

**An Empirical Study to Assess Stress among nurses working in
surgical care setting and elderly care setting.**

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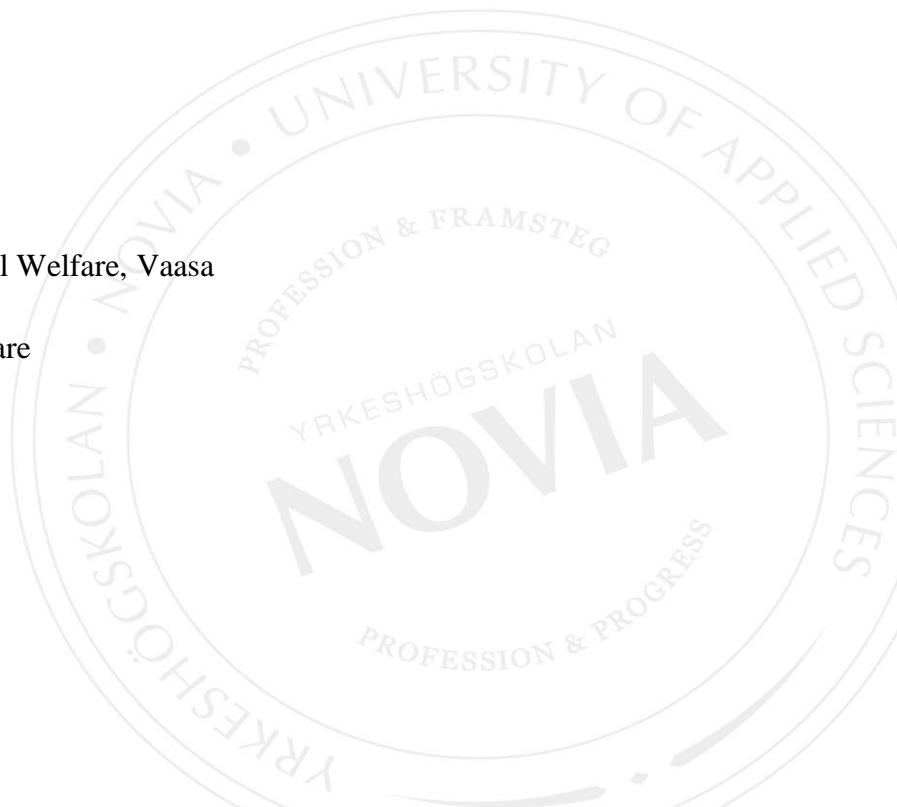
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Summary

In recent years, occupational stress has been area of research in psychology, and in the bigger areas of social and medical sciences. There also has been growing number of studies conducted on occupational stress between nurses and their coping strategies. However qualitative studies targeting specific care settings are scarce in number. That's why this qualitative research aimed to identify the stress among nurses working in surgical care setting and elderly care setting. The Job Demands–Control (JDC) work design model and salutogenic paradigm were used as our theoretical background for this study.

Our findings from this study reveal that high demand of work, shortage of staff, lack of knowledge and lack of co-operation among health professions are sources of job stress among the nurses. Also, control over work plays crucial role in the management of stress at work. This study is applicable for developing the coping mechanism and organization policies to deduce the work stress among the nurses in various caring settings. From this study we can prevent the major stress factors and promote the good stresses at work in the respective nursing settings.

Language: English

Key words: Stress, Job demand, Job Control and Nursing

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1. Introduction

Among different life circumstances workplace creates highest amount of stress. It is not surprising because of amount of time that we spend at work and changes that affect the nature of work (Han Loo, 2012). Stress is an inescapable consequence of modern life. It is also the major health threats in modern work place (Dewe, Driscoll and Cooper, 2012). Stress is defined as an unpleasant experience that has negative effect on emotional and physical condition of a person (Jennings, 2000). Normally stress is more common among employees at lower levels, since they have lower control over their work situation (Zhou and Gong, 2013).

Stress thought to be responsible for physical illnesses, family problems, and alcohol and substance abuse among many workers. In addition it causes absenteeism from work, accidents at work and low productivity (Elahi,Fallahi, Mohammadi and RasoolEslami, 2016). Cost of stress is estimated to be millions of dollars every year for employer organizations (Blaug, Kenyon and Lekhi 2007).

Job stress is rising when expectation of job become too much for employees to handle. At this situation employees feel stressed out. It also can cause serious mental, physical and emotional conditions (Beheshtifar and Nazarian, 2013; Cousins and Donnell, 2011). Stress should not be mistaken with challenge, since these two concepts are not the same. Challenge is something positive and necessary in life. It encourages us to learn new things and develop competencies necessary to do our work, and when we overcome that challenge we feel satisfied and happy. It is that little pressure that is necessary to get things done. It is for example that deadline to finish a work or an assignment (Kendall, Murphy and O'Neill Samantha Bursnall, 2013).

Occupational stress has been major sources of concern in last decades. A survey conducted by health and safety executive showed that in 2005, 50000 people in UK experienced work stress at a high level and 245000 people felt work-related stress, anxiety and depression in previous 12 months. Another survey by a life insurance company in United States showed that, around 46% of the employees thought that their job contained a lot of stress. The amount of stress related disabilities also increased from 6% in 1982 to 13% in 1991. In addition, one out of every three Americans has left his/her job because of stress. (Jenings, 2000; Kendall, Murphy and O'Neill Samantha Bursnall 2013; Cousins and Donnell, 2011; MacKusick and PtleneMinick, 2010)

The level of stress is different for different types of jobs. Some professions tend to have higher level of stress. Jobs with high levels of stress are such as: teaching, social work, newspaper reporting, emergency dispatching, nursing, police officers, fire fighting, pilots, surgeons, and enlisted military personnel. The specialties and work settings for nurses vary greatly. Nurses required providing both medical and emotional support to patients and their families and hiding their negative emotions, that's a big responsibility and causes big amount of stress (Sahraian, Davidi, Bazrafshan and Javadpour 2013).

In recent years, occupational stress has been area of research in psychology, and in the bigger areas of social and medical sciences. There also has been growing number of studies conducted on occupational stress among nurse and their coping strategies. However qualitative studies targeting specific care settings are scarce in number. That's why this qualitative research aimed to identify the stress among nurses working in surgical care setting and elderly care setting. In the following section we will present background of the study and explain about the purpose and objectives of study.

2. Background of the study

The nursing role is rapidly changing, as nurses are assigned to wider range of health care responsibilities. Caring for the patients has definitely become more complicated. Moreover, Hospitals are short-staffed and tight in Budget. The difficulties in our society plus problems related to obesity and diabetes, growing old aged population and related conditions means that our health care system should deal with a growing number of complex illnesses (Beheshtifar and Nazarian, 2013) (Blaug, Kenyon and Lekhi 2007).

Finland is not an exception in this situation. Finland is a lightly populated country with a population in dramatic demographic change. At the moment population of aged people is on the normal European level, however the numbers are expected to rise, because large proportion of those who born after Second World War reach old age (75 or older) by or after year 2020. Another problem is that majority of old people live in rural areas, which creates a big challenge to organize services for them. In order to care for older people, Finnish government put the age policy into the broader context and developed a social and health policy, the National Development Program for Social Welfare and Health Care. Nurses are leading professional that are required in order to develop the social welfare and health care programs. Finland is one of the countries that have a tradition of using health nurse in local communitie. (Kokko and Nyfors, 2009)

Flinkman, Isopahkala-Bouret and Salanterä (2013), conducted a study on three Finnish young nurses who left their profession and re-educate themselves for a new career. They found that, demanding profession and unsuitable nursing practice environment in terms of nurse-patient ratios, rush, shift hours, and general appreciation were the main reasons for nurses to quite their job. This contributed to their tiredness and not being able to provide acceptable nursing care as they were willing.

Nowdays, nurses in Finland have different responsibilities to give care to people at all ages. Their job can be included, caring for hypertensive and diabetes patients, organization of care for old people or people with multiple chronic diseases. They also involve with acute care or assessment of new problems. This makes the nursing job a demanding profession.

