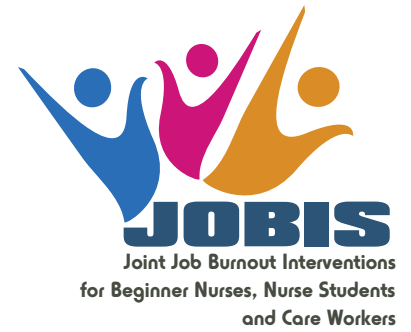




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# Report on Burnout Syndrome Curriculum training among Erasmus+ JOBIS partnership

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## ABSTRACT

Burnout syndrome is common among health care professionals, although in novice nurses and care workers has not been explored adequately. Burnout may affect different dimensions of functionality, including physical, mental and social life. Moreover, productivity is low and providing care may become problematic among health care professionals suffering from burnout symptoms.

This report aims to provide information on the burnout research among nurses in partners' country, about careworkers in the case of Italy and the training opportunities offered by universities and other associations in collaboration with Ministry of Health.

By this comparative report, the similarities and differences concerning training needs will be identified and the results will be integrated in the development of the blended training developed in the framework of the Erasmus+ project Joint Job Burnout Interventions for Beginner nurses, nursing students and care workers.

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## INTRODUCTION

The most common manifestation of prolonged work stress is the burnout syndrome characterized by emotional exhaustion, depersonalization and perception of diminished professional accomplishments (Maslach & Leiter, 1997, Maslach, 2001). Nurses, as well as other health care professionals and workers, affected by burnout experience gradual loss of positive feelings about their work, themselves and the people they care for (Karanikola, et al, 2007). Additionally, health care professionals with burnout symptoms are more prone to work absence, low work productivity, low work satisfaction and more sick leaves (Camerino et al., 2006)

According to a recent systematic review on burnout syndrome and compassion fatigue, Maslach burnout inventory is the most used instrument in assessing burnout symptoms and the reported prevalence in the Intensive Care units ranges between 14% and 70% (van Mol et al, 2015). Burnout syndrome may also influence the quality and safety of delivered care (Humphries et al., 2014). Moreover, data show that novice nurses are more prone to experience burnout symptomatology (Tei-Tominaga & Miki, 2010). In particular, there is evidence that approximately 5% of novice nurses quit their jobs during the first 15 months of their employment in clinical settings (Suzuki et al., 2010). The factors identified to be associated with resignations among novice nurses during the first two years of employment are burnout, workplace dissatisfaction, location of the hospital/ workplace, perceived lack of support from peers and supervisors, and job dissatisfaction (Suzuki et al., 2010; Suzuki, Itomine, Saito, Katsuki, & Sato, 2008; Tei-Tominaga & Miki, 2010).

Novice nurses and those who have just started working as qualified nurses are vulnerable in developing health-related problems, while they frequently make errors, precisely because they are inexperienced and therefore they lack effective skills (Ketelaar et al, 2015). Data show that nurse managers have low expectations in comparison with nurse educators regarding the skills and competencies of novice nurses, whereas there is an agreement concerning the skills required for patient care, professionalism, acting with ethics and responsibility (Numminen et al., 2014).

Care is also provided by workers who are not professionals, thus not formally educated in delivering care services, usually called "care workers". It is clarified that care workers are not employed in health care settings, however they are employed in other types of care facilities, the most frequent of which is home care sector (Fedyuk & Bartha, 2014). According to a recent report by the International Labour Organisation, migrant domestic workers encounter problems of social isolation and exclusion, lack of access to health care, sexual abuse and violence and health hazards ranging from acute to chronic health issues (Castagnone, Salis, & Premazzi, 2013; Menegatti, 2009). Recommendations on the health and safety issues of care workers

focuses on advocacy, research, policy and capacity building (Menegatti, 2009).

Care workers constitute an under-researched target population, as in most cases they are not formally employed, since they are considered as domestic helpers. However, during the last decade non-governmental organizations are focusing on this population, providing relevant descriptive data. According to the EUROFAMCARE study on informal care (2006) families in Southern Europe rely on the services provided by migrant care workers. Migrant care workers are defined as *“informal carers, usually women from third countries who are privately employed by older persons or their family members to meet the needs for domicillary support and care. The contribution provided by the care workers exceeds by far the contribution of formal care supplied by public or private organizations in social care, though local authorities”* (Di Santo & Ceruzzi, 2010).

It is estimated that approximately 700.000 migrant care workers provide care services at home in Italy (Castagnone et al., 2013; Di Santo & Ceruzzi, 2010). The main difficulties that care workers of people with dementia encounter during their work are language barriers, lack of free time and respite and communication problems with the employers. (Efthymiou et al, 2011). However, to the best of our knowledge, there is lack of published research data, concerning the degree of work-related stress experienced by care workers employed for the care of children or elderly at home.

## AIM

The aim of this report is to record the educational, training and supporting sources regarding burnout prevention and care-related stress management in each country-member of the consortium. This will allow a comparison among existing programs and relevant reflection to be drawn with regard to the development of capacity building.

## METHOD

Taking into consideration the objectives of the current report, baseline information has been collected regarding burnout research and the way care workers and/or novice nurses in each country are trained and educated with regard to care-related stress management and burnout prevention.

All 5 partners have reported on the available research by filling in relevant table including information such as: participant, study, sample design, results, publication.

Each partner included a summary text of the results of each relevant paper. The majority of the papers are published in partners' national language. The partners, provided information on the curricula available from their institution or by other public body on burnout topic and relevant skills. The form concerning curricula info included 5 columns: participant, type of studies, module, subject, hours and ECTS.

The data are not representative of the countries involved as they include only a small number of associations and universities, focusing on the Erasmus+ Jobis partnership. The results are presented by country in 3 parts: a) a brief summary of burnout research, b) curriculum content regarding teaching subjects related to burnout, c) brief profile of the institutions providing training.

## DATA COLLECTION ON BURNOUT

### ROMANIA

#### A brief summary on burnout research (annex 1)

In Romania, nurses represent a large category of the health care professions, reaching 190000 in 2013 and rising to 245710 in 2017. Recently, a number of changes such as wages cuts, lack of medical supplies, lack of adequate number of staff per ward, excessive working hours affect the workload, increases job pressure and decreases the quality of life (Burnout project Report, 2014). There are few scientific data regarding the prevalence of burnout among Romanian nurses. A comparative study on the level of burnout among doctors and nurses has revealed significant differences between doctors and nurses, with nurses to be more emotionally exhausted and suffer from depersonalisation more than doctors (Bria et al., 2011).

