Physical and psychological strain on registered nurses in long-term care facilities for elderly

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The purpose of this thesis is to describe registered nurses’ physical and psychological strain in long-term care facilities for elderly. This thesis can provide knowledge about registered nurses’ wellbeing at work by showing how the nurses themselves feel about their job, what factors affect the strain they are under and what can be done to improve their work wellbeing.

Survey was sent in electronic form to the ward nurses’ (n=11) whom distributed it to the registered nurses (n= 50) in his or hers ward. The questionnaire was sent to two middle-sized cities, X and Y, in the capital area. The response rate in total was 20% (n=11).

The descriptive study was conducted by using a survey with closed and open-ended questions. Simple percentage analysis method was used on the multiple-choice questions and content analysis for the open-ended questions.

The results show that 63,6% of the respondents feel that their job is physically straining and 81,8% experience psychological strain. Only 46% of the registered nurses are able to take a coffee breaks on daily bases, but fortunately 72,9% can have a lunch break daily. Having breaks during the day has an immediate effect on the strain the nurses experience. The study also shows that registered nurses job description now-a-days include preparing meals, washing dishes and updating social media pages, which takes time away from nursing-related duties. Having to update the social media accounts is seen as a strain, because it creates competition between wards.

Generally, registered nurses from cities X and Y experience physical and psychological strain. The factors affecting the strain were seen in the open-ended questions which indicates for example that registered nurses do not have time for breaks. Nowadays registered nurses’ job description has changed and now it includes non-care related tasks.

The results can be used to develop the work wellbeing of registered nurses’. It is to be hoped that the management and the registered nurses find ways to develop their policies regarding for example their division of work and work organizing.

Keywords: registered nurse, long-term care, elderly, physical strain, psychological strain
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1 Introduction

It has been estimated that by 2030 26% of the Finnish population is over 65 years of age and only 15% is under the age of 15 (Tilastokeskus 2007). With the aging population the need of long-term care increases while at the same time the long-term care capacity decreases. Elderly care is shifting more and more towards home care, and by keeping the elderly people at home longer increases the care intensity of the residents in long-term care facilities. (Terveyden ja hyvinvoinnin laitos 2017.) In 2014 there were over 60000 elderly people in long-term care facilities in Finland (Käypä hoito 2016).

It is stated in the Finnish law that the elderly people have the right to good quality of life and dignified end of life. These should be supported and cherished in home care and in long-term care. (Finlex 2012.) 80% of the elderly in long-term care facilities have descended mental capacity (Stakes 2005) this can be due to various of reasons, including memory disorders such as Alzheimer’s’ or dementia.

Long-term care facilities have been a topic on the news for quite some time for variety of reasons. Loved ones of the elderly have claimed online that the elderly are being mistreated and neglected, some of the headlines have been: “Is this what is waiting us? Shocking stories from relatives about elderly care in Finland” (Mtv 2016.), “Haunting stories from relatives: this is how poorly our loved ones are being treated” (Studio55 2013.), also some nurses have told about the quality of care claiming that the care is “Disgracefully bad” (Ilta-sanomat 2015). There has also been news about how the quality of care and services have increased “THL: increase in the quality of services for elderly” (ET 2014.) and how good and graceful care is being given and how grateful the loved ones are about the elderly care in Finland, for example “The care was like service in a five-star hotel” (Studio55 2013).

The purpose of this thesis is to show how registered nurses in two middle-sized cities in the capital area in Finland feel about the physical and psychological strain they are under, and what are the influential factors. This thesis was done by sending out electronic questionnaires to the registered nurses in two cities.

The focus is on registered nurses, because there are not any studies regarding only registered nurses in long-term care facilities. There are studies, such as Kettula (2011) and Lepola & Virtanen (2012), made about the physical and psychological strain on nurses, but they are not related to long-term care facilities for elderly. Also, most of the studies found were about practical nurses or about nurses in general. Previous studies such as thesis written by Salminen and Westerholm (2007), focus on health care professionals strain in long-term care facilities for elderly. Burnout is not used as a factor in this thesis, because there are many studies and thesis made about the subject. The authors acknowledge that nurses in long-term
care facilities are in a high risk of burning out (Edelstein et al 2014), but felt like including burnout as a research question would make the research material too broad.

The aim of this thesis is to be a guideline for the managers of long-term care facilities by bringing up areas of improvement and by showing what is being done well at the moment. The recommendations on this thesis are based on existing recommendations made by unions and the law as well as on the answers gathered. The existing recommendations have been modified to be better suited for the issues discussed in this thesis.

2 Background

2.1 Elderly care in Finland

In 2013 the act on supporting the functional capacity of the older population and on social and health services for older persons (980/2012) was launched and it replaced the standard of regulations regarding older population (Sosiaali- ja terveysministeriö 2017). The act includes the main principles from the regulations set in 2001, 2008 and 2013. The goal of the act is to guarantee safe environment, securing health and well-being, support independency and performance (980/2012). A multiprofessional team of registered nurses, practical nurses, doctors, physical therapists, social workers and cleaners are in the center of elderly care. (Tai- pale-Lehto & Bergman 2013, 7, 12). Also, the act on the status and rights of patients (785/1992) guides elderly care by ensuring the right to good treatment, good care, self-determination, the right to refuse treatment and access of information.

