressful in healthcare setting, and the transformation progression must for that purpose be enabled so it may be successful (12, 13). However, the application of new routines and strategies can be challenging (14). It has similarly been established that enabling of innovations in healthcare settings, with the performance and purposes of health professionals, is a significant fragment of innovations (1, 14). Both performance and purposes are prejudiced by numerous issues, such as attitudes, standards and enthusiasm and are well labeled (Strobe 2008). Inducing ideals and standards is normally problematic, although enthusiasm and attitudes are more vulnerable to impact and can also be prejudiced by the health professional’s current life condition (11, 15).

When introducing and evaluating changes it is important to define the concept of change; in this study we used the definition offered by Richards and Hallberg (8); they understand change as an informed decision to change behavior often related to a specific outcome (p 80-81). Implementation is labeled as an “embedding of the new intervention into routine health care systems and activities”. Richards and Hallberg (2015) also stated that “implementation requires attention to multiple factors and is a highly active process” (p 13) which includes “use of strategies to adopt and integrate evidence-based health interventions and change practice patterns within specific settings” (p 13)(8). The importance of enabling the implementation process for healthcare personnel have been emphasized by other researchers such as Lewy (2015). Upcoming encounters for healthcare services will “use the knowledge in a way that will bring added value to healthcare professionals, healthcare organizations and patients without increasing workload” and “develop solutions that can be easily integrated and used by healthcare professions considering the existing constraints” (p 2)(16). Resistance and barriers to change might happen after implementations have been presented (17, 18). It is vital to identify the causes of the resistance or barriers in order to manage and alter this resistance (10, 19). Encounters for presenting changes in health
care units do not only focus on the performance and intents of the health care employees, but also recognizing motivational issues, such as concentrating on the benefits of changes (20, 21).

Earlier research has described workloads, stress and job satisfaction among employees working in NHs (1, 22-24) and the importance of control over their own work (3, 25, 26). Several studies have looked at the connection between employees' work situation and its significance for patients (27, 28) and the experiences of health professionals in Norwegian NHs (1, 27, 29, 30). However, the implementation of the JoLNH strategy has scarcely attended to the employees’ perspective (31). At the same time, the introduction of JoLNH presupposes that the manager is an active driver, that employees are encouraged to update themselves professionally within specific themes, that employees have co-determination and good access to information, and that the working environment is strengthened (31).

Nursing managements must take into account that the work culture is crucial for improving the quality of NH care (1, 12, 32). Changes are needed to increase the feeling of well-being, co-determination, autonomy and influence for the employee in NHs (1). Influence on their own work situation can help increase staff engagement and involvement in providing the best possible care for patients (1, 22, 23, 27). Healthcare professionals working in NH’s stated in another study that they experience commitment to giving good care to the patients and positive energy related to suiciding giving high care quality (1). This can be used to create a positive working environment, so that health professionals working in NHs can achieve personal and professional satisfaction in their work. The authorization process towards becoming a JoLNH might support the employees in achieving more knowledge, insight as well as tools for how they can facilitate the patients’ experience of joy-of-life.

There is no doubt that care quality and recruitment of professional nursing competence in NHs are necessary and important (4, 33) for creating a good place to be for both patients and staff (34, 35). A professionally evolving work environment contributes to recruitment and less turnover (1). It is therefore vital to investigate issues related to the implementation of JoLNH authorization focusing on implementation facilitation, co-determination and a strengthened work environment; how is this implementation experienced by the employees?

This study contributes with knowledge of the implementation of the JoLNH authorization through the following research questions;

- How is JoLNH perceived by the employees, before and after the implementation?
- Which challenges do employees experience with the implementation of JoLNH?

**Method**

During winter 2018 and then winter 2019 employees in NHs located in a big Norwegian urban municipality, who had implemented JoLNH, were invited to participate in a qualitative research interview.

