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Mental Disorder „Depression“
Causes of Depression in
Health Sector „Nurses“

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Psychische Störung „Depression“
Ursachen der Depression in den Gesundheitssektor „Krankenpflege“

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Abstract

Purpose: This study addresses issues of occupational mental health among nurses. Factors such as linking role, work and social factors, stress, burnout, depression, absenteeism and the intention of turnover, guides the research. The purpose of this research paper therefore looks forward to answer the question “How to measure the extent at which nurses experience symptoms or risk of depression through various factors such as individual or demographic factors, emotional exhaustion and stressful working situations?”

Design: Data were collected from 9 nurses working for major hospitals located in Germany, Baden-Württemberg (Mannheim and Heidelberg), Bremen, Ukraine and Ghana.

Methods: The design and method utilized in the qualitative and quantitative research methods is a survey, which consists of a questionnaire and biographical Interviews. Questionnaire was used to collect data, which included demographic and job characteristics, job-related stress, emotional labor, and depressive symptoms The PHQ-9, serves to measure the depressive symptoms of the participants and serves as an instrument to back up the Interviews conducted. The questionnaire was evaluated with the SPSS version 21.0. Descriptive statistics, correlations, and frequency were used to analyze and evaluate the data.

Results: The study found out that all the participants who took part in this survey are depressed ranging from minimal to moderate depression. The questionnaire detected
approximately 20% of the participants being minimal depressed, 40%, mild depressed and 30% moderate depressed. The composed questions targeted on factors like Occupational Stress and Work strain with factors as well as recognition and appreciation from patients and organization. 77, 80% admitted, they have no recognition and appreciation from colleagues and patients. 44,40% turned out to be very stressed up with their daily work routine and the other 55,60% finds it only stressful .100% turned out to find Labor disturbances as a stress factor. All the participants are not pleased with their salary which leads to Job dissatisfaction.

**Conclusion:** The results show that it is necessary to implement programs for nurses to help reduce job-related stress, Preventive and suitable methods should be considered to reduce mental strain before depression manifest itself.

**Clinical Relevance:** Introducing programs that may help nurses and its organization is the work of Human resource management in nursing organization. Nursing administrators have to understand that, the rate at which nurses have to work and deal with other stressful situations might cause them to suffer depressive symptoms. In other to help this situation, they can aspire to enhance stressful work conditions, develop programs that subdue job related stress and minimize the expectations of depressive symptoms.
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<td>IPP</td>
<td>Institut für Public Health und Pflegeforschung</td>
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<tr>
<td>NIMP</td>
<td>Non Investigation Medical Product</td>
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<td>RNs</td>
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<td>MDD</td>
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<td>PFC</td>
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<td>NSWHN</td>
<td>The National Survey of Work and Health of Nurses</td>
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<td>TSH</td>
<td>Thyroid Stimulating Hormone</td>
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<td>ACTH</td>
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Summary

In this paper „causes of depression in the health sector “focusing mainly on nurses” shall in the first place provide an overview of the current research state of Depression. In addition, definition and theory shall be supplied to the important concepts and basic approaches of the topic as well as the process of acquiring depression as a nurse and its symptomatology.

Here after there will be a deepening account of the research state of depression in the health sector as well as a Literature review on relevant concepts and terms and also some facts about depression.

Moreover in connection with this term “Depression” there will be enlightenment to the biological depression mechanisms and also the stressors of depression in nursing will be examined.

In reverence to the sighting and evaluation of the used literature, acquisition of questionnaire and guided interviews, there will be an illustration of depression in relation to research question.

Lastly, there will be a personal statement on the research topic to enlighten the initial thoughts and the outcome of the research.
1 Issues surrounding Depression in nursing

Depression is a worldwide disease that does not need to be underestimated. It is one of the most common mental disorders that we have today. 18% of all Germans contract Depression once in their lifetime (Lang, 2011, p. 7). The discussion on this topic is generally very up to date and known. The current discussion in Germany about nurses includes nursing shortage, other health related conditions, defective material and little merit that they acquire. These characteristics can serve us a long-term factor in contracting depression. Nurses serve as the largest occupational group in every hospital. In Australia, nurses are the largest employee and make over two-third of the workforce (Iedema & Sorensen, 2008, p. 37). This profession is an interactive work which is traditionally concerned about the health of other people but from the Interview carried out in this research paper it was clear that, this has become a physically and psychologically burden for many nurses of today than before.

Problems like Burnout, illness and high fluctuation have been noticed for a long time in the health care sector, likewise the related absenteeism and the poor image of the nursing profession. The demographic alterations have gained a significant role and attention. This has therefore been one of the discussed topics lately in the society. The central demands of work today are mainly how quick, how economical and better everything should be without considering the psychological strain that comes with it.

Evidence from Institute for Public Health and Nursing Research¹ (2010) at the University of Bremen confirms in their study that aspiring nurses are already burdened health wise even during their training. It looked as if so many have stress related problems. 45 percent complained of headache, more than a third suffer from sleep disorders, 26 percent complained about lower abdominal and stomach pain (Ärzte Zeitung, 2010). In reference to the Study of “Institute for Public Research and Care”, if nursing trainees are already high stress burdened then the burden will even increased after many years of work.

Also, after listening to some nurses carefully, it was clear that some of the problems nurses face are for example, working more hours and also under time pressure with a little income and less recognition in the society confirms the various study conducted with nurses. The following study is expected to measure these problems. It was noticed

¹ Institute für Public Health und Pflegeforschung (IPP)
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during the Interview conducted in this study that, many seem to have already lost their energy and interest at work.

The current issue about nurses and their work is serving as a setting for this present study to find out if their work can be a cause to suffer depression. It is going to therefore examine the manifestations of Depression in the nursing personnel and the coherences between the stressful job situations. The elusive phenomenon of this profound word “Depression” in association with Depression is a mental disorder that each and every one of us might personally encounter or witness through a friend or close relative (Hunter, 2013). During the past decade, there have being some improved research on Depression.

In the past years numerous studies have been conducted and range of reports have been made of the account for explaining the cause and cure as well as the medical and non-medical treatment of depression. The requirement of understanding depression has actuated many scientists in different disciplines like psychiatrist, psychoanalyst, cognitive behavioral therapist, geneticists and social psychologists to research more. The arising problem is that although they all call themselves experts in their fields, they are all inexperienced with this disorder. Also there are still problems as related to the information transfer between the interdisciplinary who work together (Deserno & Heinrich Deserno, 2005, p. 11).

Recently, a clinical research was conducted on the serum level of brain derived neurotropic factor in major depressive disorder: “state- trait, clinical featured and the pharmacological treatments” (M L Molendijk1, 2010, pp. 1088-1095).

Furthermore, six prominent scientists—Aaron Beck, Richard Davidson, Fritz Henn, Steven Maier, Helen Mayberg, and Martin Seligman have met to discuss the current state of scientific knowledge on depression and the major aim of their meeting was to have a deepening view of which roles neurobiological and psychopathological plays in this type of health disorder. The themes which were addressed were “a) the relevance of learned helplessness as a basic process involved in the development of depression; (b) the limitations of our current taxonomy of psychological disorders; (c) the need to work toward a psychobiological process-based taxonomy; and (d) the clinical implications of implementing such a process-based taxonomy” (Forgeard, Henn, & Marie J. C. Forgeard, 2011, pp. 275-299).

There has been a current research on “Anxiety, depression and stress in Pregnancy”.

The study revolves around the implication for mothers, children, research and practice. The research findings states that mental disorder search as anxiety, depression and stress set as a setting for a poor growth of the embryo during pregnancy and the over-
all health of the mother remains at stake (Schetter, Tanner, Tanner, Dunkel Schetter, & Tanner, 2012, pp. 141-148). According to the current knowledge on the incurrence and therapy prospects of depression, it is states that a general overview of this disorder needs to be considered to be able to understand the pathogenesis and the overall intricacy of the disorder (Lang, 2011, p. 15).

1.1 Literature Review

Depression is a mental disorder that each and every one of us might personally encounter or witness through a friend or a close relative (Hunter, 2013). During the past decade, there have been some improved researches on Depression.

In the past years numerous studies have been conducted and quite a number of reports have been published with emphases on the causes and the cure, as well as the medical and non-medical treatment of depression. The requirement of understanding depression has actuated many scientists in different disciplines like psychiatrist, psychoanalyst, cognitive behavioral therapist, geneticists and social psychologists to research more. The arising problem is that although they all call themselves experts in their fields, they are all inexperienced with this disorder. Also there are still problems as related to the information transfer between the interdisciplinary who work together (Deserno & Heinrich Deserno, 2005, p. 11).

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all health of the mother remains at stake. (Schetter, Tanner, Tanner, Dunkel Schetter, & Tanner, 2012, pp. 141-148) According to the current knowledge on the incurrence and therapy prospects of depression, it states that a general overview of this disorder needs to be considered to be able to understand the pathogenesis and the overall intricacy of the disorder. (Lang, 2011, p. 15)

1.1.1 Definition and Facts

On the basics of scientific findings, Moragne defines depression as follows:

"Depression is a cluster of signs and symptoms that last a long time and affects a person’s everyday functioning. Clinical depression is depression that is serious enough to require the doctor’s care. It is a mood disorder caused by a combination of genetic, biological, psychological, and environmental factors. It affects the mind and the body, impacting thoughts, feelings, behavior, and physical condition" (Moragne 2011, p. 16).

Depression is considered as one of the major health problems we have today. The World Health Organization, 1997 has made it clear in their epidemiology research that depression will be the second most common cause of disability worldwide (Lynne, 2009, p. 1).

However, Lynne supported his study with (DH, 2004) and describes depression as follows: “it is an emotional state that causes its sufferers to experience negative feelings about their self-image” (Lynne, 2009, p. 3).

Lynne again cited from (Burns, 2004), (Burns, 2003) that “the person can become mentally sluggish which causes apathy and lack of interest in life generally”.

It comes along with a primary disorder- disturbed feeling or accompanied with variety of disorders like psychiatric or medical disorder. Depression is a major cause of unhappiness and suicide in most age groups (Frank L., 1993, p. 128).

Depression has been classified under the description of “melancholia”. The work of Beck reveals that Hippocrates in the fourth century B.C made the first description of melancholia.

Becks, mention and Aretaeus, a physician living in the second century, A.D., to have described melancholic patient as "sad, dismayed, sleepless. They become thin by their agitation and loss of refreshing sleep. In the more advance stage, they complain of a thousand futilities and desire death".
Reference to Beck reveals that, Pinel at the beginning of the nineteenth century describes melancholia as follows: “The symptoms generally comprehended by the term melancholia are taciturnity, a thoughtful pensive air, gloomy suspicious, and a love of solitude, those traits indeed, appear to distinguish the characters of some men otherwise in good health, and frequently in prosperous circumstances. Nothing, however, can be more hideous than the figure of melancholic brooding over his imaginary misfortunes. If more over processed of power and endow with a perverse disposition and a sanguinary heart, the image is rendered still more repulsive” (Beck, 1970, p. 5).

Beck backed added that since ancient times, there has been variety of opinions and disagreements to the description of depression. Despite the disagreements in the description, there are also some writers who have agreed on most of the characteristics. The centerpiece sign and symptom such as low moods, disruptive behavior, social problems, alcohol and drug use, pessimism, self-criticism, turmoil and retardation appear to have been generally accepted. Another crucial signs and symptoms of the depressive syndrome are autonomic symptom, constipation, difficulty in concentrating, slow thinking and anxiety (Beck, 1970, p. 12).

Similar to stress, which is a preliminary stage of depression, it is important in the incurrence therefore on how one is able to evaluate his or her situation and how to cope with a focused problem at hand. Stress response occurs only when the coping strategies are subjectively estimated to be low and if the requirement for the existing problem approaching is over one’s personal experience and limitations then it will be and evaluated as threatening and scaring (Heaton-Harris, 2008, p. 14).

Heaton-Harris stated some facts in her work that:

- “Anyone of any age can suffer with depression
- More women than men are affected
- One in five adults will suffer with depression in their lifetime
- Every year, doctors diagnose two million new cases in the UK alone
- On average, each GP in the UK will see one depressive patient a day

---

2 Heaton-Harris (cited from „ The British medical Association Family Doctor to Depression” by Dr. Kwame McKenzie (2000, Dorling Kindersley)
• Depression can be treated effectively

• It is not a weakness of the mind

• Rates of depression have increased over last few decades

• Stress is greatly related to depression

Another study also indicates:

“One in five women and one in ten men get depression serious enough to require treatment”.

(DH, 2004) Lynne cited that women are more susceptible in attaining depression than men (Lynne, 2009, p. 2).

One can debate on why women are recorded to be more susceptible to depression, it’s because women are more inclined to report their symptoms to their doctor than men and more often talk about their emotion than men (Lynne, 2009, p. 2).

1.1.2 Relevant Concept and Terms

It is very essential to avoid inconsistencies during a research on depression illness and greater amount of consistency could be served to the conceptual terms search as remission, recovery, relapse and recurrence (Ellen Frank, et al., 1991).

An Author made a sharp outline in his work that in course and prognosis of depression there are large inter-personal variability, which many studies have also confirmed. In countenance of this, variability sections of a depressive episode have been proposed. During the course of depression, some important terms such as “Remission, Recovery, relapse and recurrence” is been explained as follows:

“Remission” is defined as a condition or a short time range of (complete or partial) improvement in depressive symptoms: “Recovery” is a complete remission over a longer stretch of time (depending on the criterion after 2-6 months), referencing the current depressive Episode: “relapse” is the recurrence of depressive symptoms during remission before recovery is achieved and thus the current depressive episode has been completed;” relapse” is the occurrence of a major depressive episode after recovery (full recovery, which implies that the diagnostic criteria of acute depression has been achieved. Recurrence is the occurrence of depressive episode after recovery (full re-
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covery), which implies that the diagnostic criteria of acute depression are fulfilled (Hautzinger, 2010, p. 12).

During the therapeutic interventions, some important terms have been highlighted and explained as follows:

“Acute Therapy is the symptom reduction during the depression episode”.

“Maintenance therapy takes place at and during remission to prevent relapses” and “Prophylactic therapy is the prevention of relapse and new depressive episodes” (Hautzinger, 2010, p. 13).

Terms being evaluated during the onset of this disorder at certain parameters are: “number of phases, phase duration, phase intensity, during and extent of the symptom-free interval, cycle length (thus the distance from one phase to the other) and the volume and duration state during an examination index. It is problematic to separate the occurrence of uni- and bipolar of processes because one is not sure whether the manic episode will take place later. The probability that a manic episode will emerge at 3 accumulated unipolar depressive episodes is 10 to 30% (Hautzinger, 2010, p. 13).