Predictive factors may be type A personality, age, professional experience and their role at work and at home (Bria, 2013; Rusu & Ghica, 2016). Popa et al., (2010) have found that gender, age and marital status are not correlated with burnout while work experience is a strong predictor of burnout. It seems that high job demands in combination with insufficient resources may be a predictive factor for burnout (Bria, Băban, Andreica, & Dumitraşcu, 2013). Moreover, if the job satisfaction is high, the risk of developing burnout syndrome lowers, and it seems that young nurses with no work experience are most affected by burnout (Ştefenel & Ştef, 1999).

#### Curriculum content regarding teaching subjects related to burnout

| PARTICIPANT   | STUDIES                                | MODULE                              | SUBJECT            |  | HOURS     | ECTS |
|---|--|-------------------------------------|--------------------|--|-----------|------|
| Ministry of Health in partnership with 13 Nurses Schools; | Postsecondary Nursing School (3 years) | Module 3-general medical psychology | Medical Psychology | "Stress, coping mechanisms, risk factors"<br>"Stress coping, individual and with others" | 4-7 hours | 5    |
| University of Medicine and Pharmacy                       | Bachelor degree (4 years)              | Module 5-Medical psychology         | Medical Psychology |  | 7 hours   | 5    |



## Brief profile of the institutions providing training

There are several state and private universities including nursing faculties.

| University   | Specialty        | ECTS | Schooling numbers |
|--|------------------|------|-------------------|
| UNIVERSITY OF MEDICINE AND PHARMACY "CAROL DAVILA" BUCUREȘTI       | General Nursing  | 240  | 100               |
|  | Midwifery        | 240  | 15                |
| UNIVERSITY OF MEDICINE AND PHARMACY "GR. T. POPA" IAȘI             | General Nursing  | 240  | 200               |
| UNIVERSITY OF MEDICINE AND PHARMACY „IULIU HAȚIEGANU “ CLUJ-NAPOCA | General Nursing  | 240  | 100               |
|  | Midwifery        | 240  | 25                |
| UNIVERSITY „LUCIAN BLAGA” SIBIU                                    | General Nursing  | 240  | 75                |
| UNIVERSITY OF MEDICINE AND PHARMACY "VICTOR BABEȘ" TIMIȘOARA       | General Nursing  | 240  | 100               |
| UNIVERSITY "PETRU MAIOR" TÂRGU MUREȘ                               | General Nursing  | 240  | 100               |
| UNIVERSITY OF ORADEA   | General Nursing  | 240  | 200               |
| UNIVERSITY "TITU MAIORESCU" BUCUREȘTI                              | General Nursing  | 240  | 50                |
| UNIVERSITATEA "APOLLONIA" DIN IAȘI                                 | General Nursing  | 250  | 40                |
| UNIVERSITY "CONSTANTIN BRÂNCUȘI" TÂRGU JIU                         | General Nursing  | 240  | 30                |
|  | Midwifery        | 240  | 30                |
|  | Pharmacy nursing | 180  | 30                |

There are also state postsecondary nursing schools in Bucuresti, Iasi, Braila, Arad, Craiova schooling all nurses' specialties, as well as numerous private postsecondary nursing schools all over the country.

The main differences between nursing bachelor degree and nursing postsecondary school are:

- for the bachelor degree the duration of studies is 4 years, while for the nursing school only 3;
- baccalaureate diploma is needed at entrance for the bachelor degree, but not for nursing school;
- tuition fees are substantially higher for nursing bachelor degree;
- nursing bachelor degree provide a more advanced curriculum and higher number of clinical practice courses;
- salaries of nurses graduating bachelor degree are higher, they have the possibility to continue studies with masters` degree and PhD, they can become nurse trainers for continuous education, follow an academic career and be appointed in health management positions.

## POLAND

### **A brief summary on burnout research (annex 2)**

In Poland, since 2005 the healthcare system has been reformed in an effort to improve service provision by improving health care information, reducing corruption, promoting advocacy and quality of services (Burnout project Report, 2014).

In a recent study among Polish nurses, Ptaszek & Graf, (2014) investigated the nurses opinions towards personal burnout, work-related burnout and burnout in dealing with patients. Most of the nurses are aware of the risk of burnout in the workplace, and almost all of them are able to recognize the symptoms of burnout. Among the nurses that participated in the research, personal burnout is recognized as a physical and mental tiredness and exhaustion.

Most of the nurses are sometimes tired of their work with patients and they often wonder if they are/could be able to do their work in the future and consider their work with the patient as a difficult and little frustrating(Ptaszek & Graf, 2014).

According to a survey realised among 100 nurses in Podkarpackie district, lack of respect for the nurse represents the most stressful factor at work in 80% of the respondents. This is followed by complaints from patients and their families (71%), patients under the influence of alcohol (44%), and fast pace of work (27%). 39% of the nurses diagnosed themselves with burnout, while 35% believed they were at risk of burnout (Lewandowska & Litwin, 2009).

### Curriculum content regarding teaching subjects related to burnout

| PARTICIPANT                                       | STUDIES                           | MODULE                                  | SUBJECT  | HOURS  | ECTS |
|---|-----------------------------------|---|--|--------|------|
| University of Humanities and Economics in Łódź PL | Graduate Nursing Degree BA degree | Social Studies                          | Psychology   | 6hrs   | 2    |
|   |                                   |   | Philosophy and Ethics of Nursing                                     | 3hrs   | 2    |
|   |                                   |   | Communication (workshop – subject offered by AHE)                    | 20 hrs | 0    |
|   |                                   | Science in the field of nursing care    | Fundamentals of nursing  | 3hrs   | 16   |
|   |                                   |   | Mental health promotion  | 2hrs   | 4    |
|   |                                   | Science in the field of specialist care | Palliative care  | 2hrs   | 6    |
|   | Master degree                     |   | Theories of nursing  | 2hrs   | 2    |
| Regional Chamber of nurses and midwives           | Psychological workshops           |   | Dealing with the emotional burden of nurses (Management of emotions) | 10 hrs |      |
|   |                                   |   | Psychological service of medical customer                            | 10 hrs |      |
|   |                                   |   | Techniques of dealing in contact with a difficult patient            | 10 hrs |      |
|   |                                   |   | Coping with stress and prevention of burnout syndrome                | 10 hrs |      |
|   |                                   |   | Strengthening the self-esteem of medical staff                       | 10 hrs |      |
|   |                                   |   | Personal and professional development. Self-presentation on the job  | 10 hrs |      |

|  |  |  |   |        |  |
|--|--|--|---|--------|--|
|  |  |  | market  |        |  |
|  |  |  | Psychological principles of providing support to patients and coping with emotional burden          | 10 hrs |  |
|  |  |  | Developing communication skills and skills in support for women in the perinatal period by midwives | 10 hrs |  |
|  |  |  | Effective cooperation in task group   | 10 hrs |  |

