

## Highlights

- Culture and learned ways to act shape nurses' attitudes for learning and also affect willingness to take responsibility for professional development
- The organisations' management role is to enable nurses' work-based learning
- By affecting the physical structures and spaces of the work unit and by paying attention to the aspects of learning in distribution and organising duties, it is possible to improve learning opportunities
- Staff's ability to cooperate utilising knowledge and expertise inside work community creates a positive learning culture which affects the quality of nursing

## INTRODUCTION

The fast development of technology and constant increasing of knowledge (Bahn, 2007; Nisbet et al., 2013) as well as worldwide economic situation and the need for productivity public sector, cause pressures for continuous changes in organisations challenging also health care organisations to evaluate their practices (Ramage, 2014). The employees have to absorb new knowledge and skills to keep their professional know-how up to date and to be able to adapt to the organisational changes (Hetzner et al., 2009; Skår, 2010). The staffs' ability to learn and utilise their knowledge in the continuously changing environments of health care can be seen as safe and high-quality nursing (Skår, 2010; Henderson et al., 2011; Bjørk et al., 2013). Therefore, it is important to understand how to improve nurses' work-based learning in practice.

The concept of work-based learning can be approached from different perspectives (Fenwick, 2008). Nisbet et al. (2013) defines work-based learning as informal learning that occurs inside the work community in the interaction between employees. Work-based learning requires participation in work processes, collaborating with colleagues, taking challenging tasks and working with the customers. Thus, learning occurs as a by-product of working. (Eraut, 2007.) The core of work-based learning is learning from experience (Williams, 2010). In order to learn and to develop, the employees need space and time for mutual interaction and exchange of experiences (Moore, 2007).

Work-based learning can also contain formal learning (Choi and Jacobs, 2011). For example, universities and other educational institutes can offer curriculums to organisations that the employees may carry out alongside work without qualifications. This kind of learning can also be defined as a form of work-based learning, in which case the employee has responsibility to set the learning

objectives, look for learning situations, search knowledge and evaluate and reflect on own learning. (Stanley and Simmons, 2011.) The aim of this kind of work-based learning curriculums is to encourage employees to independent studying and taking responsibility of their own learning and the continuous development of professional skills and know-how (Chapman, 2006). In this review work-based learning is defined as informal learning that occurs inside the work community in the interaction between employees by participating in work community's practical operation (Nisbet et al., 2013).

According to earlier studies, the formal learning methods have only a marginal effect for learning compared to work-based learning (Eraut, 2007). Because of this, it is important to identify different forms of informal learning in workplaces and strive to support and to strengthen these learning forms from organisations' management and nurse managers' quarter (Eraut, 2007; Bjørk et al., 2013; Bancheva and Ivanova, 2015). The resources organisations have for training have also been cut as a consequence of economic strains, compelling organisations to look for work-based learning solutions (Williams, 2010).

The traditional understanding of learning is that knowledge is offered to the employees without them actively seeking and processing the knowledge themselves (Jensen, 2007; Williams, 2010). However, the knowledge never passes on from one person to another as it is, but the new knowledge is always constructed via the thinking processes of the individual. The person's preconceived assumptions and earlier knowledge - as well as ambient culture - have an effect on this process of knowledge shaping. (Billet, 2008.) People try to understand their experiences and give meanings to them. Because the experiences affect what kind of significance a person gives for learning and professional development, (MacKeracher, 2004) it is important to describe the experiences of work-based learning of nursing staff.

The aim of this review is to systematically summarise qualitative evidence about work-based learning in health care organisations experienced by nursing staff. The significance of this review is that it delivers evidence of what is currently known, recommendations for practice and future research as well as what remains unknown on the topic (JBI 2014). Unlike other methods of qualitative synthesis, this review does not aim to reinterpret the data (Munn et al., 2014).

## **METHODS**

### **Design**

The protocol of this review is based on meta-aggregation approach, developed by an expert group of Joanna Briggs Institution (JBI) and based on pragmatism and phenomenology from the philosophic background (Hannes and Lockwood, 2011; Lockwood et al., 2015). The main principles of pragmatism and phenomenology agree with the purpose of this review, which is to bring out objective research data about certain phenomena for utilising and adapting to clinical work (Lockwood et al., 2015).