**Number of Phases:** Bipolar patients experience approximately 7-8 episodes in about 30 years while unipolar patients experience about 4 to 5 episodes.

**Phase Duration:** The phase duration of the unipolar depressive episode is 5 to 6 months. The phase duration is quite stable and predictable for patients who do not experience the eventuation of chronicity.

**Phase Intensity:** This is the duration and volume of the complaint-free Interval

**Cycle length:** This is the interval between a depressive episode and depressive-free phase, thus the distance from one phase to the other which lies in median periodically during the process of unipolar ailments at 4.5 to 5 years. The circle length of a depressive episode is apparently shorter with fewer symptoms during a higher chronological age (Hautzinger, 2010, p. 13).
2 Depression

2.1 Types of Depression

To be able to give a proper treatment generally in every aspect of disease, it is very essential to know the most diverse and major types of the disease one has. In the case of Depression, is categorized in milder and severe types. The milder depression might only retort to counseling or a change of lifestyle, starting with eating well- balance diet, enough sleep and exercise might be required. The severe types might need counseling, a change of lifestyle and maybe combination of different therapies.

Again, Author categories the types into major also clinical or unipolar, minor (dysthymia) and Bipolar disorder. To each type there is approved set of symptoms (Paolucci, 2007, p. 5).

Unipolar depression is split into major and minor or dysthymia depression.

2.2 Major depression disorder (MDD)

MDD also called clinical depression is diagnosed if the person feels sadness and has at least five of the symptoms of depression for at least two weeks. The major depressive disorder is characterized by sever depressive episode, which persist for normally eight to twelve weeks. The work of Cremer states that this is said to be the most serious version of the depression and 50% percent of the affected people suffer regression after treatment.

2.2.1 Minor depression

Minor depression also called dysthymia, is the minor version of the major depression. One experience similar symptoms like the major depression only on a lower level and at least last for two years.

2.2.2 Bipolar depression

Bipolar depression is the combination of the two other types, minor and major depression. The person who suffers this type of depression has switch of moods, long lasting high mood and sudden low mood. This type is not as common as the other two depressions but can be sever like the other types (Paolucci, 2007, p. 6).
Heaton-Harris figured out that there are different types of depression related to mothers. With all the many symptoms only postnatal depression can be categorized because it is related to one same event in a person's life that is “the birth of a child”. He added that, it doesn’t happen only after the birth of a baby but it can also happen before the birth of the baby (Heaton-Harris, 2008, p. 25).

The three main forms of depression that is associated with time after childbirth is firstly “baby blues”.

### 2.3 Depression in association with childbirth

#### 2.3.1 Baby blues

Baby blues is the type of depression the mother gets approximately three days after the child’s birth, exactly the time the hormones produces the milk the child is going to feed on. It is caused by the dramatic fall of the hormones estrogen and progesterone. This stage is actually a low mood than a serious depression. Any woman suffering from this depression needs support from her partner if she has one or from family members in helping and taking care of the newborn baby (Heaton-Harris, 2008, pp. 28-34).

Referring to the work of Hilton Harris, the second form of depression related to childbirth is the post-natal depression.

#### 2.3.2 Post-natal depression

Post-natal depression happens because mothers get scared, thinking that they could not have been perfectly bonded to their child or thinking that they have missed the early birth stage of their child.

Besides the woman feels left alone after the early stages of giving birth. She feels she has too many responsibilities but has no help. She is probably bleeding still n feels drained out, she gets too worried and her anxiety rises. She gets more irritated after every comment made about her or her baby. She feels sometimes that she isn’t a good mother. These factors serve as a risk for getting post-natal depression (Heaton-Harris, 2008, pp. 28-34).
2.3.3 Severe post-natal depression or puerperal psychosis

This type of depression is experienced two weeks after the birth of a baby. Mostly this depression is accompanied with hallucinations and delusions. The mother believes that there is something seriously wrong with them or their child. The child’s life becomes at stake since the mothers stand the risk of killing their baby (Heaton-Harris, 2008, p. 34).

2.4 Subtypes of clinical depression

It is important to consider the subtypes of depression due to treatment approaches.

Here are some of the subtypes of depression with its clinical symptoms and treatment approaches:

Melancholic is associated with “Non-reactive mood state or anorexia which is more often and severe”. The affected person suffers from distinct quality of depressed mood, worsening of mood especially in the mornings and marked psychomotor changes. It manifests itself through anorexia or weight loss, excessive or inappropriate guilt. The patient associated with these symptoms is likely to respond to biological interventions.

The second Episode specifier comes with atypical features and its cause could be traced from the person’s childhood as to be able to sort out the chronic cause to find out if there was a traumatic incident or history behind the disorder. It comes along with “Oversleeping, increased appetite and weight gain, lead paralysis, and interpersonal rejection sensitivity”.

A person experiencing Psychotic depression is variously characterized by hallucinations or delusions and it’s treated with Antidepressant and atypical antipsychotic agent.

As to the “Catatonic features” the presence of catatonic characterizes itself by elective mutism, rigidity, waxy flexibility and psychomotor excitation. Grievous catatonic responds to “injectable lorazepam or antipsychotic agents”. Electroconvulsive therapy should be the clinical treatment to this subtype of depression. Antipsychotic agent could be considered in treating this disorder.

Seasonal depression: Seasonal pattern is also one of the subtypes. It manifests its self during winter that subsides during summer. To the therapy, bright light or antidepressant is required. Symptoms like oversleeping; overeating with carbohydrate can result in weight gain.
Depression

Post-partum onset: The depressive occurrence is within four weeks postpartum and it’s treated with pharmacotherapy, breastfeeding issues should be considered.

Rapid cycling: This is the frequent or very recurrence of manic-depressive und mixed depressive episodes. Almost four of the episodes of mania/ hypomania and depression occur in a year. It can be treated with Lithium or anticonvulsants where by Lithium appears to be less efficient (Andreas Marneros, 2005, pp. 20,24).

2.5 Causes of Depression

Due to the frequency and the rate at which depression is becoming the widespread disease in the world, there have been several research and various study made on this affliction to increase the knowledge on the causes and risk in the areas such as the biological psychological as well as the social area has greatly increased.

It should be understood that depression could occur in many ways. Versatile inspection is recommended in diagnosing the causes of depression since not only one factor can lead to or cause this disorder. Many studies and researcher have contemplated over the years over the various causes of this disorder. Depression has no one cause like other mental illness and if it had maybe a more better and efficient treatment could have been made than it’s been done presently.

To simplify the causes of Depression Clare & Milligan (2008) grouped them under physical, psychological and social causes.

It is very known that the cause of depression has many factors, genetics or non-genetics factors. Nestler et al in (Sander et al., 1999 and Fava and Kendler 2000) agrees that ‘an Epidemiological study has proven that perhaps 40% to 50% have the risk of getting depression’ through genetics (Zhao, 2008, p. 2). The author stated the probability of extracting depression through genes stand the same level as other severe medical disorders. Researchers haven’t been able to detect the exact gene that causes depression as it is interpreted that not only one gene is responsible for the disorder but rather many possible gens contribute to it (Zhao, 2008, p. 2). Again the author adds that it’s possible that the gene that causes depression in one family might not be the same gene that will cause depression in another family, which continue to complicate the search for depression as gens being the cause.

Non-genetic factors search as Nestler in (Akiskal 2000 and Fava and Kendler 2000) “stress and emotional trauma, viral infections (e.g. Borna virus), and even stochastic (or random) process during brain development have been implicated in the etiology of depression” (Zhao, 2008, p. 2).
Generally it is very tedious to adjust to change, when it comes to the uncomfortable changes in life. Related to the causes of depression, losing a love one, having a relationship breakdown, financial worries, having stressful occurrence in a person’s life and also abusive experience in childhood can stir up depression (D.S Chaney, 2002).

### 2.6 Symptoms of Depression

There many symptoms that people often experience when depressed manifest itself in physical symptoms such as “fatigue, dizziness, stomach and chest pain, muscle aches, and headaches. 69% of patient under primary care with major depression mostly have these physical symptoms at the initial stage. Somatic symptoms are predominating with depression or anxieties that occur during old age. Decreased in libido, erectile and difficulties having orgasm are symptoms related to depression or anxiety.

Negative cognition such as hopelessness, counting negative event and derecognizing the positive ones, pessimism, low self-esteem and low confidant are noticeable during depression (Paolucci, 2007, p. 166).

Symptoms of depression can be categorized into cognitive/emotional and vegetative. The cognitive/ emotional symptoms are:

“Low mood, loss of interest or enjoyment, trouble concentration, feelings of guilt or self-blame, thoughts of death and suicide and the vegetative symptoms are fatigue, psychomotor changes, disturbances of sleep and appetite/ weight”.

Further depressive-vegetative symptoms are “circulation regulation disorders; blood pressure fluctuations with nausea, bowel complaints, flatulence, diarrhea or constipations; failure of the bladder painful and frequent urinary urgency, gastric pressure” (Grabenstedt, 1998/2008, p. 56). (The study in this book listed other vegetative symptoms that could frequently occur such as frequent muscle tension in shoulder- arm region, back and neck pain and agonizing diffuse joint and muscle pain, disorders of the skin and mucous membrane (Grabenstedt, 1998/2008, p. 56).

The symptoms that are more common in dysthymia are difficulty in concentrating and feeling of guilt (Baade, 2007, p. 11).

Extended research has generally categorized the severance of the depressive episodes in mild, moderate and severe degree as well as in Major or additional symptoms (Baade, 2008).
Depression

The general or major symptoms are: Depressed mood, loss of interest and pleasure and increased fatigability.

The additional symptoms are: Decreased concentration and attention, decreased self-esteem and self-confidence, feelings of guilt and worthlessness, negative and pessimistic perspectives and thoughts of suicide/ suicidal acts, insomnia and decreased appetite (Niebling(Hrsg.), 2007, p. 7).

2.7 Diagnosis of Depression

Diagnosing depression used to be a challenging process for a general Practitioner to deal with. It used to be that all mood disorders were categorized in one group but now it is categorized in many groups and types such as major, minor, dysthymia or mild chronic depression, seasonal affective disorder or bipolar disorder (manic depression) or some other type of clinical depression to determine the kind of depression the patient has.

Depressive disorder are often not timely detected because on one hand the patient encounter somatic complaints first before the depression steps in and on the other hand because of the uncertainty about diagnostic criteria (Medknow Publications on behalf of Indian Journal of Medical Sciences Trust, 2005, pp. 217-225).

The classification systems of ICD-10 respectively DSM-IV, depressive disorder is placed psychopathological syndromes within the diagnostic category as “affective disorders” (F3) with “mania” and “severe depression” together as the two poles of the entire spectrum (Niebling(Hrsg.), 2007, p. 8).

They classify depressive disorders purely descriptive on the basis of symptomatology, severity, duration, and frequency of recurrence of disappeared disease phases. In Europe, the ICD-10 system of diagnosing depression is mainly used and known. ICD-10 explains “depressive episodes” as when over a period of time, at least two weeks there are at least two main symptoms and two supplementary symptoms present. See fig.1

A depressive episode of the ICD-10 essentially corresponds to the “major depression” as known in the American system as DSM-IV.

The symptoms mainly attached to a depressive episode are generally related to a change of mood, affectivity and the level of general involvement in activities. The main symptoms include: a depressed mood, anhedonia and avolition, increased in fatigability. These three main depression symptoms are accompanied by some additional grievances such as reduction of concentration and attention, diminished self-esteem
and self-confidence, sense of guilt and worthlessness, negative and pessimistic future prospects, suicidal thoughts or actions, insomnia and decreased appetite.

In the ICD-10, depressive syndromes are further on differentiated in severity level, somatic or psychotic symptoms and process (monophasic, recurrent / chronic, bipolar).

Categorizing the symptoms and types of the syndromes is very important because it plays a very major role in therapy and certain treatment measures.

Severity of depression is diagnosed with the following criteria:

When two of the main symptoms and two of the additional symptom (see Fig. 1) are detected, then a mild depressive episode should be diagnosed. (F32.0)

When three or four supplementary symptoms are detected, this means that the person has a moderate depressive episode (F32.1)

When the entire three main symptoms and more than four supplementary symptoms are detected, then a severe depressive episode is to be diagnosed. (F32.2 resp. F32.3)

The model addresses that a slight or moderate depressive episode can also be encoded with (F32.00 resp. F32.11) or without (F32.01 resp. F32.10) somatic symptoms. In severe depressive disorder, no additional ICD-10 coding is assigned because the somatic symptoms exist already and it will be considered at the initial stage of the diagnosis.

The study again indicates that, a severe depression accompanied by psychotic symptoms per se hallucination is coded with F32.3. The process at which the depressive episode takes place is individually very different. Monophasic (F32xx) and recurrent (F33) are the two type of processes that occurs in depressive disorder.

The study advances our understanding that a bipolar affective disorder (F31xx) is diagnosed when the occurrence of depressive episodes in connection with hypomanic, manic, or mixed affective phase, is involved in the context with the depressive mood. Furthermore the study states, chronic depressive disorder which has lasted for about (> two years), whose symptom doesn’t satisfy at least the criteria for mild depressive episode, the term dysthymia (F34.1) is used. The study eventually names a second depressive episode occurrence an in addition to the dysthymia a “double Depression” accordingly (Niebling (Hrsg.), 2007, pp. 7-9). Nursing will also be explored (Ärzte Zeitung, 2010). See Appendix 1
2.8 Treatments of Depression

Treatment of depression is aimed at stabilizing the patient’s sudden mood change. The sufferer should be supported by positive thoughts and quick action should be taken in treating this affliction. For a successful treatment to be undertaken, a combination of managing and monitoring setting lifestyle of the affected person, psychotherapy and the use of drug is needed.

2.9 Non-Drug Therapy Forms

2.9.1 Psychological Therapy

Psycho education and cognitive therapy play a very special role in the psychotherapy. Patients are informed about their own ailment and ways to deal with it as well as noticing certain triggers and the ways to prevent them. The problem that bipolar depressive patient has is always asking “Why” but the psychotherapy disputes “Here and Now” and assist the sufferer to overcome the why thoughts and concentrate on the present situation (Rosa Geislinger, 2005, p. 25).

2.9.2 Managing depression by change of lifestyle

Mental disorder is interpreted by the brain as infection and so the brain communicates for example to keep out of people or remain isolated but in this case the opposite is needed. A social connection between the sufferer and his environment is highly recommended.