Newest succession about the standard of regulations was given in 2017 by the Ministry of Social Affairs and Health. The main principles of the new regulations include guaranteeing functional capacity of older people, personnel of the services, arranging service counselling for clients, structure of age-friendly services and technology. (Sosiaali- ja terveysministeriö 2017.)

Elderly care is in a transit phase at the moment. It is shifting towards ensuring that the elderly can stay at home longer. This is done by decreasing places in long-term care facilities, which in turn, increases the need of home care. Even though the number of clients in home has increased rapidly, there has not been a significant increase of home care employees (Terveyden ja hyvinvoinnin laitos 2017.)

Elderly care demands ethically high standard of care. The ethical advisory board has set the main principles of ethically good care which are formed by the right to good care, respecting human dignity, self-determination, equity, good expertise and an atmosphere that supports well-being. (Vallejo Medina et al. 2006, 344.)
2.2 Long-term care

Long-term care means around the clock care given in a facility, where there is staff around all the time. Care given in a long-term care facility includes medicine, nutrition, activities increasing social well-being, clothing and taking care of personal hygiene. Elderly people are able to get a long-term care place when the above-mentioned services cannot be given to the person at their home or in sheltered accommodation (Käypä hoito 2016). 80% of the elderly in long-term care facilities have descended mental capacity (Stakes 2005) this can be due to various of reasons, including memory disorders such as Alzheimer’s’ or dementia.

Municipalities can decide whether they provide the long-term care themselves, or if they provide it together with another municipality. The municipalities can also buy the service from a private service provider or they can provide a service coupon to the elderly person in need of a long-term care facility place. (Käypä hoito 2016.)

An elderly person can be placed in a long-term care facility only if there is a medical rationale, or the person is a liability to customer and/or patient safety. An elderly person in a long-term care facility still has the right to live dignified life, to live in a safe environment and to be in contact with other people. The goal of a good long-term care is to provide good quality of life and a dignified death. (980/2012 14 a§ Vanhustenhoito laki.)

In 2014 there were in total of 61 672 elderly people over the age of 75 in a long-term care place in Finland. This number includes elderly people in health-care centers. (Käypä hoito 2016.)

2.2.1 Sizing

The recommended amount of staff per resident in long-term care facilities is 0,5 nurses (Käypä hoito 2016). For example, if the facility has 18 residents they should have in total of 9 nurses working during the day. The nurses are divided fairly equally into three shifts, usually the morning shift has more nurses in it than in the evening or during the night.

In 2013 25% of long-term care facilities fell below the recommended sizing, but in 2014 the number went down to 10% (Käypä hoito 2016).

2.3 Physical strain

Work-related physical strain is caused by, among other things, manual lifts and transits, reparative work tasks, video terminal work and other physical stress such as difficult and static work posture. (Työsuojeluhallinnon verkkopalvelu 2017.)

The most physical strain bearing work tasks are related to moving the patient and manually induced lifts and transits. Manually induced lifts and transits mean transiting the weight by
lifting, carrying, pulling, pushing, lowering or by twisting. The main principle in patient trans-
its is to avoid lifting the patient manually and to avoid working in non-ergonomic posture for
long periods of time. The physical strain can be decreased significantly by using ancillary and
by training the nursing staff. (Työterveyslaitos n.d..)

2.4 Psychological strain

Strain turns to counterproductive when the employee gets overloaded and tired. Counterpro-
ductive strain also delays the body’s recovery process. (Työsuojeluhallinto 2017.)

According to Hellstén (2014,75), the job satisfaction has decreased by 3 to 4% between the
years 2010 and 2012. In Hellsténs’ study, the physical and psychological strain among regis-
tered nurses has increased significantly between the years 2010 and 2012.

The psychological strain stands for nervousness resulting from mental stress (The Free Dic-
tionary 2012). In the questionnaire, the psychological strain part will focus, among other
things, on the social support gained from co-workers and employer.

Social support and different kind of reward-systems and the ability to influence ones’ own
work keep up employees’ psychological well-being. Poor atmosphere at work and the lack of
social support from employer, coworkers and in personal life increase health problems and
the risk of losing ones’ ability to work in health care. Lack of social support can also be con-
ected to depression and anxiety disorders. (Sinokki 2011; Joseffson et al. 2007; Pekkarinen
et al. 2013; sited in Hellstén 2014, 10.)

Psychological strain can cause physical problems because a persons’ mind and body are an en-
tity. The factors causing strain can be seen either as positive or negative, for example inter-
ruptions and blocks are negative factors whereas feedback and accreditation are positive fac-
tors. Nurses psychological well-being can be seen in the work unit as solidarity, safe working
environment and cooperation. (Lastenmielenterveystalo n.d.; Työturvallisuus n.d..)