2.1Surgical care setting

It consists of different phase they are pre operative phase, intra operative phase and post operative phase. (Berman and Snyder, 2013, 960)

The preoperative phase begin when the patient is planned for the surgery, in this phase the patient gets an appointment and discuss about the nature and reason for the surgery. In this phase there is physical assessment, blood test as order by the surgeon and will provide information to prepare the patient for the day of the surgery. The nurses inform the patient, what the patient need to do before the surgery and at the day of the surgery like when to stop eating, drinking and what to expect in the surgery day. (Berman and Snyder, 2013, 962-964)

In the intra operative phase there are surgeon anesthetics doctor, anesthesia nurse, instrument nurse and scrub nurse. In the surgery room all those people are interrelated. (Berman and Snyder, 2013, 973-975) Their responsibility begin when the patient is planned for the surgery, the nurse conforms the patient and the anesthesia doctor makes the patient sleep or give instruction what is needed to the patient and the anesthesia nurse monitor the patient throughout the surgery, the surgeon perform the surgery with the help of the instrument nurse and scrub nurse (National Policy and Procedure for Safe Surgery. 2013, 6).

In the post-operative phase are consider as the recovery room where the patient is treated after the surgery, in that stage the patient is transferred from the surgery theater and given the report what has done to the patient and what is needed to done then the nurses working in the post-operative phase takes care of the patient. In that stage pain management is done and follows the instruction given by the doctor. (Berman and Snyder, 2013, 976)

2.2 Elderly Care Setting

Gerontology is the study of ageing process and about older people. Whereas geriatric care is the caring field primarily focused on the medical care of older adults. Nurses have many different roles in elderly care such as: Caregiver, Teacher, Manager, Advocate and Research consumer. Nurse's practices geriatric care in many caring settings like: Acute care unit, Long-Term care Facilities, Hospice care ward, Rehabilitation care unit and Community settings. (Berman and Snyder, 2013, 414-416)

Historically, Nurses doesn't need any specific training and education to work in geriatric care. But in recent time, Nurses are more trained and obtain education to work as gerontological Nurse (Ebersole and Touhy, 2006, 2). The Gerontological nurses are most demanded nurses as the ageing populations are growing in rapid rating (Ebersole and Touhy, 2006, 24). Geriatric research is mainly focused on providing care guidelines to the clinical matters of elderly care like: Dementia, Nutrition problems and overall Physical, Social and Emotional wellbeing of elderly people (Ebersole and Touhy, 2006, 22). So the primary goal of geriatric nursing is to give the possible high quality of life to elderly people (Ebersole and Touhy, 2006, 25).

2.3 Stressors

Stressors are any condition and event that can cause or leads to the stress, the main cause of common stressor are illness, fear and injury (Baron, Branscome and Byrne, 2009, 437-438). In response to the effect of the stressor the body release different kind of hormones such as cortisol, the effects of those hormones are on respiration, digestion, heart rate and many more (Pender, Murdaugh and Parsons, 2001, 197).

Stressor can be expressed in different way by person to person. The stressors can cause more effect on some person and the same stressors can cause less effect on other person (Hurley, 2007, 17). Stress can be experienced in physical way such as having headaches, sleep problem hypertension and emotional symptoms such as fear, anger, sadness and behavioral symptoms and mental symptoms (Pender, Murdaugh and Parsons, 2001, 194-198). Stressor comes from environmental stressor, social stressors, physiological stressor, and cognitive stressors (McEwen and Lasley, 2002, 39-42).

The common stressors among the nurse are personal problem, work overload and failure to fulfill the patient need (Pender, Murdaugh and Parsons, 2001, 194-198). Common stressors in others work is

because of overload, when the person gets responsibility but doesn't get authority, when the person feel not being heard and the person is not getting enough support from the team members (Thomas, 2009, 6-21). Stressor can be classified in two term long term and short term (Rout and Rout, 2007, 17).

2.4 Long term stressors

Long term stressors are those which affect the person in the long term, death of the loved ones, divorce, losing contact with the loved one, sleep problem, children problem, if some matters like this happens, the person thinks about the incident all the time and they are always stressed which may lead to many health problems, (Baron, Branscome and Byrne, 2009, 437-438). Long term stressors effect in a long term way and is also known as chronic stressor. It effects cardiovascular system, due to increase in blood pressure which forces the heart to work more which can damage arteries and plaque formation, it also affects the immune system and effect body function (Pender, Murdaugh and Parsons, 2001, 197-199).

2.5 Short term stressors

Short term stressors are also known as day to day stressors, they may cause by everyday life events (Rout and Rout, 2007, 171). Short term stressors are caused by pressure at work, argument with in family member and other daily activities and responsibilities. Starting a new work, the day to day activity is affected by the short term stressors (Pender, Murdaugh and Parsons, 2001, 198-199). Short term stressors can cause negative impact in day to day health conditions, stressors can cause headache, back pain, fatigue. Short term stressors are resolved in the short term period of time, but it may lead to chronic illness or it can trigger the chronic illness (Piazza, Charles, Sliwinski, Mogle and Almeida, 2012, 111). Short term stressors are less severe than long term stressors but they can make enormous impact on the health condition depending how the person respond to the short term stressors (Piazza, Charles, Sliwinski, Mogle and Almeida, 2012, 120).

2.6 Positive and Negative Stress

According to Selye (Donovan, Doody and Lyons, 2013, 969), there are two different kinds of stresses: Eustress and Distress. Eustress is a good stress that pushes the person to accomplish any objective/goal without creating physical, psychological or social burden (Donovan, Doody and Lyons, 2013, 969). Eustress are easily manageable by the person without affecting his/her wellbeing. Eustress is positive and amusing force, which helps to bring motivation; development and improvement in person's work (Rout and Rout, 2007, 17).

Eustress generally, lies in mid range between too much and too less stress level. Eustress is an outcome of positive approach to the stressors. Eustress is achieved while reacting to stressors with positive emotions like: hope, positivity and appreciation. Eustress and distress are subjective perceptions; a same stress could be eustress or distress depending upon the individual response and interpretation of the stressors. (Mathney and Kolt, 2003, 729-735)

Similarly distress is a stress that causes harmful effect to physically and psychologically wellbeing of persons. Distress is usually repeated stress that will become unmanageable due to its high intensity and exhaustive nature (Donovan, Doody and Lyons, 2013, 969). Any stress can be distress when the human body goes beyond its capacity to maintain the homeostasis. Distress is always giving the unpleasant feeling to the person's body. The indicators of distress includes: hatred, feeling of revenge, anger, hopelessness, dishearten and sadness (Mathney and Kolt, 2003, 729-730).

Distresses have severe effect in the person Physiological and Psychological health. Long-term distress can cause different kinds of illnesses (McEwen and Lasley, 2003, 3-4). Cardiovascular illness is the most common kind of illness caused by the distress. Other problems are such as: obesity and stroke. Distress also weakens the immune system of the person and causes illnesses like: autoimmune problems, allergies like asthma, cold and different infections (McEwen and Lasley, 2003, 3-4). The other Physiological illnesses related to distress are: Diabetes, colitis, chronic fatigue syndrome, fibromyalgia, eczema and ulcers. Distress is also related as the causing factor for different kinds of depressions like: Acute Depression and also with Chronic Depression (McEwen and Lasley, 2003, 3-4).

2.7 Stress at work

Stress is persistent in daily life, encircling internal and external features that affect our mental and physical health (Stranks, 2005). External stress factors are found in our physical surroundings they may encompass job settings, family situation, and other contexts. Internal stress factors on the other hand include an individual's physical and emotional well-being and their ability to cope with those external stressors (Rana and Upton, 2009).