**INFORMATION ON SPECIFIC MODULES RELATED TO THE BURNOUT SYNDROME (University of Humanities and Economics in Łódź)**

BA degree

**Social science**

|        |   |            |
|--------|---|------------|
| B.W8.  | Student learns the techniques to reduce anxiety as well as the ways of burnout prevention. Student learns the causes of burnout and its impact on the quality of life | Psychology |
| B.U14. | Student uses techniques to prevent burnout syndrome   | Psychology |

**Science in the field of nursing care**

|        |   |                         |
|--------|---|-------------------------|
| C.W50. | Student indicates the role of the nurse in the burnout prevention, aggression, violence and bullying in different periods of human life | Mental health promotion |
| C.U68. | Student undertakes diagnostic and prevention actions regarding the violence, aggression, bullying and burnout.                          | Mental health promotion |

**MASTER DEGREE**

|       |   |                     |
|-------|---|---------------------|
| A.W41 | Student describes the most well-known theories of needs and gives their main assumptions                        | Theories of nursing |
|       | Student explains the mechanisms responsible for the appearance of stress as well as ways of coping with stress. | Theories of nursing |

**Brief profile of the institutions providing training**

**University of Humanities and Economics in Lodz (AHE)**

“University of Humanities and Economics in Lodz (AHE) is an accredited higher education institution and provides bachelor, master, postgraduate, PhD studies and courses for various

target groups. The university focuses on educational research, innovative teaching and e-learning. Among our key fields of study and research there are: nursery, pedagogy, psychology, innovative teaching and learning methods, social problems, EQF and NQF". More information you may find at the University website page ([www.ahe.lodz.pl](http://www.ahe.lodz.pl))

### **Regional Chamber of Nurses and Midwives in Łódź**

Supreme Chamber of Nurses and Midwives in Warsaw is represented by the Regional Chambers in every voivodeship (province) in Poland <http://www.oipp.lodz.pl/>

an organizational unit of the professional (vocational) council, bringing together nurses and midwives, registered in the nurses and midwives register. It has been established to represent the professional, social and economic interests of the professions of nurses and midwives.

Main tasks (samples):

1. Monitoring the quality of nurses and midwives profession
2. setting professional standards and qualification standards applicable to individual workplaces;
3. integrating nurses and midwives vocational backgrounds
4. representation and protection of nurses and midwives profession
5. health education and health promotion.
6. Giving the licence to practice profession
7. educational and scientific activities
8. opinions on vocational training programs
9. conducting postgraduate education of nurses and midwives
10. Giving the opinion on the professional responsibility;
11. publishing activities;

## **LITHUANIA**

### **A brief summary on burnout research (annex 3)**

According to relative research realized among Lithuanian nurses, the intensity of stress and the increased workload is expressed by nurses as burnout syndrome (Glumbakaitė et al., 2007). Additionally, in a sample of 638 community nurses, high job demands are associated with mental distress, with high demand and low social support to be the strongest factors of mental distress among nurses in the Kaunas district in Lithuania (Malinauskienė et al., 2009).

Furthermore, in a comparative study realised in different hospital departments, there was no statistical difference in personal burnout among nurses working in surgical and therapeutic units and in work-related burnout and patient-related burnout. The job satisfaction seems to be a predictive factor for the levels of burnout in contrast with workload and family status (Zilaitiene et al, 2010 , Gerikienė & Kraponavičiūtė, 2014). “Death and dying”, “conflict with physicians” and “patients and their families: are the most stressful situations reported by nurses in public primary care centers in Lithuania (Galdikiene, Asikainen, Balčiunas, & Suominen, 2014)

In a descriptive study among nurses from 29 teams in 18 different primary health care centres, individual and team level stress have been identified. Workload tended to cause more stress in larger teams. Background factors of the teams had little association with the subcategories of stress (Galdikiene, Asikainen, Balciunas, & Suominen, 2016). Low salary, workload, working hours, negative comments about the results of work, changes of work conditions, handling of documentation are correlated with emotional exhaustion among nurses of surgical and therapeutic departments. Moreover, nurses depersonalization and colleagues negative comments are correlated (Jonikienė & Grigaliūnienė, 2013). In another study conducted among 231 health care professionals (including nurses), mental health nurses had the most negative attitudes towards seeking for psychological help when compared to other specialties (Endriulaitienė et al., 2016).

## Curriculum content regarding teaching subjects related to burnout

| PARTICIPANT                                   | STUDIES  | MODULE/S<br>SUBJECT                                      | SUBJECT/TOPIC   | HOURS       | ECTS   |
|---|--|--|---|-------------|--------|
| Klaipeda State University of Applied Sciences | Professional Bachelor Degree in Nursing                | Psychology   | Nurses occupational stress<br>Stress coping strategies and methods  | 4           |        |
|   |  | Pathology  | Symptoms and consequences of stress<br>Stress as a response of the whole body   | 1           |        |
|   |  | Health Education   | Symptoms and consequences of professional burnout<br>Coping of professional burnout   | 1           |        |
|   |  | Basics of Stress and Self-regulation (elective subjects) | Psychological concept of stress<br>The response of organism to stressors and stress effects<br>Professional burnout<br>Stress in terms of personality development<br>Stress symptoms, stress causing factors (stressors) Stress and personality<br>Stress in organizations<br>Stress of employees of different occupations<br>Ways of the self-regulation/management of stress<br>Proper and improper ways of stress management | 4<br>4<br>4 | 3 ECTS |
|   | Nursing specialization – Anesthesia and Intensive Care | Intensive Care   | Stress management<br>Burnout syndrome in Intensive Care (causes and prevention)   | 2           |        |
|   | Nursing specialization – Operation Care                | Operation Care   | Nurses occupational stress in Operation Care<br>Stress management in Operation Care   | 2           |        |

## **Brief profile of the institutions providing burn out training**

### **Klaipeda State University of Applied Sciences**

The modules of Bachelor Degree in Nursing studies are provided at Klaipeda State University of Applied Sciences. Also, Klaipeda State University of Applied Sciences has Adult Training and Service Centre which is responsible for continue education.

### **Lithuanian Ministry of Health**

Lithuanian Ministry of Health is responsible for Nursing specialization programmes and continue education courses for nurses and nurses' assistants, as universities programmes have to get an approval from Ministry of Health before start to implement specialised training. Most of the Nursing specialization programmes and continue education courses are already provided at Klaipeda State University of Applied Sciences.