2.5 Wellbeing at work

Work well-being is an entirety which includes a job, job satisfaction, health, security and
welfare. Work well-being can be promoted by positive atmosphere at work, qualified staff but
also with good and motivational management. Well-being at work effects on coping, produc-
tivity and commitment at work which decreases the incidents of sick leaves. (Sosiaali- ja ter-
veysministeriö, n.d.)

Both employer and employee should participate in promoting wellbeing at work. Safety of the
working environment, good management as well as fair treatment among employees is an ob-
ligation of the employer. Employee’s main role in promoting wellbeing at work is to maintain
their professional skills and work ability. Each worker can improve work wellbeing by making
a good work atmosphere and developing working conditions and skills. (Sosiaali- ja terveysministeriö, n.d.)

2.5.1 Healthy employee

Healthy employee is motivated, responsible, succeeds and exhilarates while working. Employee should be able to exploit his or hers strengths and skills, but also be aware of jobs’ objectives. Ability to have and experience independency as well as fellowship benefits workers’ wellbeing. Wellbeing at work is connected with the feel of being needed. Employee whom receives feedback is more likely a healthy employee. (Työterveyslaitos n.d.)

2.5.2 Working environment

Working environment must be planned and built to be safe, healthy and functional. This promotes employees’ possibility to work proficiently and prevents incidents and sick leaves. Workplaces’ indoor air must be healthy and the air conditioning must be working sufficiently. Among other things, surfaces and equipment should be safe and correct ones to use in the working area. Good working environment includes breakroom, bathrooms, showers and changing rooms which are designed by the number of employees. (Työsuojeluhallinto 2016.)

2.5.3 Working hours

Working hours affects employees’ health, working ability and the possibility to connect working life and leisure time (Työterveyslaitos n.d.). Period-based working hours are mainly used in hospitals, health care centers and sheltered homes. The working hours depend on the work contract and they are connected to weeks, for example in three weeks the employee will work 116 hours and 15 minutes. If the employee does more hours than agreed in the contract, those minutes and hours are called overtime work (Tehy n.d.). According to Working Hours Act (605/1996 paragraph 7), during a three-week working period, the regular working hours should not exceed 128 hours.

Physical wellbeing is connected to shift work, because of the link between exhaustion, time of the day and risk of accidents. These three factors have an effect to employees’ ability to estimate their own performance. Attentiveness and risk-taking decreases thus the risk of traffic accidents and work-related accidents increase. Shift work itself can predispose to obesity and cardiac arrhythmias. Risk of heart attack increases by 20% with shift work. Employee whom work in two or three-shift regime has higher risk of getting breast, prostate and bowel cancer. Risk of developing metabolic disorder increases when working in shifts and shift-workers are more likely to get diabetes compared to day workers. (Työterveyslaitos n.d.)

Among employees whom work in irregular working hours have more work-related stress, anxiety and chronic tiredness than employees whom work in day shifts. Night shift workers are more likely to have these symptoms. Also sleeping disorders are more common among shift
workers as around 10% of the shift workers have long-term sleeping disorders and tiredness. (Työterveyslaitos n.d.)

When a person works in shift work, brain and the body go through momentary and enduring changes in different sectors of wellbeing. From the aspect of coping and being healthy, it is important to get enough sleep, have regular and healthy meals, exercise and otherwise have a healthy lifestyle. (Työterveyslaitos n.d.)

2.6 Occupational health care

Occupational health care is part of work wellbeing and it is connected to the employee and the employer. Aim of the occupational health care is to prevent occupational diseases and promote occupational health, working environment and safety of the work while seeking to increase employee’s power to staying at work and to help prolonged working career. Providing occupational health care to employee is statutorily obligated to the employer. (Ministry of Social Affairs and Health n.d.)

Employer can arrange occupational health care by themselves or buy them for example from health care centers or private medical centers. Providing nursing services is voluntary for the employer. (Ministry of Social Affairs and Health n.d.) Occupational health care services should be provided to workers equally and free of charge (Työterveyslaitos n.d.).

2.7 Sick leave

During a sick leave, the employee’s working performance is impaired which prevent working. Acute illnesses and chronic diseases are mostly connected to short-term sick leaves. If working decelerates employee’s recovery or endangers others wellbeing and safety, sick leave is necessary. (Työterveyslaitos n.d.)

From health and social care workers home aids, registered nurses and practical nurses had the most amount of sick leave days in 2016. Sick leaves in these professions has increased since the year 2015. (Työterveyslaitos, 2017.) Statistics show that 82% of the back injuries are caused by lifting and transiting the patient manually. Less than 37% of the sick leaves are connected to musculoskeletal disorders. (Hellstén 2015, 2.)