The working environment is one of the main important sources of work stress. Job stress denotes when a person observes the work environment in a way that his abilities are not enough to deal with its demands (Reed, 2013). In other words individual's abilities are not sufficient to cope with demand placed on them. Stress at work can be caused by tight deadlines, lack of time, emotional pressures and anxieties within the working environment. It also often takes place in settings where there are low levels of control and support (Cox, Griffiths and Cox, 1996).

Nurses tend to experience workplace stress at higher degrees than many other professions. As a nurse we frequently witness the pain and sorrow of others (Stranks, 2005). Novice nurses lack more professional expertise than experienced nurse (Berman and Snyder, 2013, 19). This factor makes novice nurse more likely to have job stress than experienced nurse. In addition nurses are working under demanding and stressful conditions.

Nurses are responsible to promote health and wellness by providing wide ranges of services. They observe and record patients condition, coordinate with doctors and other healthcare professionals to create and evaluate modify care plans for different patients, provide emotional support to the patients and their families, diagnose patients disease by looking at their symptoms and taking required actions for their recovery, review and update patients reports of medical histories to observe changes in their condition, Provide prompt care during medical emergencies, prepare patients for examinations, educate patients and their families about the disease and its treatments, help doctors during surgery and keep eye on each and every aspect of patient care. All these responsibilities make the nurses key people for doctors and patients. (Cox, Griffiths and Cox, 1996; Sahraian, Davidi, Bazrafshan and Javadpour, 2013)

Nursing profession comes along with difficulties and many responsibilities. It is a very complex and challenging job that requires flexibility and vigilance. However despite having big responsibilities, nurse's authority to control their working role is very small (Paliadelis, 2008, 263). This can lead to

many disorders like: emotional distress, anger, depression, anxiety and physical health disorders (Thomas, 2009, 14-17). In addition nurses should deal with physical demands, technological advances, staffing shortages and management issues that cause more stress for them, and unfavorably affect their physical productivity. This eventually negatively affects the level of care provided to the patients.

2.8 Physical and psychosocial stresses in nursing and outcome

Even though some stressful situations are specific to some units in hospital, nurses in general, face more stress than other professions. Stress ascends from different sources such as physical or psychological aspects of the working place. Stress causes psychological problems that consequently lead to mental problems and in prolonged cases result in physical illness as well (Rana and Upton, 2009).

Stress can be defined as condition that is felt when facing a stressful situation such as work demands. This stressful situation can subsequently result to wide range of negative outcomes, such as employee's illness, an injury, or changes in his/her conduct and lifestyle (Dewe, Driscoll and Cooper, 2012). Physical Sources of stress and outcome day to day nursing is full of physical stressors, such as lifting and moving the patients, frequent bending, variable working shifts and long hours, noisy working environments, and night shifts (Stranks, 2005).

Many nurses come in contact with infection and toxic substances on a regular basis that put them at a greater risk for catching and spreading infectious diseases (Rana and Upton, 2009). Nurse's night-shifts are linked to many problems such as: cardiac problems and circadian rhythms, stress and depression, menstrual irregularities, drug abuse, etc. Night shifts are less well staffed in compare to day shifts. It means that there are less help available to perform some physically demanding tasks such as lifting, moving or receiving new patients. Moreover, at night shifts there are not enough experienced staffs available to turn to for advice and support. Thus, less staffing and high demands during night shifts lead to additional stress and anxiety for nurses (Reed, 2013).

Heavy workload, quite often compelled nurses to do some extra hour work in their regular shift. There is immense amount of time pressure in nursing work that makes nurses to cut their own lunch and coffee break time or have to postpone in sake of finishing the ongoing caring task (Selberg, 2013, 9). This effect brings frustration and exhaustion during and after the work to the nurses. The

nursing field is diverse, as nurses specialized on particular field through working experience or specializing education on that field. This makes nurses to be an expert on one specific field but may need some extra practice or knowledge to gain proficiency on other nursing fields. When a nurse is used to work in her particular caring field and have to do other nursing related tasks, then he or she might get panic and frustration. This phenomenon is known as Forced floating (Thomas, 2009, 7).

Verbal abuses like: shouting, insulting and discrimination by Physicians, Supervisor Nurse, colleagues in working environment make the victim nurse to feel humiliated, embarrassed, angry and depressed. This kind of encounter in work will create more tension among Nurses. (Thomas, 2009, 8-9). Sexual harassment is still present at nursing work although it is illegal by law. Nurses are experiencing the sexual harassment most commonly in the form of sexual remark, dirty jokes, physical touch and sometimes approach to engage in sexual relationship. Majority of such action goes unreported due to the distress, fear and discomfort of confronting the offender due to his/her hierarchy post and feeling of guilt of not recognizing the limit. The consequences of this kind of act usually bring anger, shame, discomfort and frustration to victim. Usually the victims of sexual harassment are female nurse but there are also male victims (Thomas, 2009, 10-11).

In nursing profession, there are many nurses who came from different countries, with different ethnic backgrounds who are working with nurses from native nation and culture (De Castro, Gee and Takeuchi, 2008, 551-552). Although, nursing profession required being culturally competent but unfortunately there is presence of work place discrimination in the form of racism, unfair treatment, and prejudicial stereotype behavior (Thomas, 2009, 12-13). This affects physical and mental wellbeing, ability to execute the good care to patient and influence overall job satisfaction (Baptiste, 2015). Nurses are very easy target if something goes wrong in caring procedure even the complete fault is done by some other health care professionals like: Surgeon, Physician, Radiography workers and Lab health workers. It arouses the bitterness, anger and cause more exhaustion in work (Thomas, 2009, 10-11).

Nurse faces different kinds of ethical and moral issues in their job. Not having enough resources, authority and knowledge to deal with those situations will lead them to suffer from the moral distress, which is the primary reason to cause burnout among nurses (Thomas, 2009, 18-19). Nursing workplace is challenging itself due to its nature, and will get even worse if nurses don't get support from the co-workers and supervisor nurse. Nurses need to have their supervisor understand the nursing problems and instead of just trying to make administration party happy, alleviate and ease the stress present at the nursing work (Thomas, 2009, 20).

2.9 Physical stress and negative effects of physical stress

It is a widely accepted notion that stress causes physical illness. Many physical illnesses and problems have been linked to stress such as: high blood pressure and acute coronary diseases, digestion problems, weight gain, menstrual problems, sleeping problems, memory and concentration difficulties, anxiety, depression, loss of sexual drive, infectious diseases and other physical problems (Reed, 2013; Rana and Upton, 2009; Buss, 2012; Harding, Backholer¹, Williams, Peeters, Cameron, Hare, Shaw and Magliano, 2013; Dorrian^I, Paterson^I, Dawson^I, Pincombe^I, Grech^I and Rogers, 2011) among others.

Nurses are at a greater risk for catching and spreading infectious diseases. Nurses are at higher risk for catching infection, because they give care to the patients who reached the most infectious stage of their disease with many symptoms, such as vomiting, coughing diarrhea, or bleeding. It means there is a greater chance for exposure. Nurses help the patients with their hygiene and perform other procedures such as respiratory intubation, kidney dialysis, etc., which place them at a greater risk of contact with bodily fluids (Rana and Upton, 2009).

2.10 High blood pressure and acute coronary diseases

Stressful situations can cause the blood pressure to rise temporarily. During the stressful situations, body produces surge of hormones that increase the blood pressure by causing the heart to beat faster and blood vessels to narrow. These short-term related stress rises in blood pressure, over a time may put a person at risk of developing long-standing high blood pressure (Reed, 2013; Stress Management Health Center, 2016).

Stress and high blood pressure damage heart arteries, and put a person at the risk of developing heart attack and heart failure. Constant exposure to stress raises the blood pressure, that's why it is not good for the body to be regularly exposed to stress hormones. Stress also changes the way blood clots, which makes a heart attack more possible. (Berman and Snyder, 2013, 1434)

Furthermore, some people drink more alcohol, use drug, smoke or eat more unhealthy foods in stressful situations, which increases the risk of high blood pressure, heart attack and stroke. Nurse's night shifts make them more prone to developing cardiovascular problems such as: heart attack, stroke and other coronary conditions. Night shift work also known to be a risk factor for

developing hypertension especially among those who are doing night shifts for long time than those who are doing day shifts (Reed, 2013). And as it was explained earlier hypertension is one of the main risk factors for developing cardiovascular disease.