The sick person is bounded to change setting lifestyles and involve in meaningful activities that can help in recovering this ailment. Anti-depressive medication should serve as a second step in the recovering process. It accelerates the recovery process or could be relied on if the medication is not successful.

Technology usage has one way or the other contributed to mental disorder that is called cyber sickness. People do not engage themselves no more than before in activities that involve others, which has led to isolation, insomnia-symptom of depression, insecurity, stress, anxiety and a lot more.

An opinion paper has discussed about anti depressive medication and the risk of depression by reviewing the possible factors that can contribute to depression at hand before any clinical exploration is accomplished.
Some of the various factors that the study discusses are as follows:

2.9.3 Diet

Over the years, some studies have demonstrated that poor diet for example dairy intake of sugary and fatty foods set as a high risk of initiating depression. In addition, the study mentioned that poor and quality dietary patterns could trigger depressed moods and anxiety. The writer supports his facts by referring to the Whitehall II study of middle-aged in Britain who works in the office with a number of 3486 participants in five years. The study provided evidence, which confirms the development of depression through unhealthy and western dietary patterns. The outcome of the study confirms that there was a reduced risk for those eating a whole foods diet pattern. Another study surveys on adolescents in Australian aged 11-18 compared to the British study about their mental health in association with poor dietary patterns as well observed a poorer psychological functioning (Sarris, 2014, p. 5).

2.9.4 Physical Activity and Exercise

The amount of exercises received has decreased most especially in the adolescent. More time is been spent on the Internet and play station instead of engaging in activities like spending time with family and friends. Inappropriate physical activity leads to health problems like obesity, which is currently affecting the whole world. Prospective studies have further provided support for the predictive role of inadequate physical activity in the development of mental disorder. The author added that the effects of physical activities on mental health as compared to another similar study confirms that a regular physical activity in childhood is associated with a reduced risk of developing depression in adulthood (Sarris, 2014, p. 7).

The true effect of exercise does not only show the improvement of mental disorder but rather it is generally a mood elevator and reduced the risk of developing other mental and physical health problems. Moreover, exercising is very economical and very beneficial to the overall health state of an individual such as increase in self-effectiveness and self-esteem which are some of the problems depressive patient face. As referred to the study from Cochrane review 2009, based on a research of support for the use of exercise involving 1858 attendants, it is confirmed that exercise does not only enhance the innermost wellbeing but it also enhances the physical appearance of a person (Sarris, 2014, p. 7) (Berk M, 2013, p. 40).
2.9.5 Mindful meditation

Mindful meditation is a varied concept which is defined as the perception which occurs through: “Paying attention in a particular way: on purpose, in the present moment, and non-judgmentally”. Additionally meditating regularly has been proved by multiple studies to have influence on biological changes such as: “alterations in gray matter morphology, increased cortical thickness in prefrontal cortex (PFC) and right anterior insula, increased oxygenated hemoglobin in the anterior PFC and elevation in whole blood serotonin (5-HT)”. Other studies such, as “Electroencephalography (EGG) has proven increased in alpha and theta activity during meditation”. It is still not clear which type of meditation is recommended for depression (Sarris, 2014, p. 8).

2.9.6 Sleep

Physical health and affective disorders cause by lack of good sleep associated with the main disturbances in "circadian rhythm is counted as one of the symptoms of depression. Lack of sleep or difficulties falling asleep has a higher risk of major depressive order. A study in the Nederland has confirmed this hypothesis, which disclosed that “people with a current and depressive disorder, or remittent depression had a significant association with sleep disturbances”. An exploration by Merrill and colleagues’ lifestyle changing program which involved 2624 participants revealed that increased in physical activity, healthy diet, reduction of caffeine intake was associated with improved sleep (Sarris, 2014, p. 10).

2.9.7 Management of recreational substances (alcohol, cigarettes, caffeine)

Alcohol abuse and drug abuse is generally accepted to be one way of developing mental disorder. The specific mechanism of the associations is still unclear. Abusive alcohol use increases the monoamines and reduces neuronal glutamate at the withdrawal stage. Anxiety may be provoked at the amount of glutamate been released from the synapse in combination with deregulated monoamine and neuroendocrine pathways. Epidemiological study has confirmed two-three increased lifetime risk for depressive and anxiety disorder in association with the use of alcohol (Sarris, 2014, p. 9).

Smoking cigarettes increase the risk of developing affective and anxiety disorders, which appear to be a crucial factor that contributes to the development of depression. Smoking accentuates inflammation and cause oxidative stress as depression, which can be seen as having inflammatory component (Sarris, 2014, p. 9).
The psychoactive substance Caffeine is used in many cultures as cognitive and mood lifter as well as increased attention and alertness.

It is mostly recommended to overcome depression by avoiding the use of caffeine from the intake of coffee due to the dysregulation of the adenosine system in depression. The angiogenic potential of caffeine, which is influenced by polymorphism of the A2A receptor, modulates the adenosine system (Sarris, 2014, p. 9).

2.9.8 Social interaction

Positive social environment, intimate relationships, supportive family and friends, all influence the mental and general health of a person; most especially the psychological health of an individual. Study has confirmed the associations of negative experience with friends, family and partners to have a great influence on developing depression (Sarris, 2014, p. 11).

2.9.9 Recreation and relaxation

Keeping a lifestyle of balancing work and stress is very important in maintaining a healthy wellbeing. A Recreation activity always provides the chance of interacting socially with others and distracts from problems and worries that one may be facing. A prior study has confirmed the improvement of mental health and wellbeing in connection with the benefits of recreational activities. A study of varying methodological has supported this prediction, that listening to music is a better way to enjoy better mental health and reduce stress and depression symptom. Another study also reviewed in a research of 17 studies that listening to music for a period of time helps reduce depressive symptoms in adults but no music type was clearly mentioned (Sarris, 2014, p. 11).

Extent research lifts relaxation techniques to the techniques that have an influence on one’s mental health and the overall wellbeing. Techniques like “progressive muscle relaxation, relaxation imagery and autogenic training” were found to reduce the depressive symptom of an individual. Another study offers a descriptive account of the reduction self-reported depression in conjunction with relaxation procedures.

2.9.10 Animal and pet therapy

Animal assisted therapy is one of the therapies to improve a depressed mood of a person. The relationship between a pet and human being could turn to be extraordinary that some people feel some kind of love and affection, which could lift a depressed mood by giving the person a source of responsibility and a reason to live. Animal’s use
in this therapy may involve horses (equine therapy), and dogs and also interactions with mammals like dolphins is said to reduce the state of anxiety and depressive moods with psychiatric sufferer. A limited study made on 21 elderly inpatient affected by “dementia, depression and psychosis” indicates a convenient effect of the “pet therapy” to have impact on depressive moods and a higher quality of life was noticeable (Sarris, 2014, p. 13).

2.10 Alternate non-drug therapy

Non-medical therapies are another form of treatment of depression. A series of non-drug can be used to support the medical treatments of depression. These forms of therapies have their functioning properties like that of the combination with a medical treatment to get more efficient results in treating depression or to get fast and effective results.

Previous study by Geislinger and Grunze (2005) has described some non-medical depressive treatments as follows:

2.10.1 Electroconvulsive therapy (ECT)

The electroconvulsive therapy does not have a good public reputation but it’s presently one of the most effective treatment methods to demonstration of major depressive but also manic and psychotic illness episodes. This therapy is been recommended for patients with self-homicide risk and severe symptomatology of mental depressive episodes. In this case two electrodes are sparked a twenty to forty seconds continuous seizure which stops by itself and will draw stimulation to the nervous system.

The electroconvulsive therapy is performed under a short-term anesthesia; the treatment is painless because of the general anesthesia. During this treatment, important neurotransmitter such as dopamine or serotonin is released to stabilize the mood of the patient. This therapy is used in the acute treatment or in rare cases for relapse preventive methods of depression (Rosa Geislinger, 2005, p. 24).

2.10.2 Transcranial Magnetic Stimulation (TMS)

The transcranial Magnetic Stimulation (TMS) has been confirms as insufficient in treating bipolar disorder but said to be very effective in treating unipolar depression. Using some magnetic field will stimulate the affected areas of the brain during depressive disorders. It is performed in awaken state and its qualified to be harmless and without adverse reactions (Rosa Geislinger, 2005, p. 25).
2.10.3 Monitoring therapy

The monitoring therapy is the kind of therapy where a depression sufferer is been kept awake to observe the night the hormone cortisol will be released. Cortisol can be life-threatening for sensitive people and depressive trigger but has the ability to stabilize depression as well.

The hormones are released in the second half of the night while the patient sleeps. It is therefore very important to keep watch and therefore the patient will be kept awake in the night to observe the vulnerable phase of the night (Rosa Geislinger, 2005, p. 25).

Several studies have confirmed how effective this therapy is. It is therefore combined with a mood stabilizer during the acute stage of depression (Rosa Geislinger, 2005, p. 25).

2.10.4 Psychological Therapy

Psycho education and cognitive therapy play a very special role in the psychotherapy. Patients are informed about their own ailment and ways to deal with it as well as noticing certain triggers and the ways to prevent them. The problem that bipolar depressive patient has is always asking “Why” but the psychotherapy disputes “Here and Now” and assist the sufferer to overcome the why thoughts and concentrate on the present situation (Rosa Geislinger, 2005, p. 25).

2.11 Medical treatment

Depressed Patient may also be treated with a drug that works directly on the psycho. Since the drug works instantly against the depressive disorders, they are also called antidepressant agents. The intervention of medication is used when the mood stabilizers by acute treatment or mania is not very efficient. The four main medical agents used in the treatment of depression is categorized in neuroleptic agents especially in mania, antidepressant agent for depression, together with hypnotic agents (sleeping pills) and sedatives (tranquilizers,) (Rosa Geislinger, 2005, p. 24).
3 Work and health of nurses

Nurses are caregivers for outpatients and stationed patients at the hospital. They attentively observe the state of health of patients in order to detect changes early on. They also perform medical treatments under the instructions of a doctor. In addition to that, they prepare patients for diagnostic, therapies and assist by operations. Moreover, they take on tasks in the basic care for example help incapable patient with food intake and body care. Aside from that, they document organizational and administrative task and health measures. The duty of a nurse is mainly “to promote health, prevent diseases and restore health” (Kiran Macha, 2012, p. 2).

It requires that nurses work in shift, which is part of the daily routines in clinics. The work of a nurse is very physically very demanding. Patients need to be re-interred, beds need to be made, etc.

Nurses mainly work in hospitals, in specialized practices, in health centers, in nursing homes and elderly residences, in residential homes for disabled people and social services. They visit out patients and engage mostly in the patient rooms of hospital wards.

It is very essential for a nurse to have a high sense of responsibility. They have to work carefully and accurately and error free, for example in the dosage of medications. They must have the ability to quickly take decisions even in difficult and hectic situations. Above all empathy is required in order to respond to the fears and needs of sick people and their families (Joyce J. Fitzpatrick, 2012, p. 9).

3.1 Physical and mental health implication of the nurse profession

Nurses have a busy schedule at work, they must immediately attend to patients when the need arises therefore this profession is to be among the physically and mentally stressful occupations. Nurses are mostly all day on their feet but most still have a friendly and encouraging word for patients and their families. They always appear to be very nice and ready to help at any time. Everybody might have encountered a nurse in his or her life. The main places where they are mostly seen are in clinics and hospitals (Yao, 2008, p. 28).

The Interactive element of the nurse job is enormously demanding too, they frequently have to deal with people from different backgrounds, attend to doctors and patients and also the needs of families of to the sick person. The responsibility to attend to every patient and being of help to everyone can be demanding and exhausting. This profes-
sion and the mental stress involved are not to be underestimated. They are confronted with patients who died out of medical limitations. It is pretty difficult to deal with patients who are seriously ill everyday and are not going to survive their illness.

The psychological strain is mostly higher for nurses who work in relevant specialist hospitals. Nurse is of course a beautiful profession; one get to meet different kinds of people and gain experience each day but it is a difficult profession that deserves respect and attention.

To access the use of Alexandros H., 2009 study, psychological Stress at work could serve as a double risk of Type 2 Diabetes in Middle- Ages Women. Further information to this research is required to confirm the declaration (MErgs, June 1996, pp. 1238-1246).

Not forgetting the back pain disorder among nursing staffs due to the poorer mastering, approach and no long-term techniques in handling patients for example “bed to chair”, or transfer techniques like “stoop versus squat” (MErgs, June 1996, pp. 1238-1246).

Extensive research has been conducted on the role of stress among nurses. The Authors Gupta, Palas R. Sen, CFAI Journal of Organization Behavior revealed in 2008 that “The role of an individual worker in an organization (or system) has two-fold aspects: ‘Role Demand’ and ‘Role Performance’. ‘Role Demand’ determines exactly the role of a worker in a system or organization and ‘Role Performance’ is the fulfillment of a demand met by a worker in an organization. The study suggested that if these two roles are not in balance, stress could be the implication, even though it can’t be totally prevented. It expressively states that stress occurs when the personal expectation of a worker spats with that of the organization. A reference related research by ICFAI made on “stress and coping in organizational roles in different types of organizational role and work setting” includes the following (Srivastav, 2006, pp. 127-136):


Executives/General Employees of Public and Private Sectors—Singh (1987),


Police, Fire and Ambulance Officers – Brough Paula (2004);

Female Cashew Workers – Chirayath (2006).

These relevant studies make clear that stress is a popular agent organizational or interactive workers have to deal with on a daily basis.

As a matter of fact “Stress” can be a trailblazer for depression. Potential studies have provided further support to this prediction.

Rödiger confirms in her book that a stressful environment is set as a risk to get depression and provides a simplified schematic in her study which shows that stress contribute to depression (Rödiger, 2006, p. 8).

Another field of research states clear that stress has a linkage to depression and explains that:

“Stress causes a disruption in the organism’s normal homeostatic processes, and the effects of chronic stress cumulatively results in wear and tear on both body and results”.

Furthermore, the study adds that stress contributes to most of the burden of the environmental contribution factors of major depression (Baum, 2001, p. 344).

From the above study, it is clear that, the common disorders among nurses in association with their job include: Burnout and stress, depression, diabetes, low back pain, musculoskeletal disorders and posttraumatic stress disorder.

Research state of Depression in the Health Care Sector

The health sector includes all companies that are involved in provision of health care goods and services. These include biotechnology companies, health insurance providers, pharmaceutical companies as well as companies that manage clinics and hospitals. Not forgetting companies that provide professional and home health products like orthopedic devices, surgical supplies, blood-pressure monitors and Elastoplasts (Answers, 2011).