3 Aim and purpose

The purpose of this thesis is to describe registered nurses perceptions of physical and psychological strain in the cities of X, Y and Z. In addition, this thesis focuses also on how registered nurses feel about their job and job environment. Registered nurses have a possibility to describe how their wellbeing is supported and how different factors effect the strain they are under. The additional perspectives help to reach the purpose and aim but also gives more
support to this thesis. The purpose is also to find out if the nurses in different cities have different feelings about their jobs.

The aim of this thesis is to be used as a base to develop long-term care facilities as a work environment. The cities or the ward nurses can use this thesis to evaluate the well-being and satisfaction of the registered nurses in their area. Evidence-based knowledge will be provided as well as tools that can be used to reduce the strain on registered nurses.

The research questions are:

- What are the factors that affect the strain of registered nurses in long-term care facilities?
- How can the work well-being of registered nurses be improved in long-term care facilities?

4 Research methods

This was a survey study where a questionnaire created by the authors of this thesis was used (Appendix 1). The questions were selected by researching factors that influence work well-being, physical and psychological strain.

The questions in the questionnaire take in to consideration how does the physical well-being of residents, the number of the residents nurse takes care of in a shift and the non-care related tasks affect the strain put on a nurse. In the survey nurses can describe their physical and psychological stain and tell what kind of non-care related tasks they have. Wellbeing of the nurses has been taken into consideration in the survey by asking about coping at work, breaks and the support received from co-workers and manager. Nurses had the possibility to describe the factors that affect their wellbeing in the open-ended questions.

The electronic survey was sent to cities of X and Y. Simple percentage analysis was used as an analysis method on the multiple-choice questions and content analysis for the open-ended questions. The results were analysed by city and the results were compared between cities.

The questionnaire was sent to ward nurses electronically and they were asked to send it to all the registered nurses in their ward. The estimate is that 50 registered nurses received the questionnaire.

Original plan was that questionnaire would have been sent it to at least 72 wards in Z, 13 wards in X and 6 wards in Y. The sample size between the cities varies quite a bit but that is mainly due to the differences in the sizes of these cities, for example city Y has 14 registered nurses, and city X has more than 30. Plan was that the total number of the wards that would
receive the questionnaire was 91, and hope was that around 150 answers in total would be received. As the research permit from city Z was not gained due to time schedules, there was a loss of majority of the respondents. Eight wards in X and three wards from Y received the questionnaire and total number of answers was 11. Reminders were send about the questionnaire after two weeks, and the units had in total of four weeks’ time to fill out the survey.

4.1 Analysis

Simple percentage analysis method (The University of Chicago Press Journals n.d.; Research design n.d.) was used in the multiple-choice questions as well as in the open-ended questions when possible. Content analysis was used as an analysis method for open-ended questions.

Multiple-choice questions were analyzed by examining the frequencies and showing the results as percentages. The percentages shown in the charts and the charts used in this thesis were made with Microsoft Excel 2016. The answers of the open-ended questions were read through and analyzed by finding similarities with multiple-choice questions. The answers from open questions were used to support the findings from multiple-choice questions.

5 Results

There were in total 11 answers, eight of these were from X and three from Y. All of the respondents were women. On average, the facilities in X have 21 to 25 residents where as in Y the number of residents is more than 30 on average.

5.1 Care intensity of the residents

Figure 1 shows that the number of residents to take care of during a shift depends on which shift the registered nurse is working in, because some of the respondents have selected more than one alternative.
On average the respondents from X have four to six residents to care for during a shift, and in city Y the average is seven to nine residents per shift. The high number of residents to take care of could be explained by evening or night shifts, but because there was not a question about the shifts the respondents are working only assumptions can be done based on the authors knowledge.

As can be seen from the figures 2 and 3, the number of residents that need all available assistance on daily bases varies between the two cities. Based on the answers have collected, X has more residents that are able to walk without any assistance than Y has. This can also be seen in the number of residents who need assistance on daily bases - the number of these residents is higher in Y. The figures were formed by combining the answers of three questions, because all three questions are linked to the care intensity of the residents.

The percentages for the figures 2 and 3 are only estimates because the exact number of the residents is unknown. The answer options for these questions were 0-3, 4-7,8-11 and over 15, the estimate has been done by calculating the average from responses.
5.2 Breaks

Both cities follow the municipality collective labour agreement which states in the 27§ paragraph 2 that hospital-, health-care center-, long-term care facility- and service facility workers are to be offered the possibility to have a 15 to 20-minute lunch break daily, given that it does not have an effect on the work. Also, according to the 28§ in the collective labour agreement, the employees are entitled to a 10-minute break (coffee break) that is included in work time.
27.1% of the respondents stated that they are not able to have a lunch break daily, and as shown in figure 4 total of 54% of the respondents are not able to have a coffee break on daily bases.

![Figure 4 Coffee breaks](image)

5.3 Physical strain

63.6% of the respondents fully agreed that their work is physically straining. When divided to cities, X’s percentage is 62.5 and Y’s is 66.7. Respondents whom agreed that their work is physically straining is 27.3% and, when divided into cities, X has 25% of the answers and Y has 33.3% of the answers. One in eight respondents from X couldn’t say if her job is physically straining.