Cavalheiro, Moura Junior and Lopes (2007), found that presence of stress related to nursing activities in intensive care units was positively related to cardiovascular symptoms among Brazilian nurses working in intensive care unit.

2.11 Stress and weight gain and obesity

Stress also affects the amount and type of food we are eating. When we are under stress it might be more difficult to eat healthy. We might eat more of bad or high calories (junk foods) to fulfill our emotional needs. For example we might instead of salad or apple eat chocolate or Pizza. This is because during the stress the level of cortisone hormone and insulin in our body increases, that causes our body to crave for fatty and sugary foods. Long-standing chronic stress boosts the hunger. We might even eat when we are not hungry (Creagan, 2016). It is what is called emotional or stress eating. Life perceived stress positively associated with weight gain.

Nursing work known to be stressful with different working shifts. Both factors (stress and working shifts) effect how and what foods nurses eat and increase their risk of weight gain and obesity (Buss, 2012; Harding, Backholer¹, Williams, Peeters, Cameron, Hare, Shaw and Magliano, 2013; Creagan, 2016; Block, Zaslavsky, Ding and Ayanian, 2009).

Stress from the shift work in nursing work is linked with the bad eating habit among the nurses which may lead to the weight gain and obesity. It is found that, stress make person to consume high-sugar food product. And High sugar food products are linked with the obesity and weight gain. The nursing shift work schedule and work load is associated with eating disorder and negative sleeping pattern among the nurses working in shift (Buss, 2012, 53-454).

During evening and at late night, digestive process is slowed down, therefore when this rhythm is interrupted when nurses eat during night shifts, their digestive system cannot digest the foods they eat properly and lead to weight gain (Reed, 2013). In addition nurses might prefer to eat junk foods or foods high in sugar to override the feeling of tiredness associated with night shift work. Junk foods and high sugar foods are cheaper and easier to access and consumed in compare to alternative healthy snacks. Consuming large amount of high sugar foods are also shown to cause many illnesses

like: type 2 diabetes, cardio vascular diseases, hyper lipidemia, hypertension, cancers and osteoarthritis.

Furthermore night shift workers don't get sufficient quality sleep that lead to tiredness and lack of energy to engage in physical activities and exercises. All these factors positively affect weight gain and obesity among nurses.

2.12 Stress and anxiety and depression

Too much prolonged stress can lead to major depression. Stress, whether chronic such as taking care of a patient with chronic disease, or acute, such as losing a job or the death of a family member or a loved one can causes major depression. Both types of stresses (chronic or acute) lead to the over activity of the body's stress- response mechanism and raising the stress hormone such as cortisol, elevation of the cortisol hormone causes the reduction of the serotonin, dopamine and other neurotransmitters and lead to depression. Serotonin, dopamine and neurotransmitters are required to control and normalize life natural processes such as sleeping, appetite, sex drive and manifestation of good moods and positive emotions. Chronic stress can lead to depression when the stress response is ineffective and stress is not shut off, even when distressing event is passed (Hall-Flavin, 2014; Martin, 2016).

Anxiety is a normal response to stress. However, extreme stress can be very harmful and can cause anxiety disorder. A person with anxiety disorder is very worries and reacts harshly to stressful situations or triggers. Anxiety disorder leads also to physically illness (how worrying affects the body, 2016).

The rate of depression and anxiety is high among nurses. Nurses are exposed to too much stress that affects their psychological status. Many studies (Khalid,Irfan, Sheikand Faisal, 2010; Cheung and Yip, 2015, and Abbas, Abu Zaid, Hussaein, Khaled, AlHamdan, and Bin Abdulaziz, 2013) among others, found that depression and anxiety were common conditions among nurses.

2.13 Stress and sleeping problem

Sleeping plays an important role in maintaining the balance of human psychosocial behavior. Stress about work, school, family issues, can keep our mind busy at night, making it difficult to fall to sleep. Too much stress can lead to high levels of stress hormone (cortical), and disrupt healthy sleeping patterns (Da Rocha1 and De Martino, 2010).

Stress can lead to job burnout and feeling of emotional exhaustion. Occupational stress was one of the main contributing factors leading to insomnia and short sleep (Utsugi, Saijo, Yoshioka, Horikawa, Sato, Gong and Kishi, 2005).

Stressed and busy people tend to get less sleep. High levels of stress, emotional exhaustion and low job satisfaction are common among the nurses. It is because nursing is a challenging and stressful profession that contains lots of responsibilities, night shifts, and sleep deficiency (DorrianI, PatersonI, DawsonI, PincombeI, GrechI and RogersII, 2011).

2.14 Stress and digestion

Stress can affect our digestive system, since our digestive tract is influenced by our emotions. Enteric nervous system controls our digestion. Enteric nervous system made of millions of cells that communicate directly to our central nervous system. When fight or flight response is activated in our central nervous system, digestion would be slowed down or shut down totally. During fight or flight episodes our central nervous system shuts down blood flow to our digestive tract that affects the contractions of our digestive muscles, and decreases secretions required for digestion. Stress also may cause inflammation of the bowel, and infection (Iliades, 2016).

Stress can lead to spasm in esophagus and increase in stomach acid that causes indigestion and worsens stomach ulcers or inflammatory bowel diseases. It also leads to other problems such as feeling of nausea, constipation and diarrhea, and other digestion problems. .

High perceived stress is considered a risk factor for GI symptoms. The frequency of psychosomatic illness is significantly high among nurses. GI symptoms are highly prevalent among nurses when stress is dominant (Kane, 2009; CavalheiroI, Faria, Junior and Lopes, 2008).

2.15 Stress and sexual drive

Sexual desire is affected by the interaction of many factors such as: physical well-being, emotional well-being, previous experiences, principles, lifestyle and current relationship. Problems in any of these areas can affect the sexual desire (Seliger, 2016).

Work stress can affect the sexual desire in this way that, when work demands are more than one person can handle it, affects their self-esteem and sexual drive. In this situation the person might

discard their sexual needs (Seliger, 2016). In addition mental health problems such as anxiety and depression can suppress sexual desire. As it was explained earlier, depression and anxiety are the end result of stress.

(Lee, Lung, Kao and Lanlee, 2012) found that stress had negative effects on nurse's sexual harmony. They concluded that in order to improve and maintain care giving quality, hospital officials should assist nurses in dealing with work stress by making positive adjustments that have positive effect on nurse's sexual accord and quality of life.

2.16 Stress and menstrual problems

Stress can affect female reproductive system as well. Stress can cause some women to miss their period or have irregular periods. Prolonged and chronic stress can stop menstrual period temporarily.

Stress can disrupt the function of hypothalamus that controls the pituitary gland, which in turn controls thyroid glands adrenal glands, and ovaries, that are responsible to control the hormones.

Ovarian problems can lead to other problems related to estrogen level that effect reproductive function and menstrual cycle (Winderlich, 2016).

Results of previous studies regarding effect of stress on menstrual problems in nursing context were somehow confronting. Some studies (Lin HT1, Lin LC and Shiao JS, 2007), found that stress was a factor causing some menstrual dysfunction among Taiwanese nurses. On the other hand (Moeni, Baste, Morken, Alsaker, Pallesen, and Bjorvatn, 2015) did not find any relationship between nursing job stress and irregular menstruation among Norwegian nurses.

2.17 Stress and memory and concentration problems

Stress is an inescapable consequence of modern life. Stress, especially chronic stress increases the stress hormone (cortical), that affects brain function, putting a person at the risk of many mental problems. Constant elevation of stress hormones not only makes our body sick, but also it harmfully impacts our brain (Alban, 2016).