### **Inclusion criteria**

The search strategy of this review was based on a carefully defined study aim and on the inclusion criterions (Amaratis and Riitano, 2014; Stern et al., 2014) which were designed using the PICo format (Population, Phenomena of Interest, Context) (Stern et al., 2014). In here, PICo was formed as follows: “P = nursing staff (not students), I = work-based learning experiences, Co = health care organisations”. The search was outlined to qualitative studies because the phenomena of interest was experiences of learning. Studies was eligible for inclusion in the review if they were published in English in a peer-reviewed scientific journal between 2000 and 2015.

### **Search strategy**

The search strategy consisted of three phases (JBI, 2014). The first phase of search process was to find and test different search terms and strategies (Aromataris and Riitano, 2014) and to find out how the phenomenon of work-based learning in health care organisations has been discussed in earlier studies. This phase also confirmed that there were no reviews of the same phenomenon in the works (JBI Data base of Systematic Reviews). In the second phase of search process, studies were searched for in the chosen CINAHL, PubMed, Scopus and ABI Inform ProQuest databases, as well as in the reference lists in the studies, manually selecting relevant studies based on the titles and abstracts. In the third phase of the search suitable studies to the review were chosen among the identified studies based on full-text. (Robertson-Malt, 2014.) The key search terms that consisted of various forms of PICo concepts and the search process has been described in figure one.

(Insert figure 1 about here, please)

## **Methodological quality assessment**

The methodological quality of the systematic review process was assessed deploying the PRISMA checklist (Preferred Reporting Items of Systematic Reviews and meta-Analysis) from which the suitable components were applied to this qualitative review. Identified studies were assessed independently by two reviewers for methodological validity prior to inclusion in the review (Porritt et al., 2014). The standardised critical appraisal instrument from the JBI (QARI) was used to assess methodological quality. JBI-QARI includes ten evaluation criteria (JBI, 2014) and in this review, the original studies were excluded if they failed to meet five or more (CRD, 2009) criteria. All disagreements between reviewers were resolved through discussion (JBI, 2014).

## **Characteristics of included studies**

Meta-aggregation approach accepts all the qualitative research paradigms to the review. Also, any ideal quantity of original studies has not been named, the method allows both small and large quantities. (Lockwood et al., 2015.) As a result of the search, a total of 434 studies were identified and finally nine of the studies met the inclusion criteria as well as JBI-QARI quality standards (see figure one). The included studies are described in table one.

(Insert table 1 about here, please)

## **Data collection and synthesis**

Data collection and synthesis were carried out via a three-phase process. First, all findings from included studies were collected. In this review, the findings were literally extracted themes and metaphors which had been created as a result of researcher's thematic analysis. In ethnographic studies the head observations are categorised by the researcher from the results of original studies. The reliability of findings was secured by searching the connection between every finding and the original study. The connection was either a literal quotation from an interview, a field note or other information which supported the finding. (Lockwood et al., 2015.) Every finding was classified according to its reliability using the classification by JBI-QARI: U= unequivocal, C= credible, Us= unsupported. Only reliable findings were accepted (JBI, 2014; Lockwood et al., 2015). For example, finding number one from Govranos & Newton (2014) has been described in the following way:

Finding 1: Culture and attitudes - The contextual factors shape how the environment supports and influences the learning climate of the ward and the individual's view on learning (U)

*“The perception is often that education is interrupting the work [and] education is compartmentalized to the side ... Education is one thing and this is about work and even though people might say I need to learn that to do my job, they don't look at a lot of education as work related.” s.657*

The findings, including links to original studies, can be found in the supplementary document.

Secondly, the findings were grouped into categories based on similar significance so that at least two findings were included in every category (Lockwood et al., 2015). Although the findings were literally named according to the themes and metaphors of original studies, the forming of categories was based on the contents of findings, not the words of named themes and metaphors. The category briefly describes the content of findings. The original grouping to the categories was performed by first author but the contents of categories have been estimated together with co-authors.