“Registered nurses’ job description has changed. Before, we only helped in taking care of the residents and now we have as many residents to take care of as does practical nurses in a day. Practical nurses also take care their own residents’ things, also dispense medicines.”

High number of respondents whom described their work physically straining can be connected to their units’ number of residents and the residents’ status of health, but also the number of residents the registered nurse takes care of during a shift. All the nurses whom described that their job is fully physically demanding also described that they take care of more than five residents per shift and the residents in their units need assistance with walking and taking care of basic needs. Same results can be seen with the nurses whom agree that their job is physically straining.
5.4 Psychological strain

In both cities registered nurses have a lot psychological strain at their job. 87.5% of X’s respondents fully agreed that their work is psychologically straining and 12.5% agreed. From Y’s respondents 66.7% fully agreed with the statement and 33.3% agreed. (Figure 4.)

Experiencing psychological strain be connected to physical strain (Figure 5), coping at work (Figure 7), work atmosphere (Figure 8) and managements’ support (Figure 9).

Some of the respondents stated that language barriers cause strain as registered nurses or other staff members do not always have mutual understanding.

“The workgroup is heterogeneous by its know-how, work motivation and for example by language and this makes it difficult to achieve homogeneous care work, and this kind of work environment burdens first and foremost the skilled workers, whom are forced to fill in different kinds of lacks related to care work”.

One of the respondents experience that ethical perspective in nursing is not primary, as working has become more performance oriented. She also believes that ethical burden is part of the reason of exhaustion.

Psychological strain can be connected to respondent’ feeling that her work shifts do not support employees’ capability to cope and they have to haggle from breaks.
“Almost every day after work I am so exhausted that I do not have the strength to do anything other than lay down.”

From the respondents’ point of view, factors that affect to psychological wellbeing are also co-workers’ professional competences, linguistic abilities and work motivation. Sick leaves cause burden psychologically and physically. These factors have a negative impact on wellbeing. Residents’ relatives can cause strain on nurses as well.

“Relatives can be demanding and have too many unnecessary rights.”

![Graph showing psychological strain](image_url)

Figure 6 Psychological strain

5.4.1 Non-care related tasks and their affect to strain

Non-care related tasks cause burden among X’s registered nurses. Half of the respondents replied by fully agreeing with the statement of “Non-care related tasks increase my strain”. 25% of the respondents could not say, and both disagree and fully disagree had 12.5% of the answers. Y’s answers almost divided into extremity as 33.3% answered that they disagree or fully disagree with the statement and 33.3% fully agreed that non-care related tasks increase strain at work.

When asked what kind of non-care related tasks registered nurses have, 82% responded that they take care of meal-related tasks for example preparing breakfast and evening meals especially during weekends and they help with serving food and washing dishes. Many of the nurses take care of at least small-scaled cleaning which can include changing bedsheets and
taking care of trashes. In some units registered nurses are responsible for planning shifts, ordering supplies and planning activities.

Social media also has become part of elderly care in long-term care facilities as nurses’ tasks include updating units’ social media accounts in activity events which are meant for the residents. This has become a strain, because the units compete with each other.

5.5 Coping at work

12,5% of the respondents from X fully agreed that they cope at their work, whereas 37,5% agreed. One fourth of the nurses could not say if they cope at work as other fourth felt that they do not cope. (Figure 7.)

In Y, two of the respondents cope with their workload and one of the respondents cannot say whether she copes at work. (Figure 7.)

Figure 7 Coping at work

The number of residents registered nurse takes care of during a shift effects to managing at work. As registered nurses in Y take care of seven to nine residents during a shift, it is good that Ys’ respondents mainly agree (66,7%) that they receive help and support from their co-workers. 33,3% cannot say whether they receive help and support from others. In X over half of the respondents agree or fully agree with getting help and support from their co-workers. 25% of the nurses cannot say if they get help and support at their work place. One of X’s respondents (12,5%) disagree with other respondents.
Functionality of equipment and tools effect to coping with workload which can be seen among the respondents. Work related equipment should be usable and easy to reach as they are not according to respondents.

Possibility to have open discussion about relevant topics among co-workers, increases nurses’ ability to cope at work as does team meetings. Nurses responded that having enough regular holidays support their coping.

Wellbeing at work is promoted in Y’s and X’s units by having social events with colleagues, but on the other hand some of the respondents feel that planning these kinds of events have become their responsibility which neglects their coping at work. Experiences of getting financial support, for these kinds of events, from the management fluctuates between the respondents.

Fair division of work and work organising among registered nurses have an effect to their coping at work. Respondents replied that at the moment the division of the work load is not fair.

“On daily work organising it is important to take into consideration registered nurses’ time for taking blood samples, doing procedures, medicinal care, consultancy with the doctor, planning work shifts.”