Cortical affects the brain function and lead to some brain-related stress symptoms, such as memory problems, and concentration problems, and anxiety. Cortisone can shrink, and stop the creation of new neurons in the hippocampus of brain, that store the memories. Hippocampus is also important

for learning, memory, emotional harmony, and also shutting down the stress response after a stressful situation is over (Alban, 2016).

Nurses face higher job stress compared to other professions, and therefore have a high likelihood for cognitive failure, which puts patient safety at risk. Night shift works specially can adversely affect the nurse's health and the safety of the patients who rely on them, in both the short and long term by unfavorably affecting nurse's normal physiological rhythm (Reed, 2013).

Study of Mipark and Souk young (2013), on 279 nurses who worked for at least 6 months in five general hospitals in Korea showed that job stress, job instability and lack of job autonomy were significant factors causing nurses cognitive failure. Patient safety incidents also were affected by shift work, cognitive failure, and job stress. Kane,(2009) also found that Stress related to work deadlines, shortage of staff, conflict with patient relatives, and insufficient pay were the factors leading to psychosomatic disorders like acidity, back pain, stiffness in neck and shoulders, cognitive problem, anger, and worried among Indian nurses.

2.18 Psychological stress

As it was explained earlier stress ascends from two main sources: physical and psychological. Physical stressors found in the nurses working environment and lead to many physical illnesses and problems. On the other hand psychological stressors refer to stressful nurses working conditions or the way that tasks are designed that define the overall job characteristic. Psychological stressors can refer to: Management style, long working hours, interpersonal conflicts or relationship, poor reward system, job roles that relate to how tasks are designed, insufficient resources or shift works (Roberts,Grubb and Grosch, 2012).Psychological stressors mainly affect our mind. Excessive exposure to psychological stressors lead to many long terms or short term psychological problems among nurses such as: Depression and anxiety, angry outbursts and Irritability, Isolation, memory and Cognitive problems and burnout.

2.19 Stress and burn out

Burn out is the result of protracted exposure to chronic stress at work environment. In the long term, the extra pressure that is put on your body from stress can have very negative effects on both your physical and emotional wellbeing. Experiencing too much stress for a long period of time can cause burnout or the condition of total mental, physical, and emotional exhaustion (Jennings, 2008).

Burnout rate among nurses is very high this is due to the nature of their work. Nurses encounter different kinds of stresses during their work life. The common factors for these stresses are related to workload, few working staff, time pressure and nature of work itself. Stress is primary factor for burnout among nurses (Halbesleben, 2008, 2).

According to Schaufeli, Enzmann, Ladstätter and Garrosa, (2008) “Burnout is a persistent, negative, work-related state of mind in ‘normal’ individuals that is accompanied by its primary distress, a characterized sense of exhaustion, and reduced effectiveness, which decreases motivation, and develops dysfunctional attitudes and behaviors at work. This psychological condition develops gradually but may remain unnoticed for a long time by the individuals involved. It results from a misfit between intentions and real condition in the job environment. Often burnout is self-perpetuating because of inadequate coping strategies that are associated with the syndrome.”

Many studies explored the effect of work stress on burn out. For example, Study of Myhren, Ekeberg and Stokland, (2013) among nurses at three ICUs at Oslo University Hospital;Ullevål showed that, high burnout scores were correlated with vulnerable personality, low job satisfaction, and high degree of job stress. Lorenz, Benatti and Sabino, (2010) also found that Brazilian nurses were vulnerable to being affected by Burnout due to stress experienced in the hospital environment. In addition Okwaraji and Aguwa, (2014) found that, burn out was the result of psychological distress among the nurses in a Nigerian tertiary health institution.

Study of Klassen (2013) on 522 acute care registered nurses in British Columbia found that, psychological distress and emotional exhaustion were the main reasons of burnout and turnover among acute registered nurses. Emotional exhaustion was consistently predictive of both intent and likelihood of living the profession and the position. Emotionally exhausted nurses were two times more likely to have intent to leave the profession and 1.5 times more likely to do so.

Most of the studies concluded that work related stress is the most important in determining factor leading to burnout. Burnout clearly impacts on the mental health and wellbeing of nurses, which in turn compromise the productivity, performance and the quality of patient care.

3. Theoretical background

We use The Job Demands–Control (JDC) work design model and salutogenic paradigm as our theoretical background for this study.

3.1 The Job Demands–Control (JDC) work design

Theory of work design initiated by Karasek (1979), and then developed more by Karasek and Theorell (1990) (Dewe ,O’Driscoll and Cooper, 2012). This model recognizes two important aspects of work environments: job demand and job control. According to Karasek (1979) job demands are: the psychological stressors involved in achieving the workload, stressors related to unpredicted tasks, and stressors of job-related personal encounter, that can have an impact on stress levels (particularly psychological strain). Job control referred to as decision autonomy of working employees to control their tasks and their comporment during the working day (Landy and Conte, 2010, 467-470) (Zirwatul and Ibrahim, 2013).

Here it should be added that according to this model the demands by themselves are not the most important creators of strain experiences. The amount of strain people experience depends on whether or not they have control over the demands they have to deal with at their work. This interaction explained by Karasek (1979) as Demand x Control (discretion or will) on stress level.

If it is explained in another way, we can say that, control will moderate the effect of demands pressure on strain (Lund and Conte, 2010, 469-470). According to JDC model, the most adverse effect of psychological strain was found to be among employees working in high demands and low control jobs that also cause high strain job (Zirwatul and Ibrahim, 2013).

This model also suggests that, passive or active nature of a job can influence an employee’s learning or growth process. Active job employees are working in high demand jobs and have control in their work environment. These employees became very productive and are able to acquire new skills (Dewe Et al., 2012). On the other hand, passive job employees are categorized as employees who are working in low demand control jobs. These employees face difficulties solving problems and they are not motivated to participate in overall activities or acquire new skills (Rodrigues, Jesus bravo, peiro, and Schaufeli, 2001) .

3.2 Salutogenic paradigm

Salutogenic model was introduced in the late 1970s by Aaron Antonovsky, a medical sociologist interested in stress theory (Hanson, 2007, 115-116). In 1972 he was teaching physician at the faculty of medicine in the University of Negev. He emphasized the importance of looking at human beings in their particular situation and of bearing in mind that health contains of several dimensions. Alongside with his teaching, he developed the salutogenic model and conducted his research on the basis of connection between stress and ill-health (Friedman, 2007, 156). The construct of the word Salutogenesis derived from Latin *Salus* meaning (health) and Greek word of *genesis* meaning origins.

The origin of Antonovsky model is related to the study on the effect of menopause on 1150 Israeli women who had undergone very stressful life events, some of them had survived the concentration camps on Second World War (Hanson, 2007, 116). He discovered that some of the concentration camp prisoners adopted and coped well with the situation. This gave rise to the question of how some people despite terrible life experiences such as war, flight to another country or other life stressful events enjoy a better and happier life (Hanson, 2007, 116).

According to Antonovsky answering to this question can be formulated in terms of sense of coherence (SOC) (Consists three dimensions: compensability, manageability and meaningfulness) and general resistance resource GRRs, (money, self-esteem, intelligence social support and cultural capital) (Eriksson and Lindström, 2007). People with good SOC and GRRs at their disposal are better capable to deal with challenges of life and bear life stressful situations (Eriksson and Lindström, 2007).

4. Aim

The main aim of this study is to describe stress among nurses working in surgical care setting and elderly care setting.

In order to attain the specified aim the objectives will be:

- To identify the stress among nurses working in surgical care setting and elderly care setting.
- Define the possible work-related stressors and non-work related stressors contributing to stress.

5. Methodology

We had used qualitative method for the data collection methods, Qualitative methods includes a specific research for collecting data, for a target group of people. It includes how best we can obtain data, from whom we can obtain data, and it also tells us how long the data collection method will take (Polit and Beck 2008, 219). Qualitative methods generally aim to understand the experiences and attitudes of patients, the community or health care workers. These methods aim to answer questions about the what, how and why (Berman and Snyder, 2013, 31).