## **CYPRUS**

### **A brief summary on burnout research (annex 4)**

According to the RN4CAST SURVEY IN CYPRUS, (2016), the profile of 950 nurses is presented, with mostly female (67%) nurses, between 25-34 years old and with university degree and 11 mean working years. RN has the responsibility of an average number of 3- 5.4 patients per ward. Nurses report that they work more hours than the contracted ones. A large percentage, disagree on the opportunities provided through their work for career development (66%) and for participation in policy decisions (77%). They also report that there aren't enough registered nurses to provide quality care to patients in a percentage of 67% and adequate praise and recognition of their work (64%). Overall, almost half of the sample was satisfied of the current job (47% moderately satisfied and 9% satisfied). On this specific survey, burnout syndrome was correlated with age and years of experience, with older nurses and nurses with more registered years to report less burnout levels.

In another survey conducted by Raftopoulos et al.,(2012), a total of 1,482 nurses (80.4% were females) working both in the private and public sectors completed and returned an anonymous questionnaire that included several aspects related to burnout; the MBI scale, questions related to occupational stress, and questions pertaining to self reported fatigue. Two-thirds (65.1%) of the nurses believed that their job is stressful with the majority reporting their job as stressful being female nurses (67.7%). Twelve point eight percent of the nurses met Maslach's criteria for burnout. The prevalence of fatigue in nurses was found 91.9%. The prevalence of fatigue was higher in females (93%) than in males (87.5%) (p = 0.003). As opposed to the burnout



prevalence, fatigue prevalence did not differ among the nursing departments ( $p = 0.166$ ) and among nurses with a different marital status ( $p = 0.553$ ). Burnout can be associated adequately knowing if nurses find their job stressful, their age, the level of emotional exhaustion and depersonalization. It has been shown that the fatigue may be thought of as a predictor of burnout, but its influence is already accounted by emotional exhaustion and depersonalization.

Additionally, a descriptive correlational study among all Psychiatric-Mental Health Nurses ( $n=256$ ) employed in hospital and community mental health settings in Cyprus showed that the mean score ( $\pm$ SD) for emotional exhaustion was  $14.87(\pm 9.5)$ ,  $6.53(\pm 5.3)$  for depersonalization and  $34.49(\pm 8.7)$  for perceived professional accomplishments according to Maslach Burnout Inventory, all denoting moderate degree of Burnout syndrome. Furthermore, it was shown that work-related stress might be associated with psychiatric symptoms in Greek-Cypriot Psychiatric-Mental Health Nurses, leading to altered professional attitudes (Karanikola & Papathanassoglou, 2013). The same study revealed that female community mental health nurses (CMHNs) seemed to esteem their professional accomplishments higher than male MHNs working in hospital based settings (t-test,  $p=0.003- 0.0006$ ). Additionally, CMHNs seem to have higher levels of emotional exhaustion than hospital based nurses (t-test,  $p=0.006$ ). These findings may support targeted interventions in relation to institutional settings and nurses' organizational empowerment.

#### Curriculum content regarding teaching subjects related to burnout

| TEACHING RELATED TO STRESS, BURNOUT, BURDEN AND PREVENTION |                               |   |  |       |      |
|--|-------------------------------|---|--|-------|------|
| PARTICIPANT  | STUDIES                       | MODULE  | SUBJECT  | HOURS | ECTS |
| Cyprus<br>University of<br>Technology                      | Graduate<br>Nursing<br>Degree | Fundamentals of<br>Nursing                        |  |       |      |
|  |                               | Introduction to<br>Nursing Science                | Theory of<br>stress and<br>coping                                | 2     |      |
|  |                               | The<br>Multidimensional<br>problem of<br>Dementia | Care giver<br>burden   | 2     |      |
|  |                               | Mental Health<br>Nursing II                       | Theoretical<br>Background<br>of Burnout<br>syndrome in<br>Nurses | 4     |      |
|  |                               | Communication in<br>Nursing                       |  |       |      |
|  |                               | Nursing   |  |       |      |

|                            |   |  |  |   |  |
|----------------------------|---|--|--|---|--|
|                            |   | Management                               |  |   |  |
|                            | Courses for dementia carers                     |  | Care giver burden  | 2 |  |
|                            | Post Graduate Nursing Specialty (Mental Health) | Implications in Mental Health Nursing II | Theoretical Background of Burnout syndrome in Mental Health Nurses   | 4 |  |
|                            | Master's Degree                                 |  |  |   |  |
|                            | Mental Health                                   | Empowerment & Communication in Nursing   | Introduction to work-related coping strategies for empowering nurses | 6 |  |
|                            | Community Nursing                               |  |  |   |  |
|                            | Intensive Care                                  |  |  |   |  |
| Ministry of Health, Cyprus | Continuous education courses                    |  |  |   |  |

### **Brief description of the institutions providing training**

#### **Cyprus University of Technology**

The Cyprus University of Technology was founded in Limassol in 2003. Departments have the objective to provide education to students of a high scientific, technological and professional level, to produce high quality research that will transcend the traditional boundaries between basic and applied research, to attain an important position as a partner in a modern, European setting and to secure significant external research funding, to promote

University cooperation with local industry and the economic sector in order to participate in the national effort to innovate and constantly improve products and services.

The Graduate programme of the Department of Nursing has been designed to comply with the relevant professional requirements leading to nursing registration, as required by the relevant legislation.

## ITALY

### **A brief summary on burnout research (annex 5)**

In Italy, there is lack of nursing personnel, with 5.4 nurses for every 1000 inhabitants according to OECD relevant report. Low salary, less and expensive training opportunities, inconvenient working hours are some factors influencing the decision for early retirement made by Italian nurses. Additionally, the needs of this specialised service provision is regularly covered by migrant nurses with much worse work conditions in comparison to Italian nurses (Burnout project Report, 2014).

Job satisfaction is associated with burnout levels. Greater the satisfaction lower is the likelihood for burnout syndrome according to Renzi, et al (2005) and Violante et al.,(2009). Factors influencing burnout may be acute cases, high levels of anxiety, use of drugs for mental disorders and being a migrant nurse from extracommunitarian country (Violante et al., 2009). Interestingly, emotional exhaustion was frequently the result among nurses over 40 years old working at oncology wards with over 15 years of registered work (Quattrin et al., 2006). Burnout levels of nurses working in general hospital wards are higher in comparison with specialised hospitals such as dermatological clinics (Renzi, et al, 2005). In a sample of 329 doctors and nurses working with people with HIV, burnout was correlated with coping style, depression and anxiety. Behavioral disengagement and depression predicted high level of emotional exhaustion and depersonalization (Dorz, et al, 2004).