Finally, the summarised statements were formed of the categories, which represented the core content of categories (Lockwood et al., 2015). The results of original studies were not reinterpreted or analysed (Munn et al., 2014), but a combination of results was formed (Lockwood et al., 2015). In all, 40 findings were extracted and classified as reliable and eligible for this review. Four syntheses which summarise the contents of categories were conducted from the categories and are presented as results of this review. For example, the first category "The culture of work community" was formed of findings 1 "Culture and attitudes", 2 "What learning is", 25 "Competency in home care nursing" and 38 "Orientation of nurses or learning to do things the way we do things here". The category was formed as a first summarised statement “The experience of work community's culture and its influence on learning and taking responsibility of own learning”. Grouping of findings to the categories and forming of the syntheses have been described in figure 2.

(Insert figure 2 about here, please)

## RESULTS

### Culture of work community

The culture of work community shapes nurses' understanding of their role as a nurse as well as their understanding of what added value learning and constant development of professional skills brings to this role (Govranos and Newton, 2014). Therefore, if work-based learning or commitment to constant development is not confirmed or controlled in any way, the appreciation of and motivation for learning is easily weakened. Independent studying is seen challenging, because nurses are more used to being passive receivers of information rather than being active seekers of knowledge (Wilson et al., 2006) and therefore they need support and challenging. Learning and studying also means different things to different individuals. Learning is usually understood as directed and organised education, hence learning and seeking information besides work are not perceived as learning. (Govranos and Newton, 2014.)

However, the work community and working together provides many opportunities for learning (Bjørk et al., 2013; Govranos and Newton, 2014.) Among others, the colleagues act as mentors, role models and sources of knowledge to each other (Wilson et al., 2006; Skår, 2010). The nurses expect guidance and confirmation and also support from more experienced colleagues (Govranos and Newton, 2014). The unexperienced nurses learn best when they get responsible nursing tasks under the guidance of experienced nurses, whereupon learning and growing to the profession occurs gradually by increasing responsibility (Bjørk et al., 2013). The unexperienced nurses should be given challenging patients to be taken care of, but not without supporting of an experienced nurse (Govranos and Newton, 2014).

In addition, according to nurses' experience, important and sensible work is a motivator for personal development and doing one's best (Ryan et al., 2010). However, the work communities of health care often prevail a so-called "culture of busyness", which is learned already as a student x. Changing situations and rush are the obstacles to work-based learning. Nursing staff often experiences that the workplace is only for working, thus studying and seeking information besides working are not considered desirable by nurses. (Govranos and Newton, 2014.) Time and a positive attitude towards learning from colleagues are needed for work-based learning, but nurses experience that there is no time to sit together reflect and discuss the questions related to work (Skår, 2010).

**The first synthesised finding:** the culture of work community and learned courses of action shape the attitudes of nurses towards work-based learning, affecting also to the expectations of learning and willingness to take responsibility of personal learning and professional development.

### **Structures, spaces and duties**

In hospital organisations, there is a connection between spaces of the work unit and learning possibilities of the nursing staff (Gregory et al., 2014). Learning occurs through social interaction, which is why the spaces of a workplace should enable the exchanging of knowledge and experiences between staff (Ramage, 2014). Shared spaces, such as nurses' office, creates good possibilities for spontaneous discussions and reflection (Bjørk et al., 2013). Also, the patient rooms and corridors also become learning environments during ward rounds. By following discussions between the physicians or between a physician and a patient, the nurse has an opportunity to learn by listening and observing. (Gregory et al., 2014.)

There should also be as few closed spaces allocated only to specific persons as possible at the ward, because it limits and prevents work-based learning. For example, the physician's office is typically seen as a physician's private area where nurses only go when it is necessary from the perspective of patient's care. However, open and common spaces for the whole staff provides plenty of opportunities for learning together. Less competition or power struggle between different occupational groups occurs in the common spaces, which facilitates interaction and sharing of knowledge. (Gregory et al., 2014.)

Sharing and organising duties can either support or lower the possibilities of work-based learning and nurses' experience of learning (Skår, 2010; Bjørk et al., 2013). Duties should be organised so that it would be easier to observe and evaluate others' work (Ramage 2014), for example, a practice, in which novice and experienced nurses ~~that~~ are systematically working in pairs enables novice nurse to observe experienced colleague, have a frequent discussion and share feedback. (for example, systematic working in pairs enables observation of an experienced colleague, common discussions and sharing feedback.) These factors are most important from the perspective of learning. (Bjørk et al., 2013.) Sometimes in health care organisations, nursing has to be done alone without the help and guidance of colleagues (Skår, 2010). Nurses who work alone are not able to observe colleagues' working and it is challenging to get feedback on their own work. However, nurses need regular

discussions and exchanging of thoughts with colleagues, which is why nurse managers should arrange opportunities where nurses can exchange experiences. (Lundgren, 2011.)