5.1 Data Material

To collect the data for this study we applied for permission to two responsible authorities one for Surgical Care and another for Elderly Care from Vaasa Central Hospital. We had begun our study based on the information gathered from two different units of Vaasa Central hospital, which were surgical care setting and elderly care setting. In Vaasa Central Hospital there were three different sectors in Surgical Care settings: Pre- operative polyclinic, Surgery theaters and Post- operative wards. Similarly, for elderly care setting there was intra-medicine ward. The main participants were nurses working on those clinical settings.

5.2 Data collection methods

The method for data collection used was semi-structured interview. Semi-structured interviews are more like an everyday conversation. Semi-structured interviews were mostly face-to-face interviews and we had done the same way to collect the data information (Polit and Beck 2008, 392). Semi-structured interview is preferable when the researcher has developed sufficient information about the setting and their topic of interest to have a clear plan for the discussion with the informant, but still remains open to having their understanding of the area of question open to change by respondents (Polit and Beck 2008, 392).

Semi-structured interviews are very useful method for developing an understanding to unspoken experience, and setting (McLeod, S.A, 2014). Semi-structured interviews permit researchers to focus on the response and allow researchers the opportunity to analysis their groundwork appreciative, while still allowing for sufficient opportunity for new ways of seeing and understanding to enlarge. Semi-structured interviews can be an important tool for development of more structured interview (Polit and Beck 2008, 392).

From nine nurses who participated in semi-structure interview, five nurses were working in surgical care setting and four nurses were working in elderly care setting. We had let them tell their story with little interpretation. We had asked those questions like Describe your experience, what happens when you know about that and then response to the situation and ask further question related to the answers provided by them (Polit and Beck 2008,393).

5.3 Data analysis method

We had analyzed our collected data by using content analysis approach to describe stress among nurse working in surgical care setting and elderly care setting (Polit and Beck 2008, 680- 684). Content analysis is a general set of techniques helpful for analyzing and understanding collections of text. Content analysis involves breaking down data into smaller units so it is easier to understand according to the content that are represented and grouping coded material based on shared concepts(Polit and Beck 2008, 517-518). In content analysis clustering is the important tools to elaborate and explain collected information. Clustering is based on the similarities among unit of analysis and hierarchies that conceptualize the text on different level of abstraction (Polit and Beck 2008, 518).

5.4 Ethical Consideration

The permission will be asked from the responsible authorities before conducting interview from the nurses working in surgical care setting and elderly care setting of Hospital. While conducting the interview, nursing code of ethics will be followed. The interview will be conducted to only those who are interested. They will be informed about the purpose of the study, its potential advantages and disadvantages. With the participant consent, the interview will be processed ahead. Participant nurses will be informed in advanced that they can walk out in the middle of the interview if they feel unwilling to participate although with their previous consent. Participant's human rights, right of privacy, right of respect, right of disclosure are maintained. Participants every data will be kept confidentially. The questions of the interview will be more topics centric rather than personal for maximizing to make finding of study more applicable and beneficial for Nursing Field. (Polit and Beck 2008, 170-174)

6. Results

In this part we present the results of our interviews. The results are presented based on different categories that were covered by different parts of interviews.

6.1 Work stress sources

Many nurses rated their job-related stress high. Nurses face with different work responsibilities and working conditions, understaffing and stress related situations. This stress is negative and should be minimized as much as possible. However there is another stress that is positive. It is like hurrying little bit that keeps nurses moving and is motivating and causes the nurses to think more and ultimately provide better treatment to the patients. This stress can be caused by a manageable tasks that ultimately makes the nurse feel proud when finishes them. This stress should not be mistaken with negative stress.

6.1.1 Lack of knowledge

Work-related stress can be caused by poor work knowledge and abilities and fear of unfamiliar situations, mistakes with patients and handling of technical equipment.

“When there is like one thing few times in a month, perhaps like there is something like if I don’t know what to do, then start building up little bit stress”

“Working in different setting within the setting is one of the stress factors, in the surgical setting there are anesthesia, instrument, scrub, pre-operative and post-operative if you are in one of them and have to change then they may be stress factor”

“I get stressed when I am all alone with the patient and there is no doctor if something happens to the patient.”

“When I started here, nose and throat surgery there was lot of stress to learn everything but after a year when I had worked here, I don’t have fear anymore.”

6.1.2 Work load and staff shortage

Nurses are expected to care for greater number of patients. Furthermore nursing shortage complicates the situation even more. This make nurses schedule busier and decreases their ability to manage and provide adequate care to the patients. High workload and nursing staff shortage places emotional/mental pressure on nurses. Too many patient, few staff, Night shift, unexpected patient and change in responsibility are among the main stressors.

“Sometimes I have many patients at the same time who have pain and sometimes low blood pressure for example and I have to do many things at the same time with many patients. . It is the main stress.”

“I have lots of things to do but the time is short and I have lots of responsibilities.”

“I don’t take stress I am that kind of person who take care of the other stress. Work overload is the main cause of other nurses’ stress.”

“I think, this time now we are living is more stressful than ever before. We are so few and we Nurses are responsible about many things. So, I don’t have time to do that and take care of that. I think we could have. There are people who want to come here but our bosses says we don’t need them due to money; we don’t have money but we have very big need. It makes our job stressful, it’s stupid.”

“We have so few nurses, that we don’t get time for food, can’t go for pee or coffee break.”

“Of course on the ward and sometimes you are having too much to do than you can. You have so many things to do that you feel stressful.”

6.2 Job demand

Nursing has long been considered as one of the most demanding and stressful jobs. Stress in nursing can be related to the physical labor, many responsibilities, taking care of emotional and physical need of many patients and families, etc.

6.2.1 Many patients

Taking care of many patients caused nursing to be one of the most demand full professions.

“Perhaps, too busy sometimes, that is stressful of course, now days we are getting more and more Patients who are sicker. “

“My job is sometimes demanding mainly at the day time, when I have many patients’ I can say that my job is demanding.”

6.2.2 Lots of responsibilities

Nurses have variety of tasks and responsibilities to take care of daily. Nursing is a very demanding profession. Nursing responsibilities demand the same things as doctor jobs do. Nurses have to take care of lots of responsibilities. They have to try to treat the sick patients, provide assistance and emotional support to patients and their families, take care of lots of paperwork and documentation.

“I think my job is demand full, I have given power to take decision and I know what I have to do which makes my job demand full.”

“I think my job is demand full. I do my job well and I have a lot to do.”

“My job is sometimes mentally demanding. But it is part of the job.”

“It is very demanding, like that you have to monitor many things during the surgery, and you must have the competence to decide things quicker every time. You have so many things to do that you feel stressful.”

6.3 Stress length

Stress in terms of length can be divided into short or long stress. Long term stress is more chronic and makes the person to think about them all the time Long term stressors effects the person in a long term and is also known as chronic stressor. They can also cause many physical problems. Short term stressors on the other hand are less severe than long term stressors but they can make enormous impact on the health condition depending how the person respond to the short term.

6.3.1 Short term stress

Short term stressors caused by everyday life events. Short term stressors are for example caused by pressure at work or other daily activities and responsibilities. Short term stressors can cause negative impact in day to day health conditions.

“I have short term stress absolutely. It might be one day in a month that you feel stress. I do not build up. “

“Short term stress and it is only really here. I don’t think about this when I am at home.”

“I really don’t have long term stress but work overload.”

“I have lots of things to do all the time, and I have lots of daily work to take care of.”

“Sudden change in responsibility is the short stress I face in the work and when unexpected patient comes for the surgery I got stresses which are related to my day to day work.”

“When we have to take the unplanned surgery and we don’t have enough time to read or collect information about the patient and day to day things causes short term stress.”

“May be just phone is ringing, alarm is calling, everybody coming and say can you help, can I get more painkiller and daily wok short term stress.”

6.3.2 Long term stress

Long term stressors (Job security, changes in job routine) are those which affect the person in the long term and are also known as chronic stressor. Long term stresses engages person's mind most of the time.