**Sample**
The number of informants were settled by saturation (36). The informants were randomly selected in the 27 NHs in the municipality (36). The interviewed health care workers were recruited by the NH management, who provided the researchers with a list of potential informants and their contact information. All the informants were informed about the topic before the interview and volunteered to participate. The inclusion criteria were that the informants had been working in the unit before, during and after the implementation of the JoLNH strategy. The sample (N=14) comprised nine nurses (five were unit leaders), four assistant nurses, and one occupational therapist. The informants work experience in NHs ranged from 10 to 40 years, with a mean of 25 years. All informants were speaking native Norwegian and were female. The interview guide developed for this study is provided as Additional File 1.

**Qualitative method**

The qualitative research interview is an interpersonal situation, a conversation between two partners about a theme of mutual interest (36, 37). The interviewer attempts to verify the interpretation of the informant’s answers in the course of the interview (38, 39). The individual interviews were held over a 6-month period and each interview lasted from 30 to 40 minutes. To obtain an overview over the total amount of experiences from the NHs in the sample, we made sure that the informants represented different NHs with one or two informants from each. The interviewers used a semi-structured interview guide so that the informants could speak more freely around the subject (36). Before conducting the interviews, the two interviewers underwent a short information meeting and training to have the same approach. All interviews were audiotaped and transcribed verbatim by professional transcribers.

The analysis was conducted as collaborative negotiations between the authors, following Kvale's approach to qualitative analysis (37). To secure the confirmability of the material, two researchers reviewed and analyzed the interview material (39). We systematized, condensed, and sorted the data material in preliminary categories using NVivo 12Pro. Then, we identified and highlighted meaning statements within the text, still with their original words intact. After several collaborative negotiations between the authors, we agreed on the final categories and subcategories. In this process, the interpretation of meaning took place in connection with the total statement before the final selection and range were made (37).

**Ethical considerations**

The ethical guidelines of voluntary participation, written 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 were anonymized. The Norwegian Centre for Research Data, Data Protection Services, was notified of the project (ref.nr. 238331). Prior to this, an application was sent to the Regional Committee for Medical and Health Research Ethics, who declared that approval for the current project was not required according to the Norwegian Health Research Act.

**Results**
An overview of our findings is presented in Table 1, showing the main categories: (a) the characteristics of care activities before implementations of JoLNH, (b) how JoLNH influenced the care activities, and (c) challenges with the implementation of JoLNH, and the subcategories. The findings are further elaborated with statements from informants. The informants are numbered in parentheses at the end of each statement.

Table 1. Main and sub-categories

| Main categories                                      | The characteristics of care activities before implementations of JoLNH | How JoLNH influenced on the care activities | Challenges with the implementation of JoLNH |
|------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------|---------------------------------------------|
| Sub-categories                                       | Spontaneous care activities                                               | Planned care activities                      | Demands more documentation and resources    |
|                                                      |                                                                          | Increased focus on patients’ individual needs | Not suited for all patients                 |

The characteristics of care activities before implementations of JoLNH

The informants gave several examples of different activities they offered to the patients to make their days meaningful, before the NH implemented the JoLNH strategy. However, the informants said the organization and planning of these activities were spontaneous, and happened by coincidence, depended on the employees at work. One informant said they used song and music to bring forward memories and give recognition, another told that they read aloud from the newspaper during breakfast, and a third explained that they had joyful moments only by being together with the patients, laughing, walking and such like. One informant expressed the spontaneous activities like this:

*There has been a lot of joy in life through one day, even if it was not planned* (16)

Even though the care was characterized by spontaneous activities, the informants explained that they used life history mapping to get an overview over their patients’ prior interests and activities. However, before the implementation of JoLNH, one informant explained that they (the care personnel), unconsciously might have focused most on patients that could speak out about their needs and less on the patients who did not demand anything:

*It was perhaps the case that the patients who were most fond of talking received the most – it might feel more naturally to sit down with them* (22)

How JoLNH influenced the care activities

The second main category is supported by data on how the informants described that the JoLNH influenced the care. The informants talked about how the JoLNH lead to better planning and
implementing systems for the care activities, the strategy increased their awareness on dignity, and entailed more involvement of the individual patients and their relatives. The informants stated that one of the requirements of implementing the JoLNH strategy was more documentation. The documentation lead to more systematic work with joy of life care activities. One informant explained how the implementation of JoLNH contributed to placing the care activities into a system. Another said that the staff had become more aware of the individual patients’ needs and worked more systematic to tailor joy of life activities to different patients’ needs. Several informants said they experienced the patients as more satisfied after the implementation.