Nurses who are so devoted in their work and always looking happy and ready to help others can also need help sometimes. When a nurse suffers from depression, it can affect both the efficiency of her job as well as her patient.
A study involving work-related depression in the Caribbean with 119 nurses observed that Burnout is a major precursor of depression, which leads to non-attendance and absenteeism at work. A questionnaire was used in this particular survey.

The data collected from the participants were analyzed with a descriptive statistic, correlations, and path analysis (Baba VV1, 1999, pp. 163-9).

A further study in 2013 was conducted on job-related stress, emotional, and depressive symptoms among Korean nurses. This study was purposely made to examine the relationship between job related stress, emotional labor, and depressive symptoms among South Korean nurses. The motive of this study was to propose preventive and suitable methods to reduce mental strain for their nursing organization (Yoon & Kim, 2013). A Data of 441 nurses who took part in this survey were employed in five general hospitals in four provinces of Korea. The data collected was from a self-reported questionnaire which involve demographic and job characteristics and among them depressive symptom. The evaluation method used to analyze this study was a descriptive statistics, chi-squared testing and multivariate logistic regression. The study found out that roughly 38% of South Korean nurses experience depressive symptoms and that young and single nurses have high levels of depressive symptoms. Another strong related symptom found was in marital status nurses. The outcome of the study makes the human resource management aware that nurses can also suffer from depression (Yoon & Kim, 2013) Stressful working conditions should be improved to make work as stress free as possible (Albrecht, 2014).

A Prospective research of job strain and coronary heart (CHD) disease in US women has been conducted on nurses. The motive of this study was to analyze the connection between job strain and CHD in US female nurses. 35038 participants aged 46-71 were involved in this study. The participant’s answered questions about job strain in 1992 and in 1996. In 1992 the participants were not diagnosed of CHD, stroke, and cancer but in 1996 study, an occurrence of CHD has been noticed. Even though there was a change in the follow-up study, it was not clear if job strain really contributed to the incidence of CHD due to other factors, which can contribute to CHD (Lee & Sunmin Lee, 2002, pp. 147-1153).

Again, a study involving psychosocial stress at work and type 2 diabetes conducted by the American Diabetes Association in 2009 investigated that psychological work stress was a discrete evidence of type 2 diabetes among women after a follow-up after 15-years. The study noted that more evidence is needed to support the research and that further relevant information and factors are needed in strengthening the hypothesis (Heradides, 2009).
Furthermore, an issue of a journal in 2007 (Volume 104, Issue 1-3) provides a prospective study made among dentists in association with job- strain, burnout and depression. The motive of the study was to investigate burnout impacts and any connection between job strain and depressive symptoms.

In this study, two surveys were performed among one occupational group. Under the participants were 71% of Finnish dentist and 3 years after of the second survey 84% with the sum of 2555 dentist were chastened by. Two Inventory measurements were taken, at first the Maslach Burnout Inventory was used and secondly for the depressive symptoms the Beck Depression Inventory was chosen.

The research detected that those who were suffering from burnout but had no depressive symptoms during the first survey, 23% had a symptom of depression after the second survey. It was observed that those who had depressive symptom at the initial stage of the survey, 63% turned out to have burnout later on. The study constituted a high likelihood of a connection between burnout and depressive symptoms and also noted that job strain appears to be an ultimate trigger for burnout as well as depression respectively (Ahola, 2007, pp. 103-110).

### 3.2 Other Studies

The research state of depression in health sector seems to be very current. Among other research found on this topic are as follows:


H Brodaty, B Draper, LF Low: Nursing home staff attitudes towards residents with dementia: Strain and satisfaction with work: Nursing research: Volume 44, Issue 6, pages 583-590 (2003)


3.3 Discussion on burnout and depression

3.3.1 Definition of Burnout

Väth explains the meaning of Burnout as follows:

*Burnout means: “I cannot! I cannot do what I think I should do”.* (Väth, 2011, p. 11)

Lanz in Burisch (1994) describes burnout as a state, which is characterized by depression, Exhaustion, hopelessness and lack of motivation, which can occur in any profession (Lanz, 2010, p. 57).

Hillert & Marwitz 2006 defines the burnout characteristics as follows:

1) Emotional exhaustion refers to “the feeling of overwork, exhaustion, frustration, and fear of the next working day”

2) Depersonalization is a “distant, negative, impersonal heartless or cynical attitude towards clients, patients or pupils, and

3) Reduced efficiency is when “the sufferers experience is significantly diminished in their professional capacity, in terms of attention, concentration and sustainability” (Marwitz, 2006, p. 13).

Fieger (2011) in (Bradley 1969.S. 366) described Burnout at first as “Manager Disease” and created the impression that this is a new onset phenomenon. Already in 1911, an article reported about a disease called “Neurasthenia” (Nervous debility) which was mainly noticeable in teachers with symptoms such as headache, fatigue, reduced performance and dejection. This same symptomatology can be noted also in burnout. (Fiege, 2011, pp. 3,4)

The term Burnout was once mentioned in the 1930s in Merriam-Webster’s Dictionary but was associated with professional sportsmen and artists. Fieger (2011) referenced
(Paine 1982, p.12) work and stated that in the 1960s this was the first time burnout was described as a psychological phenomenon which was connected to helper professions (Fiege, 2011, pp. 3,4). Meanwhile Burnout is seen and found in all occupations managers, nurses, athletes, musicians, secretaries, unemployed; rescue personal, social workers, teachers, bankers, medical practitioners, physiotherapist, etc. can all acquire burnout. Burnout is used in everyday life as a synonym for general fatigue, loss of strength, alienation, self-estrangement and bitterness. It is a vogue expression, which is mostly used, in pseudo- scientific-media. It is mostly used wrongly e.g. anyone who is stressed up is referred to as “burned out” (Rossi, 2006).

### 3.3.2 Historical background

The term “burnout” had a scientific uniformed meaning after the researcher J. Freudenberger coined the term in 1974 after he himself had experienced burnout by his work. He also incidentally discovered the symptoms often with therapists in drug clinics. Since 1976 Freudenberger and particularly Christiana Maslach and Ayala Pines in California have also reported on burnout, which was associated with other social professions.

From many discussions and professional studies of C. Maslach with affected persons, she came across topics, which seemed to be particularly important like emotional exhaustion and fatigue, the multitude of negative feelings as well as perceptions towards their patients and doubt of their own profession competence. The term burnout, was scientifically accepted after she published her first work on burnout and in support of Freudenbergers work, the term was scientifically accepted (Rossi, 2006). Burnout and depression has a scientifically proven connection with each other. If there is a difference between these two terms, what could they consist of? Burnout is mostly associated in a range of personal and professional life. People who suffer from burn out still engage in social activities such as meeting up with friends. In the early stages of burnout, the sufferer can still have phases he can engage in activities without any problems at all, whereas depression always affects the feelings and mood and prevents the sufferer to function in every aspect of their lives (Norman, 2013, p. 101).

### 3.3.3 Manifestation

The manifestation of both disorders has similar ways, either with the chronic depression or the depressive symptoms but has completely different causes.

Depression is the outcome of several life events such as which the in loss of a love one. It specifies itself through dejection, weakness and grief, which are similar to the
third phase of the burnout process where the sufferer experience depressive symptoms (Diamond, 2011, p. 58). See Fig.2

Another differentiator between depression and burnout is that the person suffering from burnout tries to fight back his lost motivation or even try to regain his energy back. This does not seem to be the case with depressed people. They look for peace and relieve from their suffering rather than look out for motivation or fight back their energy. They tend to give up rather than to fight. (Charles Donald Spielberger, 1991) Burnout is mostly not detected at an early stage and many patients are treated for depression rather than for burnout, because burnout and depression share numerous symptoms, which complicate the distinction between these two ailments (Giroux, 2007, p. 20).
4 Stressors

4.1 Stressors in nursing

Cash (2006) cited from Goldberger and Breznitz (1993) in his work by grouping stressors in two main groups, “common and extreme stressors”. He defines common stressors as “stimuli that is commonly experienced by many people. Traffic jams and job stress are good examples” whereas extreme stressor is defined as “stimuli that happens relatively rarely and extremely powerful and intense, such as war or catastrophic illness”. Natural disasters and non-natural disaster can deprive us of our basic needs as such as food and shelter as well as our physical safety and threaten our existence of living and can lead to a severe clinical stress reactions (Cash, 2006, p. 20).

Stressors are all factors, requirements, perceptions, behavior prompts, feelings, situations and information, which cause vegetative stress reaction. Stress is found in every profession but certain external factors such as heat, noise and time pressure play their own role on an individual and combating or acting on the stressor is left for the individual to decide. More focus will be placed on the kind of stressors that occurs at the working place of nurses. In their prospective study for further support on their research “Arbeit in der Interaktion - Interaktion als Arbeit: Arbeitsorganisation und Interaktionsarbeit in der Dienstleistung”, they collected job specific burden aspects in the range of health sector that puts burden on health personnel. They outlined the different work-load characteristics, which is associated in working as a nurse. In the following table comparisons between sick nursing and geriatric care is highlighted.

<table>
<thead>
<tr>
<th>Factors</th>
<th>Sick-nursing</th>
<th>Geriatric nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupancy</td>
<td>3.72</td>
<td>2.60</td>
</tr>
<tr>
<td>Uncertain Information</td>
<td>2.76</td>
<td>2.63</td>
</tr>
<tr>
<td>Turnover/absenteeism</td>
<td>2.65</td>
<td>2.93</td>
</tr>
<tr>
<td>Social stressors</td>
<td>2.38</td>
<td>2.38</td>
</tr>
<tr>
<td>Overwork: patients</td>
<td>2.63</td>
<td>2.84</td>
</tr>
<tr>
<td>Overwork: work environment</td>
<td>3.18</td>
<td>2.72</td>
</tr>
<tr>
<td>Time pressure: non-specific</td>
<td>3.38</td>
<td>3.39</td>
</tr>
</tbody>
</table>
### Table 1: Workloads in different fields of nursing

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Field 1</th>
<th>Field 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time pressure: specific</td>
<td>2.85</td>
<td>2.58</td>
</tr>
<tr>
<td>Conflicting objectives</td>
<td>2.85</td>
<td>2.73</td>
</tr>
<tr>
<td>Learning disabilities</td>
<td>2.51</td>
<td>2.57</td>
</tr>
<tr>
<td>Informational impediments</td>
<td>2.61</td>
<td>2.46</td>
</tr>
<tr>
<td>Motor/motorized complications</td>
<td>3.12</td>
<td>2.43</td>
</tr>
<tr>
<td>Interruptions: people</td>
<td>3.54</td>
<td>3.06</td>
</tr>
<tr>
<td>Interruptions: malfunction</td>
<td>2.44</td>
<td>2.20</td>
</tr>
<tr>
<td>Interruptions: blocking</td>
<td>2.80</td>
<td>2.59</td>
</tr>
<tr>
<td>Risky behavior</td>
<td>2.45</td>
<td>2.46</td>
</tr>
<tr>
<td>Action of additional effort</td>
<td>2.65</td>
<td>2.34</td>
</tr>
<tr>
<td>Increased action effort</td>
<td>3.21</td>
<td>2.81</td>
</tr>
</tbody>
</table>

The study examined the comparison of mental workload between nursing, geriatric care and ambulatory care. It is shown in the table above that there are associations of stress characteristics in the health sector but there are still striking difference in the various health care fields. The dominated aspect, which shows in the in-patient care, is time pleasure. The comparison shows that aspects of time pressure dominate in-patient care area while the outpatient care deals with less time pressure.

The list of harmful factors that may cause stressful reactions or even cause burnout for example, occupancy-turnover/absenteeism which is related to frequent jump in for colleagues, turn out to have a higher score of 3.72 within the sick-nursing while in the geriatric nursing has 2.60. Interruptions, time pressure, overwork, and adding additional effort to work also has a relatively higher risk on nurses as illustrated in the Table 1.

Working in the health sector means, working under high loads of work and stress, and it is impossible to turn off all the stressors because many of them are characteristic elements of the nurse profession. Within the organization, there are mostly resources which work inside or outside the profession, that can help mitigate the effect of stressors. Stress management programs, diversifying working environments, good coopera-
tion with colleagues and conflict solving programs as well as health promotion help reduce the working stressors that affect workers (Fritz Böhle, 2006, p. 313).

### 4.2 The biological stress mechanism

Harari & Legge describes stress as “an unpleasant psychological feeling caused by inconsistencies or contradictions in a person’s cognitions”. Stress is a mental phenomenon, caused by contradictions occurring in the mind”. The physiological stress response is how the organism response to stressful situation. The individual is prepared to meet an imminent danger by fight or flight. Walter Cannon in the 1920s developed one of the early theories of stress. He revealed that, animals as well as human beings undergo certain physiological arousal when being threatened. This means that, the arousal has an effect on the organism to face the present stress in other to be able to fight or flee the situation. This controlled by the autonomic nervous system of attack and escape mechanism is a genetic program that was given to man as a natural and vital defense mechanism on the way of evolution (Harari, 2001, p. 75).

The physiological arousal in the organism during danger periods includes:

- Increased heart rate and breathing rate, this ensures that the there is more oxygen to the muscles and brain
- Improved blood clothing in case the individual gets injured during the process
- Expansion of the pupils to enhance eyesight
- The hair stands on end, this manifest itself through goose-pimples in humans and makes cuts looks bigger and more scaring

#### 4.2.1 The alarm reaction

This is practically the same as fight or flight response. Hormones are being released by endocrine system during the physical arousal period. ACTH is a substance that is being released by the pituitary gland and this lead t the release of neither epinephrine, nor epinephrine and cortisol by the adrenal grand’s. The manifestation of these hormones brings the person to mood to fight or free the situation. It was concluded from the rat experiment that, “organisms are incapable of maintaining a constant alarm reaction for a lengthy period of time: they die within hours” (Harari, 2001, p. 75). Organism enters into a second stage which is called “The stage of resistance” in order to survive.
4.2.2 The stage of resistance

During the alarm reaction, the physiological arousal present regresses in order to make the body survive this situation and prepare the body for the next threat. This process needs to be supported by the next stage called “the stage of exhaustion”.