Research among Italian nurses at dialysis centre and apheresis units reveals lower medium burnout and stress levels (Argentero et al., 2008; Klersy et al., 2007; Tremolada et al., 2015). On the other hand medium-high level of burnout is encountered among nurses working in oncology unit, but this is not repeated in pediatric oncology unit, where professionals report medium –low burnout levels (Italia et al, 2008). More specifically, according to a study by Quattrin et al., (2006), 35% of nurses working at the oncology wards reported high level of emotional exhaustion, 17% high levels of depersonalization and 11% of personal achievement. This is also the case in other studies by Violante, et al (2009) and Tabolli,et al (2006) with emotional exhaustion to be present at 28% and 38% respectively.

### **Burnout research and migrant careworkers in Italy**

Few data is provided concerning the Italian careworkers and burnout levels and management skills. According to the report of migrant careworkers in Italy by Di Santo & Ceruzzi, (2010), in the region Liguria, the project “Lavoro doc. Buone prassi nel lavoro di cura” has been promoted to assess caregiving skills of migrant careworkers including: basic skills required when working

at home (rights and duties, contract, people involved in the care, language skills and available services), technical-professional skills (mobility issues, how to handle bureaucratic issues, managing everyday needs of the people in need-diet, hygiene, collaboration with medical staff). Finally, careworkers were assessed on the multi-level skills including interpersonal skills, communication skills, learning how to adapt, build trust, intimacy and keep professional distance, handle emergency and combine personal and working life skills.

Qualification and training courses of caregiving skills for migrant careworkers are provided by a number of Italian regions (Di Santo & Ceruzzi, 2010):

| <i>Region</i>         | <i>Hours of training</i> | <i>Title/certification</i>             | <i>Credits for OSS (1)</i> | <i>Laws</i>  |
|-----------------------|--------------------------|--|----------------------------|--|
| Abruzzo               | 400                      | Qualification                          |                            | DGR 04-05-2009, NR 207   |
| Campania              | 120                      | Certified competences                  |                            | DGR 2843/2003  |
| Emilia Romagna        | 120                      | Certified competences                  | x                          | DGR 924/2003   |
| Friuli Venezia Giulia | 200                      | Certified competences                  | x                          | LR 28-52 del 1 ottobre 2004<br>DGR 1232 dd. 14/05/2004             |
| Lazio                 | 120<br>300               | Certified competences<br>Qualification |                            | DGR 31 luglio 2007   |
| Liguria               | 200                      | Certified competences                  | x                          | DGR 287/2006   |
| Marche                | 100                      | Certified competences                  |                            | DGR 118/2009   |
| Piemonte              | 200                      | Certified competences                  | x                          | DGR n. 46 – 5662 del 25 marzo 2002                                 |
| Toscana               | 300                      | Qualification                          | x                          | DD 7/197 del 18/12/2002  |
| Sardegna              | 200                      | Certified competences                  |                            | DGR N. 45/24 DEL 7.11.2006<br>Prot. N.5422 Cagliari,<br>04.07.2007 |

Source: elaboration of Studio Come srl on the basis of regional laws. Note: (1) Operatore socio-sanitario (Health and social care assistant)). Not all Regions recognize credits of their courses for becoming an OSS.

### **Curriculum content regarding teaching subjects related to burnout**

Please note: according to decree 119/2009 that disciplines health-related university degrees in Italy, the standard curriculum for nurses does not include any compulsory module on burn-out related topics. As a consequence, each University has the flexibility to include it in any module they deem appropriate. In the table below, only two examples are presented, taken from the University of Modena and the University of Florence.

Concerning care workers and assistant nurses, the topic of burn out is not part of any standardized curriculum: not for assistant nurses (see State-Regions agreement 22/2/2011 on the professional profile and curriculum of assistant nurses) and neither for domestic care workers (whose profile is regulated only in some Italian Regions)., therefore each VET provider

is free to include the topic in the training programme or not. For this reason, here only one example is reported.

| PARTICIPANT                         | STUDIES                          | MODULE   | SUBJECT   | HOURS | ECTS |
|-------------------------------------|----------------------------------|--|---|-------|------|
| Anziani e non Solo (VET provider)   | Course for domestic care workers | Communication                                      | Caregiver burden  | 2     |      |
| Modena and Reggio Emilia University | Nursing Degree                   | General Psychology 2: Community and Family Nursing | Burnout Syndrome for Health carers and caregiver Burden | 2     |      |
| University of Florence              | Nursing Degree                   | Helpful Relation                                   | Burnout Syndrome  | 1,5   |      |

### **Brief description of the institutions providing burn out training**

#### **Universities- nursing degree**

It is a bachelor's degree programme, 3 years of duration (180 Credits).

The degree programme in Nursing is designed to train healthcare professionals responsible for the provision of nursing assistance within the context of community service. Students will receive a thorough preparation in the following areas: clinical practice; patient care; communication strategies; patient guidance. Career opportunities range from medical assistance to health education and disease prevention, and from teaching to research.

Course content: The training of professional nurses includes theoretical study as well as clinical and practical application (internship). The programme's core coursework is related to the field of nursing, namely a study of how to respond to the needs of individuals suffering from health problems. The programme combines traditional lectures with an innovative approach based on interactive activities and work in small groups. Internships take place in public or private local facilities under the supervision of tutors and internship advisors. Before an internship, students will train in teaching labs with mannequins and other instructional aids, simulating the nursing practices learned in the lectures.

## **Anziani e non solo**

ANS is an NGO supporting formal and informal carers through training, evidence-based research, community based services and advocacy.

The training course for domestic care workers is a vocational training of 52 hours aimed to provide basic skills and knowledge to people working as domestic care workers of older persons. [Note: this is not a compulsory qualification as in Italy you don't need any title to be privately employed by households]

The training is very practical and covers the main topics of geriatric care: nutrition, nursing, house-keeping, first aid etc. There is a module about communication where we introduce the concept of burn out.

## CONCLUSION:

### **Comparative exercise of educational systems on burnout syndrome and related skills:**

This brief comparative exercise has assisted in understanding the different needs in partners' associations and the differences of the educational systems. From the above partners' curricula is made clear that the educational systems are quite different on the way they handle burnout issue in each country.

In the case of Poland, Lithuania and Cyprus at the degree level, student nurses gain knowledge on different skills that would facilitate them in managing burn out, through the modules:

- Social studies / Psychology
- Pathology and stress coping theories,
- Health Education
- Science in the field of nursing care,
- Science in the field of specialist care,
- Fundamentals of Nursing
- The Multidimensional problem of Dementia
- Mental Health Nursing
- Communication in Nursing
- Nursing Management

In Poland and the University of Humanitis and Economics in Łódź, 38 hours are focused on skills required to manage burnout syndrome through the subjects of: psychology, philosophy and ethics of nursing, communication, fundamentals of nursing, mental health promotion and palliative care.