*With the JoLNH – we map all the patients about their background, what they like to do, and what they don’t like to do (12)*

*It is positive, now everyone (the patients) get an activity program that is adapted to their needs, it is more systematic (13)*

Several informants said they experienced that the patients were more satisfied after the implementation of JoLNH. They further emphasized that the patients deserved to have care activities adapted to their situation and be treated with dignity. The JoLNH also made the staff more committed to ensure that the care activities were targeted to the individual patients’ needs and executed in accordance with the plan. For some patients, the care activities could be that the care personnel sang along with the patient, had a small chat, took the patient outside to the porch for fresh air, or used music-based environmental treatment. To make sure that the patients’ individual needs were considered, the informants used each patient’s life history to plan the activities.

*We create a monthly plan and then we evaluate afterwards. We should describe the patient’s experiences and activities if there has been nothing positive have happened then we must report that (7)*

Another positive experience related to the JoLNH implementation was that the employees became more conscious about seeing each patient as an individual person and involving relatives. One informant emphasized the JoLNH criteria as helpful in communicating with the relatives and explained that the documentation of care activities could be printed and given to the relatives. This documentation showed what their mother or father had been doing that day and was greatly appreciated by in the relatives. Another informant told a story about an old female patient that loved flowers, and how the JoLNH strategy had made the staff more aware of this woman’s needs by letting her go outside to pick flowers.

*To see the joy in the eyes of the patient then I feel we have succeeded to engage them in activities which we did not before (7).*

Challenges with the implementation of JoLNH Several informants commented that even though they saw the documentation as positive, it was also challenging and difficult to perform. One informant said that the documentation was too much, it was time-consuming and difficult to remember in addition to all the
other tasks they had to carry out. One informant explained that fewer specific requirements for how to document could make the documentation less time-consuming and easier to do.

*All this documentation is a working task that has come in addition to everyday working tasks. I understand that we must document the experience, but objectivity is important.*

Many informants said that the JoLNH demanded for more resources if they should fulfil the JoLNH criteria and perform the JoLNH care activities. Some told that they had special JoLNH personnel that was responsible for the activities. Even though several of the informants stated that they used to carry out similar JoLNH activities before the implementation of JoLNH, they thought about the strategy as something that that demanded extra resources. One informant told that some days, it could be difficult to let all patients go outside and get fresh air. Another informant experienced some JoLNH arrangements as challenging because the unit was empty, and someone needed to stay and take care of the patients who are uneasy and not able to participate. In such situations, the informant said she often had to sacrifice the lunchbreak to make it work. Others said it was important to get people involved and to understand how important JoLNH was, and that it did not have to be so hard and time-consuming.

*We struggle with having enough time, we know how the staffing situation is, there are many tasks and many times we feel we have too little time.*

Several informants also commented that the JoLNH activities were not suited to all patients living in NHs today, because the patients are frailer than some years ago. When the patients are sicker, the informants explained that it was more difficult to develop activities adapted to their individual situation. One said the clue was to think simple. Some patients enjoyed the activities while others had opposite reactions, they could become restless and insecure. Several informants said that patients with dementia perhaps had less benefit from JoLNH activities because they needed an environment that was safe, calm and predictable.

*I feel that those who are JoLNH responsible, they run around with noise and sound and events, but here in the NH 9 out of 10 patients have dementia and running around is not JoLNH for them.*

**Discussion**

In this study we have explored the implementation of the JoLNH authorization through two research questions; How is JoLNH perceived by the employees, before and after the implementation? and Which challenges do employees experience with the implementation of JoLNH?