**The second synthesised finding:** affecting the physical structures and spaces of the ward and paying attention to the viewpoint of work-based learning in sharing and organising duties, the possibilities of nurses' work-based learning can be improved and the learning situations can be increased.

## Management

The lack of support by organisation management and nurse managers is seen as the greatest obstacle to work-based learning of nursing staff (Govranos and Newton, 2014). The support of a management, and awareness of the possibilities of work-based learning creates a positive culture of lifelong learning (Wilson et al., 2006; Govranos and Newton, 2014). However, the nurse managers often tend to underestimate their influence on the development of a culture that supports learning. A nurse manager's significance as a role model is remarkable, which is why it is important that the managers commit themselves to continuous learning practices (Bjørk et al., 2013.) By participating in the implementation of learning strategies and adopting different studying techniques, the nurse manager become a positive role model and a motivator for the staff (Wilson et al., 2006). The manager has possibilities to create the kind of functional models that promote and support these learning events (Bjørk et al., 2013). Employees also consider important that managers encourage them to utilise new knowledge and enable an experiment of new courses of action (Lundgren, 2011).

The need for organisational productivity to intensify functions of organisations are seen as weakening of possibilities for work-based learning of nursing staff, because the interaction and communication between staff decrease due to a busyness and increasing number of tasks. Patients' shorter treatment periods increase nurses' feeling of being rushed because things should be taken care of in a shorter space of time. (White et al., 2000.) Due to the need for intensive work, oral reporting has been given up in several wards, and as a consequence ~~the nurses' learning situations~~ opportunities for nurses to learn have decreased (Bjørk et al., 2013). The operation of health care consists of human interaction that is built on the understanding of practical activities (White et al., 2000). In spite of demands of organisational productivity, managers should pay attention to the core issues of work-based learning



to ensure safe and evidence-based nursing by providing time and opportunities to interact and communicate (White et al., 2000; Hunter et al., 2008).

**The third synthesised finding:** An important role of (the?) organisation management and nurse managers is to act as enablers and supporters of nurses' work-based learning.

### **Interpersonal relations**

Work-based learning is an important part of professional development in which both the learner and the learning environment will change and affect each other (Skår, 2010). Support of a nurse manager, a mentor or colleagues, makes the learning process in a rough complex workplace environment possible (Ramage, 2014). Wilson et al. (2006) see a positive changing in workplace's learning culture when learning and professional development have been understood as a continuous process through life, which results to the employees beginning to take responsibility for learning and development themselves. The employee begins to want to look for learning opportunities and arrange time for learning. The nurses, who understand the significance of learning, actively try to solve overcome rush and other obstacles of learning. (Govranos and Newton, 2014.)

The nurses' experience of the workplace as a learning environment will strengthen when they can actively participate in the creation of that environment (Skår, 2010). Giving and receiving feedback is an important part of learning, which people do not know how to utilise. Nurses consider giving feedback difficult, and it is also feared when the feedback is negative. (Wilson et al., 2006.) However, openness, presenting different and also opposite opinions, challenging and considering together all significantly affect work-based learning and create a positive learning culture (Bjørk et al., 2013). Education provides only basic knowledge and skills; it is the accumulation of tacit knowledge through experience and observation, along with learning by interacting with colleagues and patients, that turns a novice into an expert ~~Education gives only basic knowledge and skills, tacit knowledge accumulation with past experience and observations, as well as learning by interaction with colleagues and patients makes an expert from a novice~~ (Hunter et al., 2008; Ryan et al., 2010).

**The fourth synthesised finding:** good interpersonal relations between staff as well as ability to cooperate utilising knowledge and expertise in work community creates a positive learning culture which affects the quality of care and the development of practical nursing.