In Lithuania and the Klaipeda State University of Applied Sciences, burnout topic is addressed in 22 hours including subjects as: nurses occupational stress, stress coping strategies and methods, symptoms and consequences of stress, stress as a response of the body, symptoms and consequences of professional burnout, coping of professional burnout, stress in organizations, stress of employees of different occupations, ways of the self-regulation/management of stress, stress management. Additionally, in nursing specialization, two modules: Intensive Care and Operation Care deals with stress and burnout through the subjects: burnout syndrome and stress management in Intensive care, occupational stress and stress management in Operation

In Cyprus University of Technology, 14+ hours are devoted on the subjects: theory of stress and coping, carer's burden, theoretical background of burnout syndrome, communication, nursing management and theoretical background of burnout syndrome in mental health nurses.

In Romania and Italy, few data have been retrieved and few hours are reported in training for managing nurses' burnout syndrome.

In Cyprus and Poland, burnout and stress management courses are provided by the continuous education system of the Ministry of Health and the Region Chamber of Nurses and Midwives.

In different countries, we encounter differences in the educational systems. In degree level, the universities, included in this exercise, provide opportunities for training on burnout and stress management in a variety of modules. There are also opportunities in the nursing specialization as reported in the case of Lithuania and the continuous education provided by the Ministry of Health and Nurses and Midwives Association in Cyprus and Poland. Few data are reported in higher degrees as in the case of Master degrees. In Romania, we encounter the postsecondary training, with burnout training being part of the curriculum.

Furthermore, in Italy, the association Anziani e non solo organizes training and qualification for the domestic care workers, who regularly are responsible for the care of frail people at home and usually are not trained professionals. Instead careworkers regularly learn new skills on the job and this includes risk of malpractice. This training programme has been included as the ANS will focus on this specific domain in the framework of Jobis Erasmus+ project. Overall there is lack of burnout training programmes for this population and only during last five years, researchers are focusing their attention towards management of burnout and training needs of the domestic careworkers.

In the majority of the consortium countries few information is available on the training needs and working conditions of domestic care workers. In 2011, the ILO Convention on Decent work for domestic workers promotes the rights of care workers around the globe and tries to raise awareness on the working needs of this job, which is regular excluded by the labour law and usually is underrecognised, underpaid and unprotected. For example, in Cyprus there is a high percentage of migrant careworkers from non-EU countries. The state has tried to regulate the working conditions of non-EU migrant domestic workers, but they are regularly excluded of health and social insurance benefits and there is no intention for new law regulation. Only in 2014, 20303 foreigners registered as domestic careworkers in Cyprus, with main country of origin: Philippines, Vietnam, Sri Lanka and India. Cyprus immigration policy can be characterized as employer driven or sponsorship based. There is no available information on the skills and training conditions of careworkers (Pavlou, 2016)

Concluding, there is need to develop tailored modules for the needs of each partners' institution, taking into consideration the research realized on this specific domain and also the burnout prevalence data in the cases where this is available.



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## ANNEX 1

## ROMANIA – RESEARCH RESULTS

| AUTHORS   | STUDY  | SAMPLE  | DESIGN/ TOOLS   | RESULTS  | PUBLICATION DETAILS   |
|---|--|---|---|--|---|
| Bria ,M., Ratiu, L., Baban, A, Dumitrascu, D.L., 2011 | Burnout regarding Nurses, Medical residents and Doctors                | Nurses, Medical residents and Doctors;                            | Maslach Burnout Inventory and Areas of Work-Life Survey | Data showed that 14.6% of the participants presented pronounced symptoms of burnout, while 47.8% are in the risk category for developing burnout. Also, it shows that there is a correlation between professional experience (time to create adaptive methods) and the risk of developing burnout. | Scientific Paper<br>Article carried out by Bria, Lucia Ratiu and Adriana Baban from Babeş-Bolyai University, Faculty of Psychology and Educational Sciences and Dan Dumitrascu from University of Medicine and Pharmacy Iuliu Hațieganu published in Clujul Medical 2011 Vol. 84 - Supliment no. 1                    |
| Stoika, M & Mihai, A,                                 | Comparative study regarding the level of burnout in Doctors and Nurses | Doctors and Nurses;   | Maslach Burnout inventory                               | Results show that there are significant differences between doctors and nurses, nurses are more emotionally exhausted and suffer from depersonalization more than doctors.   | Scientific Paper<br>Mihaela Stoica, Associate Prof., PhD, ” Dimitrie Cantemir ” University of Tîrgu-Mureş and Adriana Mihai, Associate Professor, PhD, University of Medicine and Pharmacy, Tîrgu-Mureş, published in Globalization, Intercultural Dialogue and National Identity, Section – Psychology and Sociology |
| Rusu, D., Ghica, C., 2016                             | The Burnout syndrome – trigger of a paradigm change                    | Nurses working in stressful environment; (surgery, intensive care | COPE Survey, Maslach Burnout Inventory                  | Results show that nurses with type A personality are more vulnerable in developing   | Scientific Paper<br>Medical journal of Bucovina, vol.II, no. I, 2016  |

|   |  |                                |   |   |   |
|---|--|--------------------------------|---|---|---|
|   |  | units)                         |   | burnout.  | Dan Rusu, Camelia Ghica from Municipal Hospital „Sfinții Doctori Cosma și Damian” Rădăuți;  |
| Bria, M. 2013,                          | Burnout syndrome among medical health professionals                                    | Health Professionals           | Maslach Burnout inventory                       | The results show that burnout divides in 4 categories, social and demographic factors, psychosocial, occupational and organizational factors and it affects Romanian nurses according to age, professional experience and role at work and at home. | Scientific Paper<br>Babeș-Bolyai University, Faculty of Psychology and Educational Sciences<br>PhD. Thesis of Mara Bria;  |
| Stefenel, D & Stef, L., 2009            | Professional satisfaction and burnout syndrome in health staff: a qualitative approach | Health Professionals           | MBI-HSS, Maslach Burnout Inventory-Human Survey | Data shows that if the job satisfaction is high, the risk of developing burnout syndrome lowers, and the most affected by burnout are young nurses with no work experience.   | Scientific Paper<br>Delia Stefenel PhD at Faculty of Sociology and Social Assistance, University of Bucharest and Laura Stef from “Lucian Blaga” University of Sibiu, published in AMT, vol II, no. 2, 2009, page. 19;                        |
| Bria, M., Baban, A., Andreira, S., 2012 | Burnout and Turnover Intentions Among Romanian Ambulance Health Professionals          | Ambulance Health Professionals | Maslach Burnout Inventory-General Scale         | Data shows that there is a burnout pattern composed by small level of exhaustion and very high cynicism levels. High job demands combined with insufficient resources are predictive for burnout.   | Scientific Paper<br>Maria Bria, Adriana Baban, Sorin Andreica, Babeș-Bolyai University, and Dan Dumitrascu from University of Medicine and Pharmacy Iuliu Hațieganu published - 3rd World Conference on Psychology, Counselling and Guidance; |