**Positive outcomes of implementation of JoLNH**

Before implementing the JoLNH the health care professionals perceived NH care as spontaneous care activities. Characteristically, in this study several informants described positive outcomes for the patients resulting from the implementation of JoLNH. Among others, it seems that the implementation supports more focus on dignity for patients in NHs. Even if the patients are in the last phase of their life nursing
interventions suitable for the patient’s situation is promoted. Both dignity and respect in the last phase of life were present before the implementation of JoLNH. The informants describe that they feel committed, and when it is systemized it is easier to customize the activities into everyday life. When the benefits of changes are in focus, the motivation to change behavior increases (16, 20, 21, 40). It seems like the health care professional are more conscious of their own behavior and attitudes after the implementation of JoLNH. When the informants talk about quality of care and more planned activities, many of them emphasize the benefits for the patients. Some of the informants spoke well about the implementation concerning the quality of the care, as one stated “to see the joy in the eyes of the patient then I feel we have succeeded”. Earlier research has indicated that the relationships with the patients and the quality of the care strongly influence on the health care personal’s experience of coping (1, 27). When involving relatives, the implementation of JoLNH has positive influences. The informants state that they discuss activities and nursing interventions with the relatives which makes it easier to involve the relatives better.

Some informants shared their concern for the more fragile patient group in NHs, and that the JoLNH strategy may not be in favor for this group, while other informants stated that it must be possible to have activities that take the patient’s condition in consideration. This dividing into two different perspectives, that some informants’ states that fragile patients will favor of the implementation and some informants’ states that fragile patients will not benefit of the implementation, seems to permeate the findings in this study.

How is the implementation experienced – challenges and benefits

Several informants stated that there were several activities for the patients also before the implementation of JoLNH. Many of these previous activities were like the activities promoted by the JoLNH strategy. To be able to do these activities they used a lot of volunteers, which was stated as positive. The main difference between the activities for the patients after the implementation of JoLNH seems to be the documentation and systemization. To be able to ensure that every patient gets custom activities, systematic and documentation are important (41, 42). When describing the challenges with JoLNH many informants mentioned the obligation of documentation of performed activities, and that this documentation should be done in a specific way. The informants seem to be divided into two distinct ways of taking part of this implementation of JoLNH related to documentation; i) those who were positive to the documentation requirements, and ii) those who experienced resistance to the documentation requirement. The informants who experience resistance were fewer than the group of informants who were positive. Those who were positive were able to see the benefit of better documentation and more systematics. For the other group who experienced resistance, they feel that it is too much to document, the documentation requirements is too complicated, and the requirements are too many. One informant also stated that she had become more positive over time, when she discovered that the systematic inspection of the patients and their needs were more thorough after implementation of JoLNH. Thainspection lead to discovering of more needs among the patients and additional nursing interventions improving patients’ well-being.
Most of the implementation has been done without supplying any extra resources. Only one informant mentioned extra resources. This may be one reason why several informants expressed resistance towards the implementation of the documentation requirements. If it is expected that the staff is going to increase their workload, in the same period facilitate the implementation, it may be difficult to accept. The JoLNH responsible in the ward, who is mentioned by some informants seeming to be used as a change agent. To perform a successful change the use of change agents or key personnel is important (43).

Lewy (2015) stated that it is important to make changes without increasing the workload, and that the change must easily be integrated in existing systems. It seems like this implementation to some extend has been successful since some informants have expressed some resistance. As stated by other researchers, resistance may occur after an implementation of changes (17, 18).

However, to be able to alter this resistance it is important to identify the causes for the resistance, which in this case seems to be a feeling of being overloaded with work. To overcome this it might be useful to introduce some training programs to make the health care personnel more motivated and ready for the change (14, 15, 20). To prepare the health care personnel to be able to change and to have resources to change is a management responsibility (1, 44). The implementation does not only relate to change in the documentation system but does also connect to activities and nursing interventions. When health care personnel experience a heavy workload the importance of experiencing control over the situation is importance (3, 25, 26), as one informant stated, “you don’t have to tidy up right away”. This informant describes that she takes control over the situation by making priorities, while another informant feels overwhelmed and “have to sacrifice my lunchbreak”. This clearly shows that related to this change there are at least two different ways to react.