“Rotation system within the system like changing from pre-operative to anesthesia is long term stress for me.”

“Job security cause by the politics are causing a lot of stress to nurses who don't have permanent contract, it is causing a long term stress to them.”

“When there is some rumors for any changes happening in to the work place makes me worry a lot. I keep thinking about that.”

6.4 Control at work

Job control tends to moderate the effect of demands pressure and strain. Job demands are the psychological stressors involved in achieving the tasks, and stressors of job that have an impact on stress levels. Job control referred to decision autonomy of working employees to control their tasks and their comporment during the working day. The amount of control that nurses have on their jobs can affect the level of stress they experience. If it is explained in another way, we can say that, control will moderate the effect of demands pressure and strain.

6.4.1 Control on arranging the workload

Level of control that nurses have on arranging their daily tasks reduce the level of stress they experience. Control on arranging the workload can mean that they can for example; divide the work between them, in a way that is more suitable and more comfortable to them.

“Yes I have control. I can say that I cannot do this all alone. And I need help from colleagues or doctor. And we can arrange the work load that is easier. And I can say to my boss that it is not ok, so you have to something about it. And I can say that this control reduces my stress”.

“Yes I can say I have control. I can change patients if I need. I can change something at my work if I need to and that makes my work easier.”

“I have control over the work. I have the responsibility to make plan for others, so I think I have control over my work and I know what I have to do. I really don' have too much stress.”

“I don't think I have control over the rotation system. I feel more controlled. That gives me stress“

“I don’t think I have control over my job I think someone is controlling my job, others are planning where I have to work and it’s the part of work. That causes some stress.”

“I am able to control over my job. I got such kind of feeling that I can manage to do my job at work however when Small things happen in the whole process and we lose control we all get nervous.

6.4.2 Choosing shifts

Another aspect of having control over work is related to choosing working shifts. Nurses, who have the power to control their working shifts, can choose their shifts in a way that suits them better and is more comfortable to them.

“We can decide which shifts in the work we do. I like to do lots of night shifts. So I do quite a lot of them”

“I can change my shift if I need to. I have the opportunity to change something at my work if I need to.”

6.5 Workplace support

Workplace support is defined as the degree to which employees notice that their welfare is esteemed by workplace sources, such as colleagues and supervisors. Colleague support and supervisor support are both have significant effect on reducing job stress.

6.5.1 Colleagues support

Co-worker support plays an important role in reducing the bad effects of stress. Good relationship and support from the colleagues at work helps in the elimination of work related stress. Verbalize support of coworkers also shown to decreases the levels of stress and increase the job satisfaction.

“I have very good workmates and colleagues. I have many friends here, so we talk to each other about stress. I also can say that I have a quite good supervisor and manager.”

“I am getting enough support, from my colleagues if I need any. Helping each other makes our work much easier.”

“I have been getting good support from my colleagues. We always discuss about the any things with the colleagues so we can reduce every ones stress.”

“We have a lot of discussion about the stress factors and I am getting enough support from my colleagues. Communication among the nurses is the key factor to reduce stress.”

“The work we are doing is very important that you have someone there if you are like calling... and if there is something wrong They will come. If they don't co-operate I will get so much stress...oh yeah lot of stress!”

6.5.2 Supervisor support

Supervisor contribution, especially supervisor support, is important to the success of stress reduction. A good leader with high level of supervisor support makes the employees feel heard, appreciated, and cared about.

“I am getting enough support from my supervisors I speak up if I need any support. Helping each other and good planning makes our work much easier.”

“I can say that I have a quite good supervisor and manager. So I have a very good situation”

“I have been getting good support from my supervisor, when I start working in this ward they provide me a colleague to guide me. We can discuss about any things with supervisor so we can reduce every ones stress.”

“I am getting enough support from my supervisor. Supervisor is always ready to talk so it's really easy when you feel any stress you go and talk to supervisor.”

6.6 Stress consequences

It is a widely accepted notion that stress causes physical illness. Stress causes psychological problems that consequently lead to mental problems and in prolonged cases result in physical illness as well. It is a generally accepted notion that stress causes many physical and psychological illnesses and problems. Though there are people who can handle the stress very well and stress does not cause them any serious problem.

6.6.1 Physical problems

Many physical illnesses and problems have been linked to stress such as: high blood pressure, acute coronary diseases, digestion problems, weight gain, neck pain, leg pain, fatigue and other physical pain.

“When there are a lot to do and my job is desk job so I have to sit and work which gives me a neck pain.”

“I think I have legs pain.”

“I get neck pains & headache but no leg pains”

“I am tired sometimes.”

“Sometimes when I have night shift, my heartbeat goes faster, because I haven’t slept as I should.”

“In the orthopedic ward I have very much pain at my back because we have to lift very much and also, to neck and the shoulder. Of course, during the night shift you have the rhythmic disorder.”

6.6.2 Psychological problems

Psychological stressors mainly affect our mind. Excessive exposure to psychological stressors leads to many long terms or short-term psychological problems such as Sleeping disorder, Depression and anxiety, angry outbursts and Irritability, Isolation, memory and Cognitive problems and burnout.

“I am able to control over my job but in these two mornings I got such kind of feeling that I cannot manage to do my job at work, it feels even for me that it is over the limit.”

“Small things happen in the whole process and we lose control everyone is very nervous.”

“I am short-tempered!! I mean, I can’t hold for long time inside me what I have to say.

6.6.3 No problems with stress

Some people are more capable of handling stress and they are capable of living their stress at their work place and do not carry it with them home so stress does not harm them much.

“None, I have many friends here, so we can talk to each other or to my supervisor about stress, so stress stays here.”

“I don’t think I have any physical problems because of stress. “

“Stress didn’t create any physical problems for me. I feel well. I have another life at home.”

“I am quite healthy person so I don’t have any physical problem because of stress. I don’t take my work to my home.”

“No I don’t let my work affects my physical physiological wellbeing, social and personal relationships and Social relationship. I am leaving all my stress at my work I won’t take it to home.”

6.6.4 Stress and social relationship problem

Stress also can affect emotional well being of the person and ultimately cause relationship Problems.

“I am so tired because of that I can’t give enough time to my family; I don’t have enough energy to do my hobbies. It’s somehow effects to my personal life and social life”

“I am short-tempered, at the beginning of my working career. I was calmer. I got changed now. It results in both good and bad ways. I am one of them who says immediately something if someone has been mistreated but I am also one of them who says the truth if he or she doesn’t like. It may harm your friendship.”

“If something bad happens at work, and I go home and I am like yelling to everyone and sometime they feel bad due to that.”

6.7 Shift work

Variable working shifts and long hours, and night shifts are linked to many problems such as: cardiac problems and circadian rhythms, stress and depression, weight gain, sleeping problems, etc. Night shifts are less well staffed in compare to day shifts. It means that there are less help available to perform some demanding tasks such as moving or receiving new patients. This leads to additional stress and anxiety for nurses. Though for some people night shifts do not create any problems. Better pay is the main motivating factor to prefer night shifts or longer hours.

6.7.1 Night shift physical problems

The nursing shift work schedule and work load is associated with eating disorder and negative sleeping pattern among the nurses working in shifts. When nurses are eating during night shifts, their digestive system cannot digest the foods they eat properly and lead to weight gain. Another problem associated with night shifts is related to the sleeping problem. Since night shifts interferes with internal biological clock.

“I have gained too much weight in last three years I think, since I started doing more night shifts. Perhaps”

“I might gain some weight because of eating late sometime. I don’t eat regularly. I try to eat healthy, but it’s not so easy. Sometime I feel that I need something else when I have night shift.”

“Sometimes when I have night shift, my heartbeat goes faster, because I haven’t slept as I should.”

“Sometimes I get sleeping problems, but I don’t feel it’s like a problem.”

“Personally I don’t like night shift because it affect my sleeping pattern because you are meant to sleep at night not on day.