|   |  |  |  |   |   |
|---|--|--|--|---|---|
| <p>Popa, F., Arafat, R., Purcarea, V.L., Lala, A., Popa-Velea, O., Bobirnac, G,2010</p> | <p>Occupational burnout levels in Emergency Medicine – a stage 2 nationwide study and analysis</p> | <p>Emergency and Critical care Hospital departments;</p> | <p>The Maslach Burnout Inventory – Human Services Survey MBI-HSS</p> | <p>Results were that gender, age and marital status are not correlated with burnout while work experience is a strong predictor of burnout.</p> | <p>Scientific Paper<br/> *“Carol Davila” University of Medicine and Pharmacy, and<br/> Romanian Ministry of Health, published in Journal of Medicine and Life Vol. 3, No.4, October-December 2010, pp.449-453</p> |
|---|--|--|--|---|---|

ANNEX 2

POLAND- RESEARCH RESULTS

| AUTHORS  | STUDY   | SAMPLE   | DESIGN/TOOLS                       | RESULTS  | PUBLICATION DETAILS   |
|--|---|--|------------------------------------|--|---|
| Lewandowska, A.,<br>Litwin, B. 2009                | <b>Burnout as an occupational risk for nurses</b> | 100 nurses in Podkarpackie district (hospital) | Questionnaire survey               | <p><b>Annex1</b><br/><b>Annex 2</b></p> <p>More than half of the surveyed nurses (56%) declared that they chose their job to help others, while 15% gave priority to the prestige of this profession. According to 80% of the respondents, lack of respect for the nurse represents the most stressful factor at work. This is followed by complaints from patients and their families (71%), patients under the influence of alcohol (44%), and fast pace of work (27%). 39% of the nurses diagnosed themselves with burnout, while 35% believed they were at risk of burnout</p>   | <p>annales academiae medicae stetinensis roczniki pomorskiej akademii medycznej w szczecinie 2009, 55, 3, 86–89</p> |
| Ptaszek, G., Stolecka, B., Graf, L., Sleziona, M., | <b>Burnout syndrome among nurses</b>              | 120 nurses in Śląsk district (hospital)        | Copenhagen Burnout Inventory (CBI) | <p><b>Annex 3</b><br/><b>Annex 4</b></p> <p>Most of the nurses are aware of the risk of burnout in the workplace, and almost all of them are able to recognize the symptoms of burnout.</p> <p>Among the nurses that participated in the research, personal burnout is recognized as a physical and mental tiredness and exhaustion and it sometimes happens.</p> <p>Physical and mental tiredness and exhaustion experienced by the nurses during their duties recognized as a work-related burnout rarely happens (it happens in a small degree). Majority of the study group never, or in a small extent, faces the problem with this kind of exhaustion, but a few of the respondents have always these problems in a large extent</p> | <p>Specialist Nursing, March 2014 no 1(4)</p>   |

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|  |   |                           |   | <p>what could prove that they have already experienced burnout.</p> <p>Burnout in dealing with patients: most of the nurses are sometimes tired of their work with patients and they often wonder if they are/could be able to do their work in the future. Most of the respondents consider their work with the patient as a difficult (in a large extent) and as a little frustrating.</p> |  |
| <p>Renn-Żurek A.,<br/>Tokarski Z.,<br/>Wydawnictwo AHE<br/>Łódź, 2016.</p> | <p><b>Stress and burnout among nurses – how to recognize and prevent it. (Author: Głowacka Agnieszka)</b></p> | <p><b>THE ARTICLE</b></p> | <p>Abstract: Promoting mental health is one of the tasks which a nurse should carry out. Unfortunately, nurses are often burdened with excessive responsibilities and forget about their health. Therefore, the problem of chronic stress and burnout is high in our occupational group. Due to the scope of stress among nurses, it is important to possess accurate knowledge as possible. Fortunately, there are various the forms to help to fight their problem.</p> <p>The progress of civilization has increased the pace of life. The result is that in everyday life we are dealing with the acute and chronic stress. It is practically unavoidable, but it is possible to limit its level. The source of stress is the defective organization of work, poor quality of the outsourcing companies and the heavy burden of duties. Therefore, nurses feel in their workplace nervous and undervalued. The question is how we can help ourselves in the fight against stress?</p> <p>THE MOST INTERESTING FINDING FROM THE ANALYSIS OF THE RESEARCH THAT CONCERNS BURNOUT</p> <p>Epidemiological studies prove that 30% of medical personnel is at the risk of burnout</p> <p>There is a positive correlation between the degree of burnout and the number of places of employment, and there is a negative correlation between the number of years of work</p> | <p>Renn-Żurek A.,<br/>Tokarski Z.,<br/>Wydawnictwo AHE<br/>Łódź, 2016.</p>   |  |

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|  |  |  | <p>and the level of burnout</p> <p>Burnout strongly correlates with stress, but the experience of stress does not have as many negative consequences as the lack of ability to cope with it</p> <p>When the person does not have sufficient resources to cope with the situation, there is a consolidation of stress what affects the chronic occupational stress. Therefore, this kind of stress is seen as the main source of burnout</p> <p>The available research shows that burnout should be seen also as a axiological problem. It facilitates the violation of ethical values and rules related with work implementation. it can also lead to the loss of moral competence. Burnout can therefore be a cause of ethical conflicts, which the nurse is not be able to solve</p> <p>It is important to react when the early symptoms of burnout are recognized. E.g. dominant feeling of tiredness, appetite and sleep disorders, alcohol, drugs, coffee, amphetamines, tobacco abuse. In the emotional sphere there is: insecurity, a feeling of emptiness and lack of goals, low self-esteem, avoidance of difficult situations</p> <p>Awareness and knowledge about burnout syndrome should be provided for nursing students and other medical staff.</p> |  |
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ANNEX 3