Previous research has shown that health care personnel experience commitment and positive energy related to care quality (1). When connecting this change to better outcomes for the patients, it increases health care personnel’s ability and desire to contribute positively to this change; one of the present informants underlined the importance of getting the staff involved and help them to understand the importance of implementing JoLNH to increase the care quality. A sense of co-determination and possibilities for professional updates for employees are included in the JoLNH strategy (31). To use this opportunity to both strengthen the quality of care and make it possible for the employees to increase their professional satisfaction in their work will be important to influence on the health care workers’ intention to change (8). Making changes to increase quality of care in NH’s is positive both for the patients and for the healthcare personnel, and one way to succeed seems to be to implement the JoLNH strategy.

**Strength and Limitations**

The present findings were translated from Norwegian to English; when translating data, it is always a risk to misunderstand and lose some of the original content. Dependability and confirmability are major factors in understanding the implications of this study, and considerably effort was dedicated to examining these issues. Content analysis was used to identify similarities, differences, and patterns in the experiences of informants, and conclusions were deduced from the collected material without a
predetermined hypothesis. This is a qualitative study, with qualitative interviews, so it is the informant’s experiences which is the basis for the results. This means that there’s no access to the daily life in the NH, something that would be acquired through an observation study.

Conclusion

Most informants in this study report a positive attitude to the implementation of JoL NH and perceive several benefits of the implementation. Quality of care for the patients seems to have increased after the implementation. Nevertheless, the fact that the informants seemed to be divided into two different groups related to their main perspective of the implementation is concerning. One group has positive experiences with the implementations process and the benefits of it, while the other group focuses on lack of benefits and problems with the implementation process. To facilitate a successful implementation, focus on the individual health care worker and the working environment is important. At the same time, barriers and resistance to change are common and may be expected. In overcoming such resistance interventions targeting the work environment must be inserted. It will be a burden on the work environment if there over time are two distinctive groups with divided views, which was seen in this study.

Abbreviations

Nursing homes (NH)

Joy of Life Nursing Homes (JoL NH)

Joy of Life (JoL)

Declarations

Ethics approval and consent to participate:

The Norwegian Centre for Research Data, Data Protection Services, was notified of the project (ref.nr. 238331). Prior to this, an application was sent to the Regional Committee for Medical and Health Research Ethics, who declared that approval for the current project was not required according to the Norwegian Health Research Act.

The manuscript does not contain neither individual persons’ data in any form nor other forms of sensitive information. Individuals participating have done this voluntarily, and by participating giving their consent to participate. Consent form were available at the units.

Consent for publication: Not applicable.

Availability of data and materials:
The datasets used and/or analyzed during the current study available from the corresponding author on reasonable request.

**Competing interests:**

The authors declare that they have no competing interests.

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**Authors’ contributions:**

All authors BA, KG, FFJ and GH have made substantial contributions to conception and design, acquisition of data, analysis and interpretation of data. All authors BA, KG, FFJ and GH have been involved in drafting the manuscript or revising it critically for important intellectual content. Authors BA, KG, FFJ and GH have given final approval of the version to be published. Each author BA, KG, FFJ and GH has participated sufficiently in the work to take public responsibility for appropriate portions of the content; and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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**References**

1. Andre B, Ringdal G, Skjong RJ, Rannestad T, Sjøvold E. Exploring experiences of fostering positive work environment in Norwegian nursing homes: A multi method study. Clinical Nursing Studies. 2016;4(4):p9.

2. Rinnan E, André B, Drageset J, Garåsen H, Espnes GA, Haugan G. Joy of life in nursing homes: A qualitative study of what constitutes the essence of Joy of life in elderly individuals living in Norwegian nursing homes. J Scandinavian Journal of Caring Sciences. 2018;32(4):1468-76.