4.2.3 The stage of exhaustion

Harari& Legge in (Selye 1977, p.33), the body is “wear and tear” if the body is no longer able to recover the alarm reaction (Harari, 2001, p. 75). But what exactly happens in the human body when one is in a stressful condition? Initially the temporal physiological arousals are clearly defined from the beginning and with a unique end and it’s called acute stress. This is a continuously acting factor, which causes a chronic form of stress. The hypothalamus plays a significant and a central role in the physiological stress reactions. It is about a thumbnail-sized area in the center of the brain, and represents a part of the limbic system, which plays a role in the emotions of humans. It is above the pituitary stalk in direct contact with the pituitary gland, a hazelnut size organ, which consists of a posterior lobe of the pituitary gland and anterior lobe of the pituitary gland. The pituitary gland is under the control of the hypothalamus and is essential for the stress response hormones e.g., TSH (thyroid stimulating hormone), which the body produces by stimulating the thyroid and make more energy available. And on the other hand, ACTH (adrenocorticotropic hormone) is produced, which in turn triggers the release of so-called glucocorticoids in the adrenal cortex (Brannon, 2014, p. 92). These provide an increased supply of energy and serve as energy carriers in the body, e.g. by increasing glycogenesis of amino acids in the liver and increase of the glucose concentration in the blood (eRoith, 2004, p. 189). Besides all hormonal functions, the hypothalamus also controls the autonomic functions. In the vegetative or autonomic nervous system all body activities are regulated not under the direct control of the individual. The sympathetic nervous system has controls all functions and systems, which are necessary for the management and stimulation of all physical reaction. In contrast, all regenerative and reproductive functions which are hardly below the level of consciousness, such as heart rate, digestion, respiratory rare, salivation, perspiration, pupil diameter, micturition and sexual arousal are throttled by the parasympathetic nervous system (Rhoades, 2013, p. 108).

In the following figure (Fig 1) the main physical reactions during stress are shown into details.
Fig. 1: "Physical reactions of stress"

(Fig 1 [Online], http://www.sportunterricht.de/iksport/nervsys4.gif [June 2014]) (Dober, 2012)
Here are ways in which some key body systems react.

1 NERVOUS SYSTEM
When stressed — physically or psychologically — the body suddenly shifts its energy resources to fighting off the perceived threat. In what is known as the “fight or flight” response, the sympathetic nervous system sends the adrenal glands to release adrenaline and cortisol. These hormones make the heart beat faster, raise blood pressure, change the digestive process and boost glucose levels in the bloodstream. Once the crisis passes, body systems usually return to normal.

2 MUSCULOSKELETAL SYSTEM
Under stress, muscles tense up. The contraction of muscles for extended periods can trigger tension headaches, migraines and various musculoskeletal conditions.

3 RESPIRATORY SYSTEM
Stress can make you breathe harder and cause rapid breathing — or hyperventilation — which can bring on panic attacks in some people.

4 CARDIOVASCULAR SYSTEM
Acute stress — stress that is momentary, such as being stuck in traffic — causes an increase in heart rate and stronger contractions of the heart muscle. Blood vessels that direct blood to the large muscles and to the heart dilate, increasing the amount of blood pumped to those parts of the body. Repeated episodes of acute stress can cause inflammation in the coronary arteries, thought to lead to heart attack.

5 ENDOCRINE SYSTEM
Adrenal glands
When the body is stressed, the brain sends signals from the hypothalamus, causing the adrenal cortex to produce cortisol and the adrenal medulla to produce epinephrine — sometimes called the “stress hormones.”
Liver
When cortisol and epinephrine are released, the liver produces more glucose, a blood sugar that would give you the energy for “fight or flight” in an emergency.

6 GASTROINTESTINAL SYSTEM
Esophagus
Stress may prompt you to eat much more or much less than you usually do. If you eat more or different foods or increase your use of tobacco or alcohol, you may experience heartburn, or acid reflux.
Stomach
Your stomach can react with “butterflies” or even nausea or pain. You may vomit if the stress is severe enough.
Bowels
Stress can affect digestion and which nutrients your intestines absorb. It can also affect how quickly food moves through your body. You may find that you have either diarrhea or constipation.

7 REPRODUCTIVE SYSTEM
In men, excess amounts of cortisol, produced under stress, can affect the normal functioning of the reproductive system. Chronic stress can impair testosterone production and cause impotence.
In women stress can cause absent or irregular menstrual cycles or more-painful periods. It can also reduce sexual desire.

Fig. 2:” Medium- to long-term consequences of stress reactions”

(The American Institute of stress, 1978)

The activating of the stress-response system and cortisol affects cardiac health by increasing inflammation, which causes heart attack. Other stress hormones are able to affect all the body processes. This can put an individual and at increased risk of a considerable number of health problems. The normal stress reactions can change to severe stress reactions after a period of time if healthy measures are not incorporated to cope with stressors. The medium-and long-term consequences of over-dose or long-standing stress are noticeable on the physiological, somatic, psychological and on the behavioral level. After prolonged exposure to the stress-inducing factor, psychosomatic complaints, organic diseases, fatigue, tiredness, absenteeism, unhappiness become the end results. The resistive force to the applied stress decreases considerably. It is no longer possible to adapt the organism to the constant stress. The person’s respond to his adaptation or to other stressful situations is completely restricted (Olpin, 2013, 2011, 2013, pp. 46-49). When a nurse has a physiological long-term stress, it results in psychosomatic complaints. The somatic consequences of having a long unpredictable stress is that, the complaint begins to develop several organic diseases. The mental side effect of stress is having anxiety, dissatisfaction, feeling depressed and low self-esteem. It can also eventuate to burnout and job dissatisfaction. All these stress factors can influence the behavioral of an individual to the extent that he or she begins to absent him or herself from work. This person is usually involved in taking an increased amount of nicotine and alcohol as well as consuming numerous amounts of pills. This can affect the victim where, they fail to attend social gathering and begin to absent themselves from social activities (Olpin, 2013, 2011, 2013, pp. 46-49).

Cardiovascular disease may be somehow related with stress. There should be more studies and research on how stress is associated with cardiovascular diseases. Some researchers have made an attempt to investigate the association between stress and heart diseases. Blood pressure and heart rate rises when someone is mentally stressed because of the increased amount of oxygen (David Robertson, 2012, S. 292). Mental stress decreases the blood supply resulting to decreased blood flow to the heart muscle. When this occurs, the blood turns to clot more easily during stress, because the body is designed in such a way that to prevent bleeding to death but if a bigger clot lodge itself in the blood vessel surrounding the heart or blood vessel in the brain, it can increase the chance of blood pressure. This intends to weaken the blood vessels and may result in a heart attack or stroke (Olpin, 2013, 2011, 2013, p. 49).

Stress affects the immune system that defends the body against diseases. The immune system includes lymphocytes, monocytes and interleukins. The chemical messenger allows the lymphocytes to communicate with each other. Stress causes cortisol to slow the production of lymphocytes that suppresses the release of interleukins. This results in the in capability of the body to fight diseases and infections (Olpin, 2013, 2011, 2013, p. 49).
However, long-term stress may lead to excessive hair loss or some form of baldness if not well treated. Stress triggers mental and emotional problems such as personality changes, irritability, anxiety as well as depression. An examination has shown that, stress begins with pain in the neck and shoulders. Mouth ulcer and excessive dryness may be also manifest, causing hypertension and menstrual disorder. However, for men this can cause impotency and premature ejaculation. This can cause both stomach irritations and weight loss. Individuals may have skin outbreaks such as eczema and psoriasis (Baker, 2014, pp. 1-51).

4.3 Occupational Stress and Work Strain

4.3.1 Working time -related strain

Many studies have come to the conclusion that individuals who become despair due to work situations are assumed to cause stress that is coherent to developing depression than biographical personality traits.

Killmer in Herschbach 1991a, p.53), For instance, when loads are piled up, it is usually due to the size of the total labor time and on the other, from the work routine. The total working time of a nursing varies from 18-38, hours per week. Those who work full time usually have more stress, because full time means more hours that automatically results to more work than part-time. The other factor is the time work begins. An employee may have an early shift that is usually from early mornings till afternoons and late shift from night till morning or three shift services, morning afternoon and night. When this occurs, it causes burden for the nurse’s staff (Killmer, 2011, p. 94).

Changing working hours from late shift to early shift is particularly stressful because the recovery phase between the two shifts is very short. Regularly 5-10% of the nurses spend 50% of their time working at night. A night shift lasts at least eight hours and sometimes even longer than ten hours a day. The quality of life will be greatly affected because of the social life being restricted and biological rhythms are being disturbed. Night shift is particularly difficult because the caregiver has to bear the responsibility for all patients and has to deal with nightly routine work intermediate and emergencies at all times. Working overtime can cause lack of staff is very distressing, because often the leisure time cannot be catch up. Killmer in (Bartholomeyczik, 1993, p. 90) overtime is an indication of poorer working condition. Working during the weekend is one of the distressing factors that nursing staff has to face because often not even two weekends per month is remained free. Working during holiday is seen as part of the normal work requirements. Also a stressful event is when the working plan is made promptly or need to be modified The Author point out that inadequate staff; the acquisition of for-
eign tasks and the associated high work pace impaired the wellbeing and health of workers (Killmer, 2011, p. 95).

In all, the people who work in three shifts are particularly heavily work-loaded. In addition, working time related burdens considerably limit the quality of life of nurses (Killmer, 2011, p. 96).

As it has already been mentioned in this study, time pressure is identified as the common stress factor in nurse profession. A particularly stressful nursing job is being in charge of dying patients. Even experienced nurses still find this extreme situation very burdened and still remain the same after many years of working experience (Killmer, 2011, p. 96).

Moreover other significant factor is dealing with difficult patients. This includes mainly hostile patients, patients with demanding attitude towards nursing staff and those who hinder their own healing process through some disregarding behaviors (Killmer, 2011, p. 98).

Also the workload increases when many activities have to be performed so nurses attributed to different professional areas have to incorporate to make the realization of the task come to existence. This situation can cause stress most especially when they have to cooperate with foreign nursing activities. Furthermore, the distribution of work resulting from lack of independence of nursing and not so clearly defined duty and demarcated areas of their activity can also serve as a stress factor (Killmer, 2011, p. 98).

Besides a total of "at least one-fifth of the working nurses are used for completely different profession tasks". Such services are neither paid nor credited to the establishment plan and their own professional responsibilities are even more neglected and the time pressure increases more and more. Such quantitative excessive demand for achievement in the role of a nurse is perceived as extremely burden (Killmer, 2011, p. 98).

Aside that, lack of information in the workflow of a nurse can be very stressful when unclear and incomprehensible information is been conveyed. Even with clear information about the workflow is mostly a certain kind of unpredictability and incomplete planning for a day's activity". Interruptions in the workflow are seen as normal because it is rare to finish a started task without being interrupted (Killmer, 2011, p. 98).

Ullrich and Herschbach found out in their study that 90% of respondents are overburdened because they are repeatedly disturbed in their personal conversations with patients. That interaction with patients is severely impaired already and is delicately restricted by how the daily work routine is organized. Killmer in (Ullrich, 1987, p.109);
approximately, 87.4% to 96% particular noise factor is from the ringing of telephones (Killmer, 2011, p. 98).

4.3.2 Interaction-related strain factor

Interpersonal interactions are when someone is rewarded for their work as stated, "Each person can, at least, potentially impose certain demands on the individual and provide certain rewards". It is even doubted that patient-related needs are generally accepted as stressful but it is more stressful to have conflicts with physicians and others health workers in a personal (Killmer, 2011, p. 101).

4.3.3 Doctor-related strain factor

One of the load factors is the command from doctors and the authority of doctors to issue orders for nursing staff. Interactive problems between nurses and doctors often result from the imbalance of information stream between doctors, nurses and patients. Information flow between doctors, nurses and patients is always experienced as unsatisfactory. In a study, 97% of the nursing see answering doctor's medical questions to be very stressful 81% complain that doctors care very less about patients and leave all the work for the nurses. Numerous complaints and competitions within nursing staff serve as other factor to be strained up and suffer from a depressed mood (Killmer, 2011, p. 102).

In refusing to work during conflicts, nurses stand the risk of being dismissed from work without notice. Inadequate coordination of medical and nursing workflows is another negative factor. They are caused by the willingness of cooperation by physicians and the virtue of their power to define situation. And the fact that nursing staff must align to the work schedule of doctors and according to their needs. Nurses are therefore forced to fall in the shades of doctors. They mostly work at the background and even at times in an extreme working period where they have to subordinate their interests and the interests of the patients to be able to meet the required expectations. This means that the working structure is strongly influenced by the doctors or they try to indirectly influence it. Nurses are very stressed by the whole interaction issue. Some nurses believe that their work situation will improve if doctors are going to change positively (Killmer, 2011, p. 102).

4.3.4 Nursing staff-related strain factor

Also in relation to patients and physicians, nurses have the most contact with their colleagues and superiors in nursing stations. A good relationship within the station teams
Stressors

are prerequisite for good quality care, because working together as a team is very much required for a successful teamwork.

Competitive behavior among colleagues was found in the study to be very rare. It is assumed that the cooperation between colleagues appears to be satisfactory. 71% of the respondents think that the cooperation is very good (Killmer, 2011, p. 103). Disturbances within the team will definitely have an impact on the effectiveness of the workflow. Negative impact on the teamwork should be attended to and maintenance should be done (Killmer, 2011, p. 104).

In the East German survey, 80% of the nursing staff rewarded their cooperation among themselves as good. This is diagnosed as empathy deficit and is an indication of the burnout syndrome depersonalization, which again indicates a symptom of depression (Killmer, 2011, p. 104).

Many professional beginners complain about having an attractive looking station even though the nursing service management had promised to give them a desirably station in their interview. They ended up in less attractive stations with high workload. In the qualitative study about nurses, four people stated that the management was a burden. A station maintenance service was also mentioned as a burden factor. They complain most of the time about the lack of understanding and the constraints of the station management (Killmer, 2011, p. 105).

4.3.5 Income related stress factor

A job turnover due to job dissatisfaction has become very common not only in the health sector but also in other range of profession. Low income has been highlighted as a contributing factor for a nurse to have intention of leaving their job, yet this area has many elements affecting its measurement. A study by the Department of Marketing & Management, University of Central Arkansas, Conway, AR, 72035 shows that among the many and other reasons why nurses drop their job is the unsatisfactory of salary or inconvenience they get from their organizations (Jr. Joseph D. & Cangelosi,, 1998). It is constantly talked about that, the reward nurses get is not to be equated to the work they have to do.