LITHUANIA- RESEARCH RESULTS

| AUTHORS                                    | STUDY   | SAMPLE  | DESIGN  | RESULTS   | PUBLICATION DETAILS  |
|--|---|---|---|---|--|
| Vimantaite R. & Šeškevičius A. 2006        | The burnout syndrome among nurses working in Lithuania cardiac surgery centers. | Nurses of Cardiac surgery units (GPN, Anesthesia and intensive care, Operation theatre) | Descriptive study, Not-standardized questionnaire created according Maslach burnout inventory adapted to Lithuanian work culture and health care system | The study revealed that 72.8% of nurses had an excess of workload (exceeding full-time job). Most of the respondents (84.4%) pointed out the emotional stress, unevaluated work and underpayment. Three-fourths of the nurses (75%) indicated that they felt physical fatigue after their work. More than half of nurses (67.2%) felt general fatigue, 63.3% reported the leg pains after the work, and 32.2% feel splitting headaches. Psychological fatigue was stressed by 86.1% of specialists. The main causes of psychological stress are as follows: the communication with the doctors in 57% of the cases, communication with the patient's relatives in 52% of cases, communication with the nursing administration in 49% of cases, and communication with the patients in 40% of cases. | Vimantaite R. & Šeškevičius A. 2006. The burnout syndrome among nurses working in Lithuania cardiac surgery centers. Medicina, 42(7), 600-605. |
| Glumbakaitė E., Kalibatas J., Kanapeckienė | Connections with sequels of stress and  | 1095 nurses working at primary  | A quantitative study using Nurses stress Scale (Grey-   | The study has shown that the intensity of stress experienced by nurses is expressed as burnout  | Glumbakaitė E., Kalibatas J., Kanapeckienė V., Mikutienė D., 2007. Connections with sequels of stress and psychological demands on nurses      |

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| V., Mikutienė D., 2007   | psychological demands on nurses working at primary health care centers.   | health care centers in Lithuania                         | Toft, 1981), adapted Maslach Inventory (1981)   | syndrome ( $r = 0.49$ ; $p < 0.001$ ), emotional ( $r = 0.45$ ; $p < 0.001$ ), depression ( $r = 0.44$ ; $p < 0.001$ ) and psychosomatic ( $r = 0.33$ ; $p < 0.001$ ) symptoms. The increasing workload is most often expressed as burnout syndrome ( $r = 0.47$ ; $p < 0.001$ ), emotional ( $r = 0.39$ ; $p < 0.001$ ) and depression ( $r = 0.37$ ; $p < 0.001$ ) symptoms                 | working at primary health care centers. Gerontologija 8(1), 31-38.  |
| Malinauskienė V., Leišytė P., Malinauskas R. 2009                          | Psychosocial job characteristics, social support, and sense of coherence as determinants of mental health among nurses. | 638 community nurses                                     | Mental distress was measured using the Goldberg 12-item General Health Questionnaire and psychosocial job characteristics using the Swedish version of the Karasek Demand-Control questionnaire | High job demands were associated with mental distress after adjustment for age, smoking, alcohol consumption, physical activity, job control, social support, sense of coherence, family crisis, self-rated health as compared to one year ago (OR=2.15; 95% CI, 1.07–4.30), low job control (OR=1.22; 95% CI, 0.64–2.31), job strain-low social support at work (OR=3.78; 95% CI, 2.08–6.87) | Malinauskienė V., Leišytė P., Malinauskas R. 2009. Psychosocial job characteristics, social support, and sense of coherence as determinants of mental health among nurses. Medicina, 45(11), 910-917. |
| Žilaitienė B., Poškienė G., Razbadauskas A., Istomina N., Žiliukas G. 2010 | Burnout syndrome of Klaipeda nurses   | 280 nurses working in the different hospital departments | A quantitative study using two anonymous questionnaires: Copenhagen Burnout Inventory (CBI) and questionnaire consisting  | It was determined that the personal burnout was $44.55 \pm 16.39$ , work-related burnout – $42.05 \pm 13.85$ and client-related burnout was $41.84 \pm 17.59$ . The differences of personal burnout between nurses working in therapeutic units and nurses working in surgical units were not statistically significant   | Žilaitienė B., Poškienė G., Razbadauskas A., Istomina N., Žiliukas G. 2010. Burnout syndrome of Klaipeda nurses. Sveikatos mokslai (Health sciences) 5, 3568-3572.                                    |

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|   |   |  | of 15 questions prepared by the authors was carried out.  | ( $p > 0.05$ ). There were no statistically significant differences ( $p > 0.05$ ) of work-related burnout and client-related burnout between nurses working in different hospital profile units also. Respondents, who considered their working conditions to be good had statistically significantly lower burnout average than respondents, who considered their working conditions to be bad ( $p < 0.05$ ). The burnout level did not depend on the workload ( $p > 0.05$ ) and family status ( $p > 0.05$ ). However, lonely parents, growing up two children or childless lonely parents, experienced less burnout symptoms than not lonely parents growing up two children or childless not lonely parents ( $p < 0.05$ ) |   |
| Galdikiene N., Asikainen P., Balciunas S., Suominen T. 2014 | Do nurses feel stressed? A perspective from primary health care | 187 nurses from 18 public primary care centers                             | Descriptive study using Expanded Nursing Stress Scale (ENSS) developed by French <i>et al.</i> (2000) | The most stressful situations were "death and dying," "conflict with physicians," and "patients and their families," and the least stressful were "discrimination" and "problems with peers."   | Galdikiene N., Asikainen P., Balciunas S., Suominen T. 2014. Do nurses feel stressed? A perspective from primary health care. <i>Nursing &amp; Health Sciences</i> , 16, 327-334.               |
| Jonikienė G., Grigaliūnienė V. 2014.                        | Nurses experienced Stressful Events and Professional Burnout    | 198 nurses. 92 from surgical departments and 106 – therapeutic departments | Professional burnout used adapted for medical staff „Professional burnout                             | Emotional exhaustion most strongly correlated with low salary ( $r = 0,436$ , $p = 0,000$ ) and workload, working additional hours ( $r = 0,410$ , $p = 0,000$ ). Also, emotional exhaustion strongly correlated with negative comments about the results of work   | Jonikienė G., Grigaliūnienė V. 2014. Nurses experienced Stressful Events and Professional Burnout Interface. <i>SLAUGA. Mokslas ir praktika (Nursing. Science and Practice)</i> , 6(2010), 4-5. |

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|                                | Interface.  |  | questionnaire prepared by Vodopjanova N. based on the Maslach Burnout Inventory (MBI).   | ( $r=0,391$ , $p=0,000$ ). More often nurses got a claims and reproaches higher their emotional exhaustion was found ( $r=0,360$ , $p=0,000$ ). Correlation was found between emotional exhaustion and changes of work conditions and working hours ( $r=0,379$ , $p=0,000$ ) and handling of documentation