3. Grødal K, Innstrand ST, Haugan G, André B. Affective organizational commitment among nursing home employees: A longitudinal study on the influence of a health-promoting work environment. J Nursing Open. 2019.

4. Tourangeau AE, Patterson E, Saari M, Thomson H, Cranley L. Work-related factors influencing home care nurse intent to remain employed. J Health care management review. 2017;42(1):87-97.

5. Schultz JS, André B, Sjøvold E. Demystifying eldercare: Managing and innovating from a public-entity's perspective. International Journal of Healthcare Management. 2014.
6. Norway S. Care services. In: Data NLfOG, editor. https://wwwssbno/en/statbank/table/11875 tableViewLayout1/ 2020.

7. Helse- og omsorgsdepartementet. Morgendagens omsorg. In: omsorgsdepartementet H-o, editor. 2012–2013.

8. Richards D, Hallberg, IR. Complex Interventions in Health An overview of research methods. New York: Routledge; 2015.

9. Weiner BJ. A theory of organizational readiness for change. Implementation science. 2009;4(1):67.

10. Jacobs SR, Weiner BJ, Reeve BB, Hofmann DA, Christian M, Weinberger M. Determining the predictors of innovation implementation in healthcare: a quantitative analysis of implementation effectiveness. BMC health services research. 2015;15(1):6.

11. Schultz JS, Sjøvold E, André B. Can group climate explain innovative readiness for change? Journal of Organizational Change Management. 2017.

12. André B, Frigstad SA, Nøst TH, Sjøvold E. Exploring nursing staffs communication in stressful and non-stressful situations. J Nurs Manag. 2016;24(2).

13. André B. Challenges among health care workers when changes are introduced. In: Innstrand ST, editor. Health Promotion - Theory and Practice. 1. Trondheim, Norway: Reseach Centre for health Promotion and Resourses HiST/NTNU; 2012. p. 37-47.

14. André B, Sjøvold E. What characterizes the work culture at a hospital unit that successfully implements change–a correlation study. BMC health services research. 2017;17(1):486.

15. Schultz JS, Sjøvold, E., André, B. Can work climate explain innovative readiness for change? The Journal of Organizational Change Management. 2017;30(30):1-12.

16. Lewy H. Wearable technologies–future challenges for implementation in healthcare services. Healthcare technology letters. 2015;2(1):2-5.

17. Lorenzi NM, Riley RT. Managing change: an overview. JAmMedInformAssoc. 2000;7(2):116-24.

18. Craig LE, Churilov L, Olenko L, Cadilhac DA, Grimley R, Dale S, et al. Testing a systematic approach to identify and prioritise barriers to successful implementation of a complex healthcare intervention. BMC Medical Research Methodology. 2017;17(1):24.

19. Lorenzi NM, Riley RT, Dewan NA. Barriers and resistance to informatics in behavioral health. Medinfo. 2001;10(Pt 2):1301-4.

20. André B, Ringdal G, Loge J, Rannestad T, Laerum H, Kaasa S. Experiences with Implementation of Computerized Tools in Health Care Units - A review article International Journal of Human-Computer Interaction. 2008;24(8):753-75.

21. Ramsey A, Lord S, Torrey J, Marsch L, Lardiere M. Paving the way to successful implementation: identifying key barriers to use of technology-based therapeutic tools for behavioral health care. The journal of behavioral health services & research. 2016;43(1):54-70.