The reasons why a person may want to be a nurse is because many are attracted to this profession because of the desire to be of help to someone. The position of nurses has deteriorated significantly in material concept in recent years. The ratio of doctors and nurses in the hospitals significantly shows that nurses are more troubled. Female nurses are paid less than male nurses. In 2008, 20% of full-time workers in nursing and 48% of full-time employees in the elderly nursing care have a monthly salary of less
than 1500 Euros. 20% of employees in nursing and 24% of the workforce in the elderly nursing care earn less than 2,000 Euros. Averagely, geriatric nurses are paid less than nurses who work at the hospitals. Income of less than 2000 Euros is classified as precarious wages by the DGB, below 1500 Euros is referred as poverty wages. In the geriatric nursing, 72% are paid at the lowest agreed wage. In health care, 44% of women are working full time and 30% of full-time employees earn 2000 to 3000 Euros is the ratio which is fairly balanced (Kumbuck, 2010, pp. 187-189). However, in the upper class income, 20% of men but only 10% of women earn more than 3,000 Euros a month, which shows a significant difference (Kumbuck, 2010, pp. 187-189).

### 4.3.6 Interruption

Interruptions are caused by unforeseen external events, which distrust the actual task of an individual. The possible triggers of interruptions are other people, technical problems e.g. telephones, computer breakdown or organizational problems that can arise through a late delivery. When nurses are disturbed in their task and processes, they have to look for time to come back to finish up their initial task. All these events can highly stress up a nurse and have a long-term effect on his or her health (George, 2003, pp. 494-507).

### 4.3.7 Confrontation with death and dying Patients

The nurses working at the intensive care unit are often confronted with dead and dying patients so that they begin to ask questions about their existence and the meaning of life. Confrontation with death and dying patients is also considered as a burden on the nursing staff. It is easier to accept the death of an older person than for example the death of a child. The mortality rate at which patients die in the intensive care unit exceeds 50% (Hamric, 2007, p. 422). And other study in the USA states that 20% of the patients from the intensive care die after discharged (Nimmo, 2011). The nurses are often confronted with death and so with their existence and meaning of life. The confrontation with dead and dying patients is one inescapable fact of life. Many nurses develop a personal bond with patients, especially when the patient spends a longer period, the majority of the day and at night in the hospital. This circumstance makes it difficult to say goodbye and to accept and process the loss.

Another mental exertion is the dying process as some patient’s experience long suffering before they pass. Some death arises as a surprise however some do not. The process whereby nurses have to wait for a patient to die poses a great nervous strain for the entire nursing team and most especially difficult for younger and inexperienced nurses and also for those who are not well trained towards this situation.
Often, the stress of everyday life in these stations do not allow the accompanying and the necessarily support from a nurse to a dying patients to the extent that some nurses have remorse after the death of the patient. This difficult situation already encountered by nurses who are being confronted with these situations, causes sense of guilt. It also adds more stress to the already stressful situation. At times due to the economical conditions, the deceased must be quickly disposed to ensure a quick occupancy of the vacant bed. The ethical perception of nurses serves as a stressing factor for nurses. They hardly have time to say goodbye to the deceased (Sandwo, 2014).

4.4 Social Condition and Depression

4.4.1 Lack of recognition

Vitality and attractiveness in our society are values to which everyone is trying to correspond to a certain extent. Since the status of nurses are associated with the care of sick people, it’s considered to be less valuable. For example, the careers of elderly people do not equate their status socially and financially with nurses who work at the hospital. Also, the idea that nursing is a women’s job also strongly influence this factor (Münch, 1993, p. 734). A heavy burden for the careers is not only the lack of social recognition of the profession, but also the inappropriate associated payment (Jr. Joseph D. & Cangelosi,, 1998). Furthermore the public recognizes the nursing in contrast to doctors not as an independent profession. From the interview conducted, it was confirmed that, people think, everybody is capable of becoming a nurse. Many nursing science students are most often confronted with this declaration.

The lack of profession and prestige causes a person to feel weak in his or her self-esteem. For example at work, if one earns a little or less recognition, one may feel less valuable to the society. This leads to confrontations and mental disorder which develops if one has to constantly deal with prejudices and has to justify his or her activities (T. L. Cox, 2012, pp. 427 –449). In order to increase the prestige of nurses, a stronger public relation activities need to be undertaken giving a n action of positive image and testimonies in context with the profession.

4.4.2 The expectation of Caregivers

Professional models of care: Caregivers bear a great responsibility in the context of patient care and are responsible for their coordination. The models of care require the involvement of competent nurses and adequate resources in other to enable continuity of care and consider the individual needs of patients (O'Lynn RN, 2007, p. 113).
Quality of Care: The quality of care is the driving force for the care and the organization and is the fundamental concern of all nurses. Senior nurses are responsible for creating an environment that has a positive effect on the wellbeing of patients (Breen, 2010, pp. 6,7).

Continuous quality improvement: There are structures and processes for quality measurement and improvement of care processes and services in the organization. For example setting a strategy and implementing ways to meet the goals as well as good planning is the outcome of good quality may include, holding monthly meetings or getting feedback after every meeting (Mears, 1997, p. 48).

Advice and resources: The organization provides adequate resources and support available and has the opportunity to consult competent nursing expert. In addition, the participation of nurses in professional organizations has the possibility to exchange their knowledge and experience within the community and encourage others (Thompson- Adams, 2008, p. 252).

Autonomy: Nurses are expected to work autonomously on the basis of professional standards of care, with extensive expertise of the community and health (Haag- Heitman, 2011, p. 26).

Nurses as teachers: Professional nurses are involved in the educational activities of the organization and community. Caregivers are encouraged to teaching activities (Ostermeier, 2009, p. 128)

Interdisciplinary relations: Cooperation within and between disciplines is valued and encouraged. The corporate culture is characterized by mutual respect for each other's work (Orchard, 2005, pp. 1-5).

Career Development: In the device, the personal and professional development of staff are supported and valued. The participation in programs for further development of clinical skills as well as leadership and management abilities are available in the human and financial resources (Swansburg, 1995, p. 185).
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Nurses should take the opportunities and the courage to take part when it comes to the research department research. Participating in questionnaire can help make them realize whether they are depressed or have symptoms.

In addition, online screening tools can help them identify their stand on their mental health. Several studies have found this very effective (HealtheVet, 2011).

Manager of nurses should look for signs and make open discussions to address the problems nurses might be encountering. Aside from that, employee assistant programs should be implemented.

Nursing is traditionally seen as a Profession that helps and assists people, most especially the sick ones. Many of them mostly forget to take care of themselves in other for them to be able to function properly at their work segment. They seem to be so very much committed to their work and ignore their overall health. Strategies should be incorporated such as good advocating policies that support good health and treatments for those with problems and to promote supportive working environments.

5.1 Research question

The main issue the paper addresses is “How to measure the extent at which nurses experience symptoms or risk of depression through various factors such as individual or demographic factors, emotional exhaustion and stressful working situations?” the paper therefore looks to answer this question.

5.2 Research design

5.2.1 Survey

The study was a written survey performed on 9 out of 10 expected nurses who work in hospitals in Heidelberg, Speyer, Bremen, Ghana (Obuasi) and Ukraine (Ternopil) with 149,633, 50,036, 548,319, 13,000, 1,073,300 inhabitants respectively. To be able to nearly comprehend and illustrate the working conditions and problems, interviews were conducted on the nurses. During the time of the survey, the participants were working on about 80 to 100 patients.
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The reason for a written standardized questionnaire in this survey is that, it is relatively quick and more affordable to perform and involve many people through the questionnaire is always easy. It is relatively quick and more affordable to perform and involving many people through the questionnaire is always easy. Even though the research design should have opened a way for more participants, but due to time factor, only 9 were able to partake of the survey. The Patient Health Questionnaire (PHQ-9) will serve as a part of the diagnostic instrument.

Apart from other factors that contribute to depressive disorders, stressful working situations should be covered in order to create its awareness in relation to depression. The stressful work situations that should support the diagnostic methods in relation to the answers are divided into the following categories according to Loads in reference to (Böhle, 2006, p. 313):

- Psychological nature: dying patients, emergency situations.
- By too much work, lack of personnel, not 100% patients care.
- Long by shift, night shift to services.
- Organizational nature: work stoppages, unfavorable processes, telephone faults.
- Through difficult dissatisfied patients.
- By shortage of doctors, poor cooperation with the doctors.

Demographic variables such as age, time of work, part or full time employment and occupational duration are important factors to deal with since it has a possible link to work and stress that contributes depressive symptoms. The following test method should serve as an instrument on the first indication of whether one may be suffering from depression or stand of developing it.

The questionnaire is divided into two parts. Part A with demographical items. The part A of the subscales questionnaire consists of the demographical variables, the second section of the part A should respond to the emotional exhaustion and working stressors that may contribute to depression, Part B with the PQH-9 questionnaire for the measurement of the depressive symptoms should reveal the general depression/health status of the participants at the end. This at the same time should serve as a qualitative research method for the present study. Finally the questionnaire will be typed into the
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Statistical Package for the Social Science (SPSS Version 21.0) so that the results could be evaluated.

5.2.2 Demographical factors

Demographical factors like age, gender, marital status, working department, years of nursing experience were included. Marital Status was classified as in a relationship (married and living together), in a relationship (not living together) and single. Work shift was classified as morning, afternoon and night shift or rotating shifts as well as the overall health status or the nurses.

Part A

Demographical Items: 1, 2, 3, 4, 5, 6, 7, 8, 9,

Sex, Age, Marital Status, Children

Unit / Department

How long have you worked as a nurse?

Are you full-time or part-time employed?

What shift do you work; Morning, afternoon or night shift?

How would you rate your overall health?

Job related stress factors and social support scales

Chronic environmental job-related stress factors were assessed using a questionnaire and biographical interviews. The questionnaire included job related stress factors, social support scales regarding work overload, work environment, job control, job fitness, interpersonal relationships, and support from organization or coworkers.

Emotional exhaustion in connection with workloads: Item 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28

How much do you value your sick days a (off days)?

What situations in your everyday care you feel is particularly stressful?

What support / options will help you to cope with your workload?
Describe your working environment (e.g. Stressful)

How do you come along with dying patients and emergency situations?

Do you have recognition and appreciation from patients as well as colleagues? If not how do you handle the situation?

How do you solve conflicts at work?

Describe how you feel through difficult dissatisfied patients

Does direct contact with patients burden you too much? If yes describe how

Are you satisfied with your work through the contribution of your success? Describe how you are satisfied with your work

Are you emotionally exhausted in connection with the organization? If yes describe how

Are you disturbed by the work layoffs and malfunctions (e.g. Telephones?) If yes describe how you handle the situation

Do your workings hours give you stress?

How greatly does your working hour stress you?

How do you describe the work scope, distribution and drainage?

Do you get are reward and praise when you do something? How much do doctors weigh you down at work?

How much does your working stuff weigh you down at work?

How happy are you with your salary?

5.2.3 Data Analysis

Average score of the 19 job-related stress factors including (work overload, interpersonal relationships, workplace environment, job control, job fitness, supervisor support) and nine psychological symptoms from PHQ-9 (loss of interest, depression, insomnia, fatigue, poor appetite, depressive feeling, concentration problem, isolation-change of moods and death). The age was excluded from the analysis because of the higher correlation of \((r=1)\) per person.
The Data collected from the participants were analyzed with SPSS Version 21.0 a descriptive statistic, correlations, frequencies with and PHQ-9 was used to evaluate.

The total value will be evaluated by the summary of the three subscales. Nevertheless, the three subscales and the PHQ-9 will be considered separately.

The length of time for completing the questionnaire should be 10-15 minutes. The interested survey participants had a free choice on where they would want to attend to the questions, whether at work or during their free time. Further arising questions was to be answered through personal meetings or telephone calls.

5.2.4 Psychological symptom scales

The Job related Questionnaire included psychological symptom scales regarding loss of interest, depression mood, fatigue, anxiety using the (PHQ-9) Patient Depression Questionnaire.

Part B - PHQ-9

The test method for the psychological stress factors is based on the developed questionnaire system “PHQ-9”. However, it is very important to note that, the test results cannot replace an accurate diagnostic evaluation by a qualified psychologist, psychotherapist or a specialist. Again, the number of participants is not enough to be able to make a convincing hypothesis.

The questionnaire PHQ-9 corresponds to the depression module of the health form for patients (PHQ-D) and comprises nine questions about depression. It reveals the status of depressive symptom based on how the questions are formulated. It was developed as a screening tool for the diagnosis of depression for routine use in somatic-medical field. The PHQ-9, which is the 9-item depression module from the full PHQ is recommended by the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders, the fifth edition) working group of the American Psychiatric Association as a tool for measuring the severity of major depression according to the new DSM-5 criteria.

This instrument uses nine items to diagnose depressive disorder with the question “How often did you feel the following symptoms during the last two weeks”? Here is a four-level response; “not at all (0) ”, " on just a day (1) " , " on more than half the days (2) " and" almost every day (3) ". The scale score of depression corresponds to the sum of the scores on the nine items and has a value range of 0 to 27. A score below 5 com-
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prise the absence of a depressive disorder; 5-10 corresponds to a mild degree, heavy with light or heavy depressive disorders. Major depression (MD) is diagnosed when the score is higher than 10. A value between 10-14 is called a middle MD, at 15-19 is called a distinct MD and at 20-27 is called a severe MD. The allocation to the respective degrees of severity depression is made by a scaling with "0 = no depression", "1 = mild depression", "2 = slight MD", 3 = average MD "," 4 = severe MD. " All in all the PHQ-9 scores of 5,10,15 and 20 represents mild, moderate, moderately severe and severe depression.

5.3 Questionnaire/ Interview

The second supervisor of this research paper had a review on the questions and notable corrections were made before they were presented to the participants.

After the approval of the questionnaire, the anonymity of the participants was rest assured. Once the process was approved, the entire nursing participants were informed about the survey. The meaning and purpose of the survey, individual meetings and discussions were also made. The survey should serve as a process to create awareness and contribute to motivation and acceptance of nurses in our society. The questions were distributed in May 2014. The actual nursing staff that wanted to take part in the questioning determined the number of the questionnaire. The eight participants are part-time and full-time workers. The questionnaire should be returned latest on 11 June 2014, this period was marked on each questionnaire.