5.6 Work atmosphere

Quality of atmosphere at work is quite distributed especially in the city of X. In X quarter of the respondents fully agreed with having a good work atmosphere as 12,5% agreed. Most of the respondents (37,5%) could not say whether their work atmosphere is good or not. 25% disagrees having a good atmosphere at work. (Figure 8.)

In Y, over half of the respondents (66,7%) thought that their work atmosphere is good. One of the respondents could not describe their units’ atmosphere. Overall, respondents could not say or they at least partly agree that their work atmosphere is good.
Work atmosphere can be some ways connected to employees’ ability to receive help and support from other co-workers as in both cities the respondents receive help and support. Maintaining good work atmosphere belongs to each member of the working group. Having disagreements or arguments between two employees, have an effect on the atmosphere and it makes the rest of the day burdensome for all the employees, as one of the respondents says. Coping at work (Figure 7) and work atmosphere (Figure 8) corroborate each other.

50% of respondents in X says that they do not have clear hierarchy in their working units. Singular respondents see clear hierarchy at their work place as quarter of the respondents cannot say.

66,7% of Y’s respondents cannot say whether they have clear hierarchy as 33,3% agrees having a work place with clear hierarchy. Having a work place where employees see each other as equals affect to work atmosphere. Managements’ support (Figure 9) is easily reflected to work places’ hierarchy.

5.7 Managements’ support

In both cities registered nurses feel like their management supports them. Respondents from X have a supportive manager, as one quarter of the respondents answered both fully agree and agree that they receive support from their boss. Three of the respondents disagreed (25%) or fully disagreed (12,5%) with the statement that they gain support from their manager. 12,5% of the respondents could not say if their manager is supportive.
Y’s respondents have somewhat supportive manager. 66.7% of the respondent agree that they have support from the manager as 33.3% of the respondents could not say.

![Figure 9](image)

**Figure 9** Managements’ support

Management has the possibility to support his or hers employees by investing in employees’ work wellbeing. Manager who has experience in nursing and knows how straining nurses’ job is has more potential to be, as described by respondents, excellent manager.

6 Discussion

The aim of this thesis was to find out how registered nurses in two cities feel about the strain they are under and what factors are related to it. The results show that the nurses feel that they are under a lot of physical and psychological strain. Biggest influences on the psychological strain are the working atmosphere and the support gained from the manager and colleagues.

The care intensity and the personnel sizing can explain the results shown in Figure 5. The fairly high number of residents whom need full assistance can explain why only one registered nurse responded that her unit does not have any residents that need the assistance of two nurses. The sizing in city X seems to be in line with the recommendations, but the sizing in city Y could be re-evaluated.

Language barriers among the staff are felt to increase the strain, because it can be time consuming to translate the needs of the residents and to communicate with colleagues. The sup-
port gained from the management is important, and only half of the respondents felt that they gain enough support from their manager. Managements support is crucial, because it is the only way to express any dissatisfactions or shortages in the unit or among nurses.

Previous studies show that that physical strain among nurses is common and that nurses in general feel that adequate equipment has an effect on the experienced physical strain (Salminen & Westerholm 2007). According to previous study (Kettula 2011), registered nurses and practical nurses in health care centers’ ward experienced that three-shift regime and taking care of burdensome patients caused physical strain. Not having the possibility to have decent breaks effect to the nurses by making them feel themselves rushed. The study has unity with our study as registered nurses seem to be physically strained. Registered nurses’ physical strain be connected to their units’ sizing, care intensity as well as the residents’ status of health. Salminen & Westerholms’ thesis has the same findings that the physical and psychological state of the residents increases the physical strain of the nurses.

6.1 Ethical concerns and validity

Research permit requests were sent to all three cities, but unfortunately one of the cities had to be excluded as research permit was not received due to time schedule. In the research permit request, it was stated that if a research permit is not gained from all three cities, the cities involved will be referred to only with letters. This effects to the cities’ possibility to know their strengths and weaknesses.

It was also planned that the answers from a city would not be used if there were less than five responses but a loss of one city, and another city having only three respondents, the authors felt that these three answers cannot be overlooked. If all the answers had not been used this study would have only been about one city.

The permits gained for this survey stated that the authors are to send the finished thesis to both cities. One of the permits included an exact date when the thesis is to be submitted to them, and as the publication date of this thesis was prolonged the authors reached out to the city and were able to set a new date.

Answering the survey was optional and it was mentioned in the introduction of the survey. None of the respondents were coerced to answer, and they had the option of not answering the open-ended questions. There were no questions that would reveal the respondents’ identity, for example there were no questions about the unit the respondents work at and no questions about their name or age. This was done to protect the anonymity of the respondents.
The answers to the survey were deleted after the analysis process was completed and no copies of the answers were made at any point. The analysis was done by the authors only and the authors were the only ones to see the answers. The anonymity of the respondents is guaranteed by not revealing the city behind the answers of the open-ended questions.