22. Morgan DG, Semchuk KM, Stewart NJ, D’arcy C. Job strain among staff of rural nursing homes: A comparison of nurses, aides, and activity workers. J Nurs Adm. 2002;32(3):152-61.
23. Hasson H, Arnetz JE. Nursing staff competence, work strain, stress and satisfaction in elderly care: a comparison of home-based care and nursing homes. J Clin Nurs. 2008;17(4):468-81.
24. Grødal K, Innstrand ST, Haugan G, André B. Work-related Sense of Coherence and Longitudinal Relationships with Work Engagement and Job Satisfaction. Scandinavian Journal of Work and Organizational Psychology. 2019;4(1).
25. André B, Sjøvold E, Rannestad T, Holmemo M, Ringdal GI. Work culture among healthcare personnel in a palliative medicine unit. Palliative and Supportive Care. 2013;11(02):135-40.
26. Karsh B, Booske BC, Sainfort F. Job and organizational determinants of nursing home employee commitment, job satisfaction and intent to turnover. Ergonomics. 2005;48(10):1260-81.
27. André B, Sjøvold E, Rannestad T, Ringdal GI. The impact of work culture on quality of care in nursing homes – a review study. Scand J Caring Sci. 2013:n/a-n/a.
28. Hannan S, Norman IJ, Redfern SJ. Care work and quality of care for older people: a review of the research literature. Reviews in clinical Gerontology. 2001;11(2):189-203.
29. Jansen K, Ruths S, Malterud K, Schaufel MA. The impact of existential vulnerability for nursing home doctors in end-of-life care: A focus group study. Patient Educ Couns. 2016;99(12):2043-8.
30. Midtbust MH, Alnes RE, Gjengedal E, Lykkeslet E. A painful experience of limited understanding: healthcare professionals’ experiences with palliative care of people with severe dementia in Norwegian nursing homes. BMC palliative care. 2018;17(1):25.
31. Livsglede for eldre. Livsglede for eldre, rydde i huset 2016 [Available from: (http://livsgledeforeldre.no/wp-content/uploads/2016/03/Rydde-i-huset.pdf)]
32. André B, Nøst TH, Frigstad SA, Sjøvold E. Differences in communication within the nursing group and with members of other professions at a hospital unit. J Clin Nurs. 2017;26(7-8):956-63.
33. Cooper E, Spilsbury K, McCaughan D, Thompson C, Butterworth T, Hanratty B. Priorities for the professional development of registered nurses in nursing homes: a Delphi study. J Age Ageing and Society. 2017;46(1):39-45.
34. Haugan G. Nurse–patient interaction is a resource for hope, meaning in life and self-transcendence in nursing home patients. Scand J Caring Sci. 2014;28(1):74-88.
35. Haugan G. Meaning-in-life in nursing-home patients: a correlate with physical and emotional symptoms. J Clin Nurs. 2014;23(7-8):1030-43.
36. Miles MB, Huberman AM, Saldana J. Qualitative data analysis: Sage; 2013.
37. Brinkmann SK, S. InterViews: Learning the Craft of Qualitative Research Interviewing third edition ed: sage Publications Inc.; 2015.
38. Kvale S. 10 standard objections to qualitative research interviews. Journal of phenomenological psychology. 1994;25:147-73.
39. Riessman CK. Narrative analysis. University of Huddersfield; 2005.
40. Strode W. Social psychology and health. . Buckingham - Philadelphia: Open University Press; 2008.
41. Nøst TH, Frigstad, S.A. André, B. . Impact of an Educational Intervention on Nursing Diagnoses in free-text format in Electronic Health Records. Nordic Journal of Nursing Research 2016;37(2):100-8.

42. Frigstad SA, Nøst TH, André B. Implementation of Free Text Format Nursing Diagnoses at a University Hospital’s Medical Department. Exploring Nurses’ and Nursing Students’ Experiences on Use and Usefulness. A Qualitative Study. Nursing research and practice. 2015;2015.

43. Andre B, Ringdal GI, Loge JH, Rannestad T, Kaasa S. The importance of key personnel and active management for successful implementation of computer-based technology in palliative care: results from a qualitative study. Computers, informatics, nursing : CIN. 2008;26(4):183-9.

44. Schultz JS, André B, Sjøvold E. Managing innovation in eldercare: A glimpse into what and how public organizations are planning to deliver healthcare services for their future elderly. International Journal of Healthcare Management. 2016:1-12.

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