5.3.1 Guided biographical quantitative research, focusing on

Occupational biography, occupational stress and work strain, appreciation in the course of the work, health status, income satisfactory, appreciation and recognition

Samples of Survey: 9 interviews with health workers (nurses), 8 women and 1 man

Age structure: 6 between 19-30years, 3 between 31-36years

Field or work: anesthesia, ambulatory care, ward nurse, Operation Theater

5.3.2 The degree of depression with PHQ-9

The degree of depression will be determined through the support of the PHQ-9 by accessing the answers chosen. Major depression will be diagnosed if 5 or more of the 9 depressive symptom criteria is present at least more than half the days in the past two
weeks and one of the symptoms is depressed mood. If two or 3, or 4 depressive symptoms have been present at least more than half the days in the past two weeks and 1 of the symptoms is depressed mood, then other depression is diagnosed. Lastly if a sever symptom such as suicide, it is still counted regardless of duration. Moreover, it is important at the final diagnostic of the depressed person to research the history of the patient and the sufferer.

5.4 Discussion of the Results

The study included nursing staffs; that is 8 women and 1 man. The average age was 27.11 years; 60% percent of the participants were from 19-30 years as well as 30% are between 31-40 years. 88.90% are females while 11.10% male. The average working years are 4.83. Average of 1.22 is working part time or full time. 70% are working full time and 20% part time. Average of 3.44 is alternating between shifts. 10% works early, 20% work late and 60% work all the shifts.

5.4.1 Quantitative content analyses

PHQ-9: The participant who completed the PHQ-9 Assessment resulted that; all the 9 participants are depressed ranging from minimal depression to moderate depression. The severity of depression is determined by the total score, which ranges from

1-4: Minimal depression, 5-9: Mild depression, 10-14: Moderate depression, 15-19: Moderate severe depression and 20-27: Severe depression.

The results shows in the table that the participants who had a total score from 1-4 are 2 (20%) which implies minimal depression. Those who scored from 5-9 are 4(40%), which implies Mild depression. Those who scored 10-14 are 3 persons, which indicate Moderate depression. The symptoms scale regarding loss of interest, fatigue, anxiety, loss of appetite had a higher score.
Severity of Depression

Fig. 3: "Depression Severity"

Gender

Fig. 4: "Gender"
Depression and work

The Figure 5 shows how the chosen biographical elements that were focused on in the quantitative experiment associates with each other. In the diagram it is clear that the occupational stress and work strain under the chosen factors is higher than the other stressful element in the nursing profession. The average of 28.33 admitted this fact that the workload compared to the available personal and time is just too imbalanced. The appreciation in the course of the work also serves as a critical factor the nurses complained of. It is also clear that the health status of the respondent did not show any positive results in the PHQ-9 questionnaire. All the respondents have depressive symptoms which have led to minimal and to moderate depression. Income satisfactory as well as appreciation and recognition through encouragement or reward, clearly show to be the lowest in the chart.
**Appreciation in the course of work**

![Bar chart showing appreciation in the course of work](image)

*Fig. 6: “Appreciation in the course of the work - Colleagues and Patients”*

Figure 6 demonstrates that out of the 9 respondents, 77.80% answered with “no” that they get recognition from colleagues and from patients and 22.20% said sometimes they get the recognition that they deserve, even though from the interview many of them thought they have better recognition from colleagues and from patients. Even though recognition and appreciation from patients and successes through the work contribute in a large part of Job satisfaction, it is clear that there is a deficiency of it at the working place.

**Reward**

![Bar chart showing appreciation through reward](image)

*Fig 7: “Appreciation in the course of the work - Reward”*
Figure 7, as in the previous diagram also highlighted that 77.80% sometimes get presents from the authority if they have done something good for the favors of the success in the station and 22.20% said that they never had a present from colleagues or from the station management.

**Daily stress**

![Daily work Stress chart]

*Fig. 8: “Occupational stress and work strain-daily stress”*

The representation of daily work stress is shown above. The blue bar represents nurses who find their daily job routine very stressful as shown in the percentage. And the red bar shows those who find their daily job routine only stressful. 44.40% of them respondents find it very stressful in their day to day working routine as represented in the blue bar above, while 55.60% as represented in the red bar, have decreased stress in their routine.

**Labour disturbances**

![Labour disturbances chart]

*Fig 9: “Occupational stress and work strain- Labour disturbances”*
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Figure 9 furthermore reveals that, all the respondent have admitted that they are overburdened due to repeatedly disturbances of telephones and working equipment’s during working routine or are disturbed in their personal conversation with patients. 100 % answered with yes that they are very disturbed by the working equipment’s and also declared that they are often disturbed in their routines. It showed up in the emotional exhaustion as a function of organization impact of work interruptions and disturbances such as telephone, etc as this factor was mostly commonly mentioned.

Interruptions cause a higher regulatory burden, which may have negative consequences in terms of the working processes. This can be risky when the amount of duration of the disturbance remains for a long period of time.

Shift

![Chart showing working shift stress](chart.png)

*Fig. 10. "Occupational stress and work strain- Shift*

Figure 10 shows the occupational stress that occurs in the course of working in shifts or rotating in shifts. Those who work full time usually have more stress than part-time workers.

The other factor is shift work, early and late shifts or three-shift service, which includes night shift, happens to be another factor of burden for nursing staff. When working on a late shift, early shift is particularly stressful because the recovery phase between the two shifts is very short. The present study reveals that approximately 44.40% answered with “yes” that their working shifts stress them a lot while the other half also 44.40% answered with “sometimes” that their working shifts bothers. On the other hand, only 11.10% answered with “no” that there is no problem with working in shifts.
Patients

Figure 11: "Occupational stress and work strain-patient"

Figure 11 illustrates the extent difficult patients burdened nurses. Dealing with difficult patients who appear to be hostile, racisms, unfriendly or sexual oriented is seen to be very stressful factors for the participants. 60.70% declared that they feel pressured with difficult patients. 22.20% acknowledged that it is extremely stressful with difficult patients and while 11.10% however said that it is not stressful.

5.4.2 Work and Stress

The constant responsibility for everything that sometimes has nothing to do with the actual nursing work but some duties that could be approachable by other professional groups are continuously performed by nurses that contribute to work loads and stress. They compromise a lot in doing other work and after that they are still required to give their best to patients. The feeling of emotional exhaustion and feeling burned out occurs which can be the cause of depression in a long time process.
Health

Figure 12 shows how the self assessed overall health status of the respondents. It was estimated with “very good” to “bad” for those who assessed their health status to be good were 55.60% and 33.30% said that they are fit however the remaining part 11.10% assessed their health to be bad.

Salary

Figure 13 presents the general Loan Satisfaction of the respondent. All the respondents admitted that they are not satisfied with what they earn in contrast to the everyday work. 100% answered with “not satisfied”. The satisfaction is salary also contributes the overall job satisfaction.
5.5 Qualitative Results from Interview

How to attract and retain hospital registered nurses (RN) have become a recurring theme discussed by hospital boards, administrators and physicians everywhere. This study seeks to provide current data on this situation. The exploratory research effort consisted of 9 depth interviews and informal discussions with nurses in a major metropolitan area of the Baden Württemberg, Bremen, and from a foreign country Ukraine and Ghana. The formal research effort involved hand-delivering questionnaires to nursing staff.

The results of the interviews conducted in this research paper and other studies about this topic have confirmed the expected results to some extent. The aim of the interview was to serve as a support to the questionnaire and to ensure deepened and qualitative results of the research. The results are based on the focal points; Occupational stress and work strain, appreciation in the course of the work, health status, income satisfactory, appreciation and recognition. The research question should be accompanied with a clear supportive response from the interview. The results are based on the answered questions that were originated from the interview.

5.5.1 Working related strain

The studies came to a conclusion that the work situation associated with significant depressive symptom that work-related stress for nursing personnel is very high due to work overloads. The participants of the interview have confirmed that the size of the total working labor and the giving time for the labor give them pressure and stress. One of the interviewers had indicated that through personal defects they have to do a lot more work, three people do the work of five. Another also added that in extreme cases, patients have even has to stand in a queue until it’s finally their turn to see the doctor due to personal deficiencies. Others have also said that they cannot sleep very well when they have to work late or night shift. The sleeping phases are disturbed and so they have little concentration for the next working day. They are affected by tiredness and work through the day feeling tired, quickly annoyed and stressed up. They complained that their social life is totally affected because at times they have to work unexpectedly because a colleague is ill or because they have to work during the weekend or on holidays.

Furthermore, it was also mentioned that, dealing with difficult patients who appear to be hostile, racisms, unfriendly or sexual oriented serves as a very stressful factor to be dealt with.
5.5.2 Interaction-related strain factors

The outcome of the interview makes clear that, the nursing stuff do not have a lot of stress within the nursing personal. 88, 9% says they will speak with the person involved first to resolve the misunderstanding. They suggested that, clarifying unresolved situations, asking questions, eliminating misunderstanding trying to put you in their position and trying to feel with and understand them is always the best way to fight against conflicts within nursing staff.

5.5.3 Doctor-related stress

One of the doctor related stress factor is the authoritative behavior of the doctors. The respondent added that, at times there is imbalance of information and not so clear explained task from doctors. Almost 66, 7% complained about the supportiveness of the doctors. Many complained that the amount of job done by doctors is relatively very little. Other complaints about doctors was the little to no respect towards nurses and some even described the doctors as “snobby”

5.5.4 Nursing staff related stress

The present study found out that the relationship within nursing team is relatively very good. There were little to no disturbances within the team. Competitive behavior among team was not mentioned. This provides an open responds to whether this actually prevails in the teams or not then competitive behavior can easily lead to stress and conflicts. 88, 9% of the nurses rewarded their cooperation among themselves as good. The respondents who haven’t worked long in this profession, actually claimed that the location of the hospital or even the nature of the stations belong to the influencing factor of the well being. Less attractive stations stressed up workers easily and deficit the joy of working but there were no complaints with the Station management.

5.5.5 Recognition

The interview found out that the nurses get less respect from doctors and also from the society. Less appreciation turns out to be dominant factor within the profession. A heavy burden for the careers is not only the lack of social recognition of the profession, but also the inappropriate associated payment. Furthermore the nurses admitted that the public recognizes the nursing profession in contrast to doctors not as an independent profession. The declaration that everybody is capable to become a nurse is a common thing the respondents are confronted with and has to deal with. One of them
stated that she feels needed and she is happy when she can help a sick person through the knowledge she has acquired so because of that it doesn’t matter if she is appreciated or not. Furthermore the Figure 2 shows that 77.80% sometimes get gifts if they have done something good for the favors of the success in the station and 22.20% said that they never had a gift. Some admitted that they get present during special occasions such as Christmas and Easter. Others also added that programs or pick nicks are organized at times to ring the working staff together.

5.5.6 Confrontation with death and dying patients

From the outcome of the interview, confrontation with death and dying patients is also considered as a burden on the nursing staff although some mentioned, that one get used to with time. 33, 3 % said that they have no problem with emergencies or with dying patient. 11.1% have problems dealing with this situation as well as 55.6% added that it depend on the kind of situation prevailing the emergency or the death of a patient.

5.5.7 Income satisfactory

As it is presented in the Fig. 13, all the respondents admitted that they are not satisfied at all with what they earn in contrast to their everyday work as 100% answered with “not satisfied”. The interview revealed that in Ghana the government refuses to pay the nurses by the end of the month and they must wait for a long time before their monies are finally paid. Due to this, nurses prefer to work in private hospitals instead of government hospitals. From the interview, it was discovered that, the “House Officers earn approximately 1000 dollars (735, 40 EUROS), junior doctor circa 2000 dollars (1,471 EUROS) and a senior doctor nearly 2500 dollars (1,839 EUROS) monthly in Ghana. Nurses on the other hand earn between 500-900 dollars depending on where one works (367, 70- 661 dollars), 86 EUROS a month. Aside from that, nurses in Ukraine earn aprox. 900Hryvnia (58 EUROS) The situation with the loan dissatisfaction shows up from the top-down, doctors and nurses, since sometimes monies are required from patients and even corruption among physicians is a topic talked about.

5.6 Implication

The results of this study and that of NSWHN illustrates that nurses are at higher risk to suffer from depression. It was a shame to have found out that all the participants for this research paper are all depressed, ranging from mild to moderate depression, Even though they think that they are very healthy except 11.60% who admitted not to be
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It is hard to tell whether those who assessed themselves to be healthy lacked knowledge of their health status or they purposely did not want to reveal any signs indicating depression. This is a problem because if you do not sell your sickness you will not find a cure. As compared to the study of NSWHN, 75% at least have a chronic disease and other health problems and that a clear connection to job strain was assessed. It was also a surprising finding that 100% of the respondents are not satisfied with their salary. The participants were picked not only from Germany but also from places like Ghana and Ukraine and they all talked so negatively about their Income. So therefore, this issue needs to be handled at the political (CJNR (Canadian Journal of Nursing Research), september 2010, p. 11). Due to this, a health care program purposely designed for nurses to promote their health should be introduced. That is why we have Health Care managers who are suitable for this task. Educating Nurses on their mental health and deducing the stigma and discrimination, reducing overtime, efforts to reduce work stress as well as mentorship are such tools to help prevent risk of depression in nurses.

5.7 Limitation

Firstly, the sample of nurses was primarily 88, 90% female. Other study found out that depression in women is nearly twice that in men (5.2% vs. 2.6%). (CJNR (Canadian Journal of Nursing Research), september 2010, p. 13), The DH, 2004 (DH, 2004) indicates also “One in five women and one in ten men get depression serious enough to require treatment”. These facts encouraged Lynne to cite that women are more susceptible in attaining depression than men (Lynne, 2009, p. 2)This could mean that, this study perhaps investigated the depression in women than in men because almost all the participants are female. It could probably indicate that the participants were already depressed and that the work situation/ environment really have nothing to do with their health status.

Secondly, the participants in this study were not many to have a 100% confirmation of a hypothesis that “Nurses get ill due to their work condition”. Apart from that, the expected participants for the survey were supposed to be five men and five women so that a balance results could be attained but it ended up involving only one man and eight women, which does not encourage a balance and convincing results to the research question. Again, it was in the plan that nurses working at different fields would be involved in the survey, however, two of them work in the same filed as operation assistants and the rest have almost the same duties as a nurse, which on one hand doesn’t help the validity of the results of this research.
Thirdly, the instructions for the PHQ-9 questionnaire is that, it should have 2-weeks reporting period but in this study, there was no sufficient time for the 2-weeks reporting period, which again does not support the correctness of the results (Benuto, 2013, S. 116).

Lastly, from the observation made on the depression questionnaire, it is clear that the questions are too emotional and probably will only respond more to females than to males.

5.8 Comparison to other Study

In this following paragraph, a comparison is going to be made with other extended study made on depression in nurses.