Because the number of respondents was low, it is understandable that it cannot be stated that the results reflect the opinion of the entire cities registered nurses whom work in long-term care facilities. Some of the open-ended questions were broad and not specified, and thus some of the answers received were to be excluded. This effects to the trustworthiness of this thesis, even though the findings are in line with previous studies made about similar subjects.

7 Conclusions

The number of residents to take care of during a shift varies between the respondents and it is hard to say if the personnel sizing in all of the units is adequate. Ten out of eleven respondents stated that they have residents whom need the assistance from two nurses, but it is unclear if the respondents have counted the help they give in to the number of residents they take care of during a shift. If they have not taken this into account in their answers, it would mean that actual number of residents they take care of is higher which would mean that the personnel sizing is inadequate. From the open-ended questions we got the impression that registered and practical nurses have the same number of residents during a shift, and it gives an image that registered and practical nurses have similar job description which might not support registered nurses’ professional competences. The high number of residents to take care of during a shift takes time away from nursing-related tasks, such as doctoral consultations and medicinal care.

Physical and psychological state of the residents has gone down which can be seen in the high number of residents whom need assistance with walking or whom need full assistance. As registered nurses’ job description has changed towards basic care the physical stain has increased. Residents’ state also has a significant impact on physical strain. High number of residents whom need assistance of two nurses can also explain work strain.

Most of the respondents are able to take lunch breaks but alarmingly high number is not able to have a coffee break. The length of lunch breaks is unknown and this leaves us wondering if they are all able to have a full-length lunch break. Breaks have an effect on work wellbeing because without breaks registered nurses have to stay on their feet long periods of time. This has an immediate effect on physical strain.

Physical stain among registered is common and it has a huge impact on the entire wellbeing at work. The help received from colleagues helps to reduce the experienced physical strain.
Non-care related tasks might also increase the physical strain. Equipment can help to lower the strain, if they are easy to reach and usable.

The respondents seemed to be extremely strained psychologically. As human body and mind are so connected each other, physical burden can influence the psychological strain. Psychological strain is connected to coping at work and vice versa. It can be seen that the working environment and atmosphere, shifts as well as colleagues can have either a positive or a negative effect.

Open atmosphere and regular team meeting as well as communality outside work support employees’ coping at work as was seen in the responses. Having vacation days in regular intervals was mentioned as an important factor in coping. Work division and work organising seems to be a problem.

8 Recommendations

The personnel sizing should be checked, and a plan drawn for possible surprising and unplanned absences so that the staff would not be under increased strain. If there is a shortage of personnel, it should be seen in some ways without compromising the care of the residents. The shortage should not increase the strain of nurses, because being under increased strain can influence focus and loosing focus can compromise the safety of residents and nurse.

A comprehensive orientation of new employees is crucial, because well familiarized and well-trained staff increases the well-being of residents and decreases the strain of other nurses. The length of the familiarization period should be determined by the care intensity of the residents and by previous experience the employee has, and it should be continued if necessary. If the new employee is a foreigner his or hers Finnish language skills should be supported by speaking Finnish to the employee. People tend to start speaking English to foreigners, because it feels easier and safer (Maailman kuvalehti 2011).

The lack of breaks is alarming, because being able to take breaks has an effect on both physical and psychological strain. Nurses are on their feet for most of their shifts, which creates strain on the whole body, being able to sit down even for 10 minutes helps to reduce the strain. Lack of breaks is usually an indication of a too strict schedule which means that the nurses are in a hurry and that effects the psychological well-being. Guaranteeing breaks for everyone could be done by creating pairs whom would let each other have breaks in a way that it would not affect the work and the safety of the residents. Pairing up could also be helpful if the unit has high number of residents whom need the assistance of two nurses.

Finnish Institution of Occupational Health (n.d.) has a recommendation for planning shifts for three-shift regime workers. The recommendations’ plan is that the employee would start with two morning shifts continuing with two evening shifts and ending with two night shifts. After
these six shifts the employee would have four days off. This could be adapted to nurses’
schedule. As we are aware that not all registered nurses work during nights, nurses could
have from example three morning shifts following three evening shifts. Work shift planner
should avoid transits from evening to morning shifts.

Wellness-days among units’ nurses would increase the entire wellbeing of the staff. It would
also improve the work atmosphere and communality. Regular team meetings prevent the in-
terruption of information flow and the meetings able the possibility of open discussion among
team members.
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Appendix 1: Questionnaire in Finnish

Sairaanhoitajien fyysinen ja psykkinen kuormittuneisuus vanhusten pitkäaikaishoidossa
Olemme viimeisen vuoden sairaanhoitajaopiskelijoita Laurean ammattikorkeakoulusta ja teemme opinnäytetyötä, mikä käsittelee sairaanhoitajien työn kuormittavuuteen vaikuttavia tekijöitä. Kyselyn tarkoituksena on selvittää mitkä hoidolliset ja ei hoidolliset asiat vaikuttavat jaksamiseen, sekä onko kaupunkien välillä suuria eroja.