“Regular night shifts are really stressful, I tend to eat a lot during my night shift, I feel like eating candy all the time after my night shifts are over.”

“I feel low energy and my whole body is paining after the night shift.”

“I think it affects the sleeping pattern, in the day you could not sleep even you are tired and feel like sleeping. I think night shifts cause a lot of sleeping problems.”

“One of the reasons why I move from surgical ward to the day surgery was due to my health didn’t take it well from night shift. It gives me migraine; shoulder and neck pain, my stomach doesn’t feel after night shift. It gives me so much stress.”

“Shift work is stressful; you have no routine or system in your life. It is good working in morning shift and always have weekend free and you can sleep at the night.”

6.7.2 Night shift and social isolation

Nurses who do night shifts are more likely to feel socially isolated from their families and friends. It is sometimes more challenging for them to find the time to spend with their families and friends.

After night shift I am so tired because and I can’t give enough time to my family and friends. It affected my social life. ”

“When you are working night shifts and on weekends, your friend doesn’t know when they can call you and you don’t want to do anything when you have a free day and be alone if you give very much to the patient.”

7. Discussion

The main objective of this study was to find out various kinds of work related stresses and stressors of nurses working in surgical caring settings and elderly caring settings in Finnish health care. In this study, the surgical caring setting was comprised in three part pre-operative clinics, intra-surgical theater and post-operative ward. In other hand elderly care setting was considered primarily in intra-medicine ward. The purpose of writing this thesis was to identify several occupational distress and eustress of nurses working in different clinical settings. Focus was made on identifying physical, psychological, social effects on nurses caused by work distress and eustress. This study reviewed thoroughly how scientific literatures explain about occupational stress and its effects on well being of employee. The finding of this study supports the literatures and with Theoretical background.

As state in Job Demands-Control (JDC) model, employee is more likely to get adverse effect at work when the work demand is high but has very little control over work (Karasek, 1979; Zirwatul and Ibrahim, 2013). This study shows high demand of work, shortage of staff, lack of knowledge and lack of co-operation among other health professions are sources of job distress among the nurses that supports the JDC model. This study also suggests that the consequences of stress on human wellbeing depend upon many factors like: experience, control over workload and individual perception towards stresses.

The study also suggests that work demand for nurses increased significantly due to high number of critical ill patient (Pender, Murdaugh and Parsons, 2001, 194-198). The study also reflects the lack of information and lack of co-ordination between other staff subsided nurses control over their work environment (Thomas, 2009, 18-19).

The Nurses appear to have more stress when the responsibility of the patient came upon them solely rather than divided between health professional team (Thomas, 2009, 6-21). This study also reveals that nurse's job stresses depend upon the individual's level of perception about the stress and their working experience (Hurley, 2007, 17). It seems that nurses encounter more stress at the beginning of their career and gradually develop the coping strategy by accumulating more working experiences (Berman and Snyder, 2013, 19). Our study shows that control over work is more prominent into nurses who have more working experience. Usually, control over workload was seen less in novice nurse but increases subsequently in experience nurse. It is difficult to generalized one variable of job stress as bad stress or good stress for whole Nurses. It is quite common for a nurse to perceive the same variable of stress as eustress and other to feel as distress (Mathney and Kolt, 2003, 734-735).

The study shows the duration of stress among nurses is short term and long term (Rout and Rout, 2007, 17). Nurses appear to have more negative physical health effect mainly by short term stress and psychological and social effect primarily by long term stress. The main sources of short-term stress among nurses are work overload and shortage of staff (Pender, Murdaugh, Parsons, 2001, 198-199).

Similarly, the long-term stress is caused by work insecurity, sudden changes in organization's policies and working role that cause deterioration on mostly physiological wellbeing (Roberts, Grubb and Grosch, 2012). Surprisingly, many nurses seem to have developed good sense of coherence about their profession. So, when patients die or have complications in ward or during surgery, nurses have the conciseness to understand the situation as part of their job but nurses seem to get long terms tress if their own action was responsible for the patient's negative outcome (Eriksson and Lindström, 2007).

This study implies that control over work plays an important role in reducing the workload, which helps to minimize the stress (Lund and Conte, 2010, 469-470). This study also suggests that nurses who can choose their working shift have little work distress as it is easier for them to synchronize their personal life with work life but nurses who were unable to choose their own working schedule felt more distress like somebody is controlling over their work.

This study proves that nurses are more comfortable at their job, if they get strong support from their colleague and from head nurse (Thomas, 2009, 20). It also suggests that head nurse support was needed for nurses to avoid long-term distress and to promote the eustress at their job. However, colleague support cannot be denied for its role to cope with long-term distress and particularly dealing with day-to-day stress. This study shows that colleague support and head nurse support plays very important role for nurses to have control over their job demand.

This study shows that nurse got many physical and psychological health problems due to stress caused by shift work, which can lead to high blood pressure, acute coronary disease, digestive problem, weight gain and many physical pains and psychological challenges like sleeping disorder, depression, anxiety, mood swing, irritability, isolation, short memory, several cognitive disorders and burnout (McEwen and Lasley, 2003, 3-4). In this study, it shows that nurses who did lot of night shifts were more prone to suffer from physical and psychological health problems than who did regular shifts (Reed, 2013).

8. Limitation and Scope

The data used in this study was collected from limited number of nurses working in Vaasa Central Hospital in Finland. The finding from this study may not be completely reliable as the study was based from the interviews, which may contain random bias opinion of the interviewers. This kind of random bias is inevitable and cause little affect over quality of data (Polit and Beck, 2012, 197). And also, the misinterpretation of data may occur as the interviews was conducted mostly in English and Finnish but the participants of the interview have two languages as mother tongue: Finnish and Swedish, while we have neither English, Finnish and Swedish languages as our mother tongue which may possess the risk of errors (Polit and Beck, 2012, 195-196).

The time frame for conducting this study was a bit short, so it may have affect on the quality of finding of the study. Longer timeframe could have improved the quality of result of this study. This study was conducted in a Vaasa Central Hospital, so the finding from this study may be bit different if conducted outside of Finland due to different hospital setting and work environment different than in Finland.

To ensure the trustworthiness of this study, Lincoln and Guba's Framework (1985) was applied during the study of thesis. According to Lincoln and Guba's Framework (1985) trustworthiness has four elements: Credibility, Dependability, Conformability, and Transferability. Reliability of this study was assured by using data from multiple scientific literatures as the reference for the study and also, analyzing the data of study altogether by all three researchers to avoid possible bias influence in the finding of study (Polit and Beck 2012, 539-540). This study is applicable for developing the coping mechanism and organization policies to deduce the occupational stress among the nurses in various caring settings. The surgical care and elderly care are crucial settings in the health care system. From this study we can prevent the major stress factors and promote the good stresses at work in the respective nursing settings.

9. Conclusion

Our findings for this study display that, high work demand, shortage of staff, lack of knowledge and lack of co-operation among health professionals are main sources of job stress among the nurses working in surgical caring settings and elderly caring settings in Vaasa central hospital.

Work demand increases when there are more critically ill patients and when there are shortage of staff. In this situation nurses have to take care of many patients and they have more responsibilities. Work load and shortage of staff were the main causes of short-term stress among nurses. On the other hand, long-term stress was caused mainly by work insecurity, sudden changes in organization's policies and working role. Nurses experienced negative physical health effects as the result of short term stress and psychological and social effects as the result of long term stress.

Our findings suggest that control over work plays an important role in reducing the amount of stress. Control over work can be related to nurse's ability to organize their work in a way that is more suitable to them or the possibility to choose their working shifts. So they can harmonize their personal life with their working life.

Surprisingly many nurses also encountered positive stress in their working environment, which attributes in control over their work and promotes their well-being. In addition we found that support from colleagues and supervisors have an important role in reducing the amount of stress related to work demand and avoid long-term stress. In the future, further research can be done using more diverse and broad data to assess stress factors in several nursing work settings.

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