## DISCUSSION

The aim of the review was to systematically summarise qualitative evidence about work-based learning in health care organisations experienced by nursing staff. The results of this review have shown a variety of contradictions and tensions between learning needs and the reality of nursing practice and courses. The issues of work-based learning facing each other are the organisations' needs for effectiveness ~~economy and intensification of operations~~, and on the other hand the needs related to professional growth and development of nursing staff.

The results identified three main contradictions ~~On the basis of the results three main contradictions~~ causing tension in work-based learning can be identified. First, while rush and demands for effectiveness have increased in organisations, at the same time the need for learning and development of professional skills - which takes time - has increased (White et al., 2000). The essential paradox of work-based learning is connected to this. The prerequisite for professional development is not only adopting of new knowledge, but also questioning earlier data and ability to critically evaluate workplace practices (Wilson et al., 2006). Routine-like performing of duties leads to a situation where nurses never stop to reflect and estimate their own actions or the actions of the whole work community. However, in the middle of all the busyness of the work, reflecting is not easy without time required and support of a manager, a mentor or an experienced colleague. For example, working in pairs could provide an opportunity to reflect of experiences, and it also gives an opportunity for a new employee to question and challenge the practices learned in a workplace. Leader-member discussions could also act as support in the reflection.

The working culture in health care organisations has traditionally been task-oriented, which is why the development of work through the methods of work-based learning stays in the shadow of performance and effectiveness. Suorittaminen johtaa siihen, että hoitajat pyrkivät vain hoitamaan työtehtävänsä, jolloin työn ja tehtävien syvempi tarkastelu jää taka-alalle. (Performing OK!) EN LÖYDÄ MUUTA ILMAISUA leads to the nurses striving only to carry out their duties, which is why deeper examination of the work becomes secondary. The culture of busyness strengthens the values of efficiency and performing. From the perspective of learning, it would be important to strengthen the culture of mutual support and working and learning together. (Eraut, 2007; Williams, 2010; Bjørk et al., 2013.)

Nurses' work contains plenty of tacit knowledge and experiential skills (Eraut, 2007; Jensen, 2007), which is why from the different forms of work-based learning in nursing are the importance of working together alongside others, observing, listening and participation emphasised. Novice nurses depend on the support and guidance of experienced nurses (Ryan et al., 2010; Govranos and Newton, 2014), but the increasingly serious shortage of resources and the busy work pace cause challenges for organising support (Moore, 2007). However, in order for the new employees to commit to the organisation, providing adequate support and guidance has a great significance. The nursing staff should be seen as a basis for the whole action in the organisation and not just as a resource that is essential to the action. According to the results of this review, nurses' professional skills are valued in health care organisations, but, on the other hand, expertise is also seen as a tool for producing good results. Even so, it is challenging to arrange the adequate staff resources required for work-based learning.

The hierarchical structures of health care organisations and their control being directed downwards from above ~~command relations directed downwards from above~~ are seen in nurses' working culture as strong trust in authorities and passiveness in independent knowledge seeking and learning (Govranos and Newton, 2014). The change from passive receiver of information and instructions to an active seeker of knowledge requires a culture change in the whole organisation, which is a slow and time-consuming process. The willingness ~~and also the duty? / responsibility~~ of the nursing staff to take responsibility for one's own and the whole work community's actions could increase by sharing the manager's power, but it requires a readiness to a totally new management culture in health care organisations. Hoitohenkilöstön halukkuutta ja myös velvollisuutta ottaa vastuuta sekä omasta että koko työyhteisön toiminnasta voisi lisätä jakamalla johtajan valtaa, mutta se vaatii terveydenhuollon organisaatioilta valmiutta täysin uudenlaiseen johtamiskulttuuriin.

The second aspect causing tension in work-based learning concerns the issue that even though external pressures and the need for change enforce learning and developing, also internal motivation is needed for the commitment to lifelong learning. In order for nurses to regard learning as worthwhile and rewarding, ~~it should be clearly expressed that learning is valued within organisation~~ organization should clearly express that the learning is valued. Paying attention to the resources required for learning and promoting courses that support learning gives the impression that learning is valued (Williams, 2010). The commitment of the higher management to support and promote work-based learning of nursing staff should be seen in the strategic definitions and development policy of the organisation.