Kyselylomake täytetään nimettömänä, eikä opinnäytetyössä eritellä yksittäisiä vastauksia. Vastaukset esitetään kaupunkikohtaisesti.

Tämä kysely on lähetty kaikkiin Zn, Xn ja Yn kaupunkien pitkäaikaishoitopaikkoihin. Kyselyyn vastaaminen on vapaaehtoista.


Mikäli Sinulla on kysyttyvää kyselylomakeesta, voitte ottaa meihin yhteyttä sähköpostitse: pia.mikkola@student.laurea.fi tai niina.matilainen@student.laurea.fi

Kiitos vastauksestasi!

1) Kaupunki jossa työskentelet
   Z
   X
   Y

2) Sukupuoli
   Nainen
   Mies

3) Asukkaiden määrä työyksikössäsi
   1-10
   11-15
   16-20
   21-25
   26-30
   Yli 30

4) Hoidettavien asukkaiden määrä työvuoron aikana
   1-3
   4-6
   7-9
   Yli 10

5) Itsenäisesti ilman apua kävelevien asukkaiden määrä työyksikössäsi
   0-3
   4-7
   8-11
   12-15
   Yli 15

6) Kävelytettävien tai kävelyssä apua tarvitsevien asukkaiden määrä työyksikössäsi
   0-3
   4-7
   8-11
   12
   Yli 15

7) Täysin autettavien asukkaiden määrä työyksikössäsi
   0-3
   4-7
   8-11
   12-15
8) Onko osastollasi kahden hoitajan apua tarvitsevia asukkaita?
   Kyllä
   Ei

9) Ehditkö joka vuoron aikana pitämään lounastauon?
   Kyllä
   Ei

10) Ehditkö joka vuoron aikana pitämään kahvitauon?
    Kyllä
    Ei

Valitse mielestäsi sopivin vaihtoehto
1= täysin erimieltä, 2= jokseekin erimieltä, 3= en osaa sanoa, 4= jokseekin samaa mieltä, 5= täysin samaa mieltä

11) Työni on fyysisesti raskasta
   1
   2
   3
   4
   5

12) Työni on psyykkisesti raskasta
    1
    2
    3
    4
    5

13) Ei hoidolliset työtehtävät, kuten pyykinpesu ja siistiminen, lisäävät rasittuneisuuttani
    1
    2
    3
    4
    5

14) Koen jaksavani työssäni hyvin
    1
    2
    3
    4
    5

15) Työilmapiiri yksikössäni on hyvä
    1
    2
    3
    4
    5

16) Koen saavani tukea ja apua muilta työyhteisöön jäseniltä
    1
    2
    3
    4
    5

17) Työyksikössäni on selkeä hierarkia
    1
    2
    3
    4
    5

18) Saan tukea jaksamiseeni esimieheltäni
    1
    2
Vastaa lyhyesti alla oleviin kysymyksiin

19) Miten työhyvinvointia edistetään/ylläpidetään työyksikössäsi?
   Oma vastauksesi

20) Mitkä eivät hoidolliset tehtävät kuuluvat työhösi?
   Oma vastauksesi

21) Mitkä muut tekijät vaikuttavat jaksamiseesi työyksikössäsi?
   Oma vastauksesi

22) Vapaa sana
Appendix 2: Questionnaire in English

Physical and psychological strain on registered nurses in long-term care facilities for elderly

1) City you work in
   Z
   X
   Y

2) Sex
   Female
   Male

3) Number of residents in your unit
   1-10
   11-15
   16-20
   21-25
   26-30
   More than 30

4) Number of residents to take care of during a shift
   1-3
   4-6
   7-9
   More than 10

5) Number of residents whom are able to walk without help/assistance in your unit
   0-3
   4-7
   8-11
   12-15
   More than 15

6) Number of residents whom need help or assistance with walking in your unit
   0-3
   4-7
   8-11
   12-15
   More than 15

7) Number of residents whom are entirely helped
   0-3
   4-7
   8-11
   12-15
   Yli 15

8) Are there residents whom require help from two nurses?
   Yes
   No

9) Are you able to have a lunch break during each of your shifts?
   Yes
   No

10) Are you ab
    Yes
    No

Choose the most adequate alternative
   1 = fully disagree, 2 = disagree, 3 = cannot say, 4 = agree, 5 = fully agree

11) My job is physically straining
    1
    2
12) My job is psychologically straining

13) Non-care related tasks, such as doing laundry, have a negative effect on my burden

14) I feel like I have enough strength to manage at my job

15) The working atmosphere at my unit is good

16) I feel like I am getting support and help from my colleagues

17) There is a clear hierarchy in my unit

18) I feel like my supervisor is supporting my well-being

Answer shortly on the following questions
19) How is well-being at work promoted in your unit?
Your answer

20) What non-care related tasks are included in your job?
Your answer

21) What other factors affect your well-being at work?
Your answer

22) Free speach