The national Survey of Work and Health of Nurses (NSWHN) turned to examine the Work and Health of Nurses with one concern that is “Nurses have a higher rate of depression (1 in 10) as their counterparts as found in national surveys. The aim of the study was to examine the clear negative association with nurses between the role of “work overload, job stress, perception of the quality of care provided and respect and support of employers and co-workers”.

The focal factors of stress, such as Job strain, Role Overload, Respect, employee support and Perception of the quality of Care was assessed using a modified version of Job Content Questionnaire with 12 questions relating to the chosen stress factors. In assessing “The Role Overload score” was assessed by using derived variables using five statements based on a subscale of the Occupational Stress Inventory. (CJNR (Canadian Journal of Nursing Research), september 2010, p. 6).

The Employer Support was calculated by first summing the scores for the questions relating to whether the employer offered scheduling flexibility with regard to shifts or day work.

The Perception of Quality of care was assessed by choosing two questions of the NSWHN question that is namely “perception of staffing on their last shift worked and the “perception of the quality of the care they provide on that shift” (CJNR (Canadian Journal of Nursing Research), september 2010, p. 7).
5.9 Overall Health status

In their research, 5.8% of nurses admitted to having suffered or now suffered from depression. More than half, 54.7% was reported not to have suffered or suffering from depression. The study reported that at least 89.5% of those who were depressed had at least one chronic condition. There was no association to working time such as working full time or part time. (CJNR (Canadian Journal of Nursing Research), September 2010, p. 10) While this study revealed 11.10% that is one person who thinks that she has a bad health condition. Name of health conditions was not mentioned as specified in the NSWHN study. 55.60% was shown to have a very good health condition, which is higher than the research made in the other study.

In the study of NSWHN, the relation to Age and Depression was assessed which wasn’t so in this study. They interestingly found out that, the younger the nurse that has higher that rate of depression, as compared with age 65 years nurse ad 25 years nurse, the younger nurse has nearly double the risk of depression than the older nurse. Study also compared the relationship of depression to smoking and drinking, which was also not done in this study. They found out that, smoking more than doubled the risk of getting depression while drinking did not show a significant in relation to depression.

Furthermore, their study resulted that nurses with lesser respected intended to have a higher risk of developing depression as it is shown in this study that among the factors, no recognition and appreciation was rewarded by 77.80% and in relation to Depression all those who answered with no recognition were depressed.

In conclusion of their study it was stated that, the amount of support or appreciation shown to employers did not lessen the risk of depression since it was not supported by their analysis (CJNR (Canadian Journal of Nursing Research), September 2010, p. 11).
6 Intervention Measures for Nursing Staff

It is necessary to reduce or eliminate physical and psychological stress through targeted intervention measures in the field of nursing. In health circles, regular meeting between institutional players take place where health-related issues of a particular work area is being, discussed, analyzed and possibilities are being explore. The health circles serve as an instrument that reduce or tries to eliminate several problems and attempt finding solutions to problematic situations in the health sector. Again, they bring attention to the range of organizational structures and working conditions. Furthermore, the health circle is a core instrument of health management and contributes positively to staff and Organization Development.

Moreover, the goal is to develop interventions that sustainably strengthen and secure the health of the nursing staff. To be able to provide better working conditions for health care personnel, intervention measures such as the sensitivity of healthy and conscious food availability in the canteen or the implementation of nutritional advice should be regarded because a more unhealthy diet can have a negative impact on the body and even lead to illnesses. Many companies are introducing courses for smoking cessation and making the health implications of smoking known because it is important for people in the health field to have knowledge on the consequences of tobacco (Steinhöfel, 2014, p. 109).

Behavior intervention measures that help support health care personal are as follows: Back Training, cooperation with local health care company, training for infectious diseases, nutrition counseling, healthy canteen food, courses on tobacco cessation (Steinhöfel, 2014, p. 111).

A better working place and environment is also very important to be promoted because permanent physical stress can cause health problems if it’s not attended to or addressed.

Other intervention measures for nursing staff to promote their physical health at work include: Technical inspections, establishment and review of standards of hygiene, structurally measure, possibility to change facilitating at work from time to time regular monitoring of work security, constitutional workplace design (Steinhöfel, 2014, p. 113).

Further intervention measure is the operational stress prevention. It is important to involve this preventive measure because more and larger increase of mental stress and other related disorders are caused by stress. Particularly in hospitals and nursing services, the rate at which stress parameters in work-overload or over capacity is very
It is as much very important to provide a better working environment for nursing staff to secure their and contribute to the health of the staff in the near future.

Regularly mental resilience through relaxation should be guided by courses or by external consultants of the organization. The nursing staff is not forced to accede these courses or visit but it is highly recommended that they join.

### 6.1 Subvention for Nurses and Organization

Hospital administrators can intervene in these crises by instituting motivational and hospital commitment programs to improve retention/reduce turnover, e.g. work responsibility rotation, work schedule rotation, team approaches to health care and award/recognition programs.

### 6.2 Staff development

The increased complexity and international integration, the progressive digitalization of everyday life, the information and knowledge society, make high demands its employees in this environment, to be able to have longer fulfillment of tasks assigned to be competent and effective, they must be able to lean on powerful and well-managed employees in addition to the technical know-how. They must have knowledge also about personal, social, leadership, methods and language skills. The various instruments and processes of personnel and management development supports can help these challenges. Human Resources Strategy professional personnel management, a mandatory leadership training and supported on skills requirements and staff development should always is highlighted.

To approach a strategy to control the personnel and management development, measures for implementing concepts such as promoting a common corporate culture, creating decent condition and esteem at workplace and describing the personnel and the management development with its processes and tools should be incorporated. More over trust wealthy goals should be set out and held unto. Also facilitation of bottom-up innovations should be implemented so that the workflow could be promoted and information imbalance could be prevented. Again reduction of time pressure, measures for stress reduction and trainings should be integrated to improve the ability of coping with stress. An improvement in communication within organization and employees is one of the important which has to be positively influenced. Not forgetting the promotion of a good social climate to encourage an easygoing working environment. Lastly training and further education for employees to promote and update the qualification and enhancing easiness at work and getting updated with the new technological equipment’s used at work is also very important.
In addition, appreciation and recognition are also human needs, be the praise and reward from the boss or the respect from colleagues, friends, patients, caregivers or roommates. It is very important to be invested in and promoted. Having the opportunity to help people should actually help encourage nurses and bring happiness to the doer but not make you sick.

Again, incorporating family-friendly working conditions by reduction of working hours is a very important tool. Reduction of working hours represents an important measure to achieve more flexibility in the course of employment and private life. Also, an adapted work after parental leave should be available so that parents would not have problems having family leave after delivery (Bundesvorstand, 2012, S. 26).

### 6.3 Protective factors for work interruption

The organization or resources should make it possible to extend the processing time at which a task should be completed. Late completion of task should be without consequences. The situation could also be compensated in which persons that are more experienced or can perform task switching faster at a greater speed with no problems should be given the more elaborated tasks.
7 Conclusion and Discussion

Personal Care for people who need care due to effects of aging, illness, injury or other physical impairments represents a profession that requires social communication, helpfulness and human sympathy in which people are emotionally highly recommended. From the questionnaire and the interview conducted in this study, it is clear that nurses as in the elderly homes or stationed hospitals, have more mental and physical workloads and emotional exhaustion due to the high responsibility that they have, lack of recognition and respect, chronic staff shortage, confrontation with dying or dead patients, permanent exposure to organizational management, time pressure, dealing with difficult patients, high staff turnover and income unsatisfactory. The long term results of these stressful factors are seen through the first stages of depression as confirmed in this study.

The study of NSWHN supports the questionnaire that was used in this study that, job strain and overloads variable showed a significant relation to depression.

Their results reflected that, depressed nurses were nearly twice as likely to be experiencing severe job strain. Despite several researches from different Institutes and study, there is still not yet a general accepted and significantly valid concept on Depression in Health Care professionals. Generally, depression is a very complex process, which is accompanied by several factors such as working conditions, life experience, hereditary and personality traits.

Raising awareness and enlightenment in this context as important for nurses or supervisors is a first step in tackling this situation. It is very important to know the development of this disorder and the connection it has with working under pressurizing conditions so that necessary preventive measures could be implemented. Not only healthcare organizations need new orientation but the political level must also deal with this issue and develop suggestions for improvement as well as calling for a fruitful collaborations and cross-functional cooperation within the health sector.
References


### Enclosure 1

<table>
<thead>
<tr>
<th>Major Symptom: Depressed mood, Loss of interest, anhedonia, avolition, increased in fatigability</th>
<th>= 2</th>
<th>=2</th>
<th>=2</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
<td>+</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>= 2</td>
<td>= 3-4</td>
<td>≥4</td>
<td></td>
</tr>
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Additional symptom: reduced concentration and attention, low self-esteem and self-confidence, feelings of guilt and worthlessness, negative and pessimistic prospects for the future, suicidal ideation/-actions, Insomnia, decreased appetite

Severity level

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<th>moderate</th>
<th>severe</th>
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Other Symptoms

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<th>Somatic Symptoms?</th>
<th>Psychotic symptoms?</th>
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<tbody>
<tr>
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<td>yes</td>
</tr>
<tr>
<td>no</td>
<td>yes</td>
</tr>
</tbody>
</table>

Depressive Episode

Process

<table>
<thead>
<tr>
<th>Mono-phasisch</th>
<th>Rezidi-ieren-</th>
<th>bipolar</th>
</tr>
</thead>
</table>

ICD - 10

| F 32.xx | F33.xx | F31.xx |

„Diagnosable depressive episodes“
Symptoms of Burnout

**Emotional exhaustion**

The feeling of overwork, indifference, exhaustion, aggression, depression

- I have no strength no more
- I will give up soon

**Depersonalization**

Loneliness, crises in a relationship, socially reserved

**Reduced efficiency**

Diminished in capacity, lack of concentration

- Why should I do it?
- I feel so empty
# Enclosure 3

## PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

**NAME:** 

**DATE:** 

Over the last 2 weeks, how often have you been bothered by any of the following problems?

* (use "v" to indicate your answer)

<table>
<thead>
<tr>
<th></th>
<th>Not at all</th>
<th>Several days</th>
<th>More than half the days</th>
<th>Nearly every day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Little interest or pleasure in doing things</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2. Feeling down, depressed, or hopeless</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3. Trouble falling or staying asleep, or sleeping too much</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4. Feeling tired or having little energy</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5. Poor appetite or overeating</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6. Feeling bad about yourself—so that you feel a failure or have let yourself or your family down</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7. Trouble concentrating on things, such as reading the newspaper or watching television</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9. Thoughts that you would be better off dead, or of hurting yourself</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

**TOTAL:** 

---

(Healthcare professional: For interpretation of **TOTAL**, please refer to accompanying scoring card)

---

10. If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- Not difficult at all
- Somewhat difficult
- Very difficult
- Extremely difficult
Enclosure 4

Questionnaire

Place  1 = "Ukraine"  2 = "Baden Württemberg"  3 = "Bremen"  4 = "Ghana"

Gender  1 = "male"  2 = "female"

Age

Marital status  1 = "in a relationship/ married and living together"  2 = "in a relationship/ not living together"  3 = "single"

Children  1 = "yes"  2 = "no"

Department

1. How long have you work as a nurse?
2. Do you work full time or part time?  1 = "full time"  2 = "part time"  3 = "all"
3. Do you work Early, late or night shift?  1 = "Early"  2 = "late"  3 = "night"
4. How would you rate your overall health?  1 = "very good"  2 = "good"  3 = "bad"  4 = "very bad"
5. How would you rate your sick days?  1 = "very good"  2 = "good"  3 = "bad"  4 = "very bad"
6. How would you rate your daily work you feel particularly distressing?  1 = "very stressful"  2 = "stressful"
   i.  3 = "not stressful"
7. Do you get support that helps you with your work stress?  1 = "yes"  2 = "no"  3 = "at times"
8. How is your working environment at your work?  1 = "very good"  2 = "good"  3 = "bad"  4 = "very bad"
9. Do you get clear with situations with dying patients and emergency?  1 = "yes"  3 = "maybe"
10. Do you have recognition and appreciation from patients and colleagues?  1 = "yes"  2 = "no"  3 = "at times"
11. How do you resolve conflicts at your work?  1 = "talk to the person first"  2 = "don’t talk to the person"
   1.  3 = "report to authorities"  4 = "get out of their way"
12. How do you find difficult patients?  1 = "very stressful"  2 = "stressful"  3 = "not stressful"
13. Does the direct contact with the patient strain you too much?  1 = "yes"  2 = "no"  3 = "maybe"
14. Are you satisfied with your work by the contributing to your success? 1 = "yes" 2 = "no" 3 = "maybe"
15. Are you emotionally exhausted in conjunction with the Organization? 1 = "yes" 2 = "no" 3 = "maybe"
16. Are you disturbed by the redundancies and labor disturbances (e.g. phones?) 1 = "yes" 2 = "no" 3 = "at times"
17. Do your working hours load you? 1 = "yes" 2 = "no" 3 = "maybe"
18. How much do your working hours stress you? 1 = "very stressful" 2 = "stressful" 3 = "not stressful"
19. How do you describe the work scope, distribution and drainage?
20. Trouble falling or staying asleep, or sleeping too much 1 = "not at all" 2 = "several days" 3 = "more than half the days" 4 = "nearly every day"
21. Feeling tired or having little energy 1 = "not at all" 2 = "several days" 3 = "more than half the days" 4 = "nearly every day"
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23. Feeling bad about yourself-or that you are a failure, or have let yourself or your family down 1 = "not at all" 2 = "several days" 3 = "more than half the days" 4 = "nearly every day"
24. Trouble concentrating on things such as reading the newspaper or watching television 1 = "not at all" 2 = "several days" 3 = "more than half the days" 4 = "nearly every day"
25. Moving or speaking so slowly that other get people could have noticed or opposite 1 = "not at all" 2 = "several days" 3 = "more than half the days" 4 = "nearly every day"
26. Thoughts that you would be better off dead 1 = "not at all" 2 = "several days" 3 = "more than half the days" 4 = "nearly every day"
27. How hard has it been for you to come along with friends, work, and home 1 = "Not difficult at all" 2 = "somewhat difficult" 3 = "very difficult" 4 = "extremely difficult"
Declaration

I hereby declare that, the present work was independently made by me. Only specified literature and tools were used in this work. Contents that were taken literally or from other sources are identified as such. This work was supported in identical or similar form nor submitted to any other examination board.

Ort, Datum

Vorname Nachname