However, the employees' learning motivation is not equally high and everyone is not equally able to search knowledge or look for learning situations or to reflect on learning experiences. Regular leader-member discussions help manager to identify nurses who need more support in learning (Bahn, 2007). The manager's role is to help find learning motivation (Eraut, 2007; Williams, 2010; Bjørk et al., 2013). The nurse manager has the challenging role of a supporter and promoter of work-based learning of nursing staff, which should be taken into account not only in the education of managers but also in the internal development of managerial work in the organisation. As the need for work-based learning increases, more and more abilities to act as a learning coach will be required from the nurse managers. Nurse managers' peer support groups and mutual mentoring could support and strengthen the manager's own skills to reflect as well as help to evaluate a manager's actions as a supporter of work-based learning. It is also important for the manager to be aware of the effect of different management methods on nurses' willingness to independent workplace learning.

Finally, the third issue causing tension for work-based learning is, that health care organisations are complex and challenging learning environments (Govranos and Newton, 2014), that offer plenty of learning situations (Bjørk et al., 2013) which might, however, remain unnoticed. If the working culture of organisation and the ways of organising duties do not support and encourage work-based learning, these possibilities will not be utilised. From the learning perspective, the work units should be aware of relevant sources of knowledge and the situations where knowledge appears, and focus to examine these situations and events which produce knowledge and learning. (Gregory et al., 2014.)

An interesting result of this review is the emergence of the significance of workplace's spaces OK and the interaction that these spaces enables related to work-based learning of nursing staff (Bjørk et al., 2013; Gregory et al., 2014). Usually, the spaces of organisations are examined from the perspective of fluency and functionality of work, ignoring the connection with spaces and learning. However, learning is not always dependent on the activity of staff but also on the spaces where employees meet, communicate and work together. Such physical structures and spaces that allow the encounter of various occupational groups, spontaneous interaction and working together create an opportunity to reflect on everyday practice and learn together. (Bjørk et al., 2013.)

Learning and working are usually thought as separate matters so ~~the time reserved for learning is out of the working time~~ that the time people spend on learning is time taken away from working. When the workplace is seen also as a learning environment, learning can be understood occurring along

with work. In order for the work-based learning to be continuing and successful, the learning situations should be combined as a natural part of everyday work. For this, it would be important to ~~could be~~ integrate work and learning in the practices of workplaces. ~~connected from the direction of work and~~ from the perspective of basic duties without forgetting to respect them. In this way ~~ease~~, learning could be seen as useful and necessary for managing in work life, and not as an additional burden that disturbs working.

Työtä ja oppimista voisi lähteä yhdistämään työelämän suunnasta työpaikan perustehtävien näkökulmasta ja niitä kunnioittaen. Tällöin oppiminen voitaisiin nähdä työssä pärjäämisen kannalta hyödyllisenä ja tarpeellisena, eikä työntekoa häiritsevänä ylimääräisenä rasitteena.

## **Conclusion**

Professional education gives basic skills for nursing, but learning is a process that continues throughout the whole career in everyday work of the organisation. The creation of a culture which supports work-based learning is the best way to ensure professional competence of nursing staff also in the future. The results of this review challenge the management of health care organisations to be aware of value and significance of work-based learning from the perspective of organisation's action and success and to pay attention to the viewpoint of work-based learning in strategic plans.

## **Limitations and future research**

The fact that every study that emerged in the database search was not successfully found affects the reliability of this review. Thus, it is possible that some suitable studies have been excluded from the review. There was also an attempt to extend the search to cover unpublished sources, however, such sources could not be found. (Aromataris and Pearson, 2014; Robertson-Malt, 2014.) Because language was limited only to English, some relevant studies may have been excluded.

The results of this review indicate that management plays a significant role in worked-based learning by nurses; however, the perspective of management has been little discussed in studies of work-based learning. For future research, it would be reasonable to examine the nurse managers' perceptions of their role as a supporters of nurses' work-based learning. This role is a challenging duty, which is why it would be important also to examine what kind of readiness the manager's education gives to this

duty. It would also be interesting to examine how new technology, such as simulation and digital learning environments, could be utilised from the viewpoint of work-based learning. Additionally, the significance of structures and spaces of health care organisations has not yet been examined from the perspective of learning. What would the future hospitals look like if the spaces were examined also as learning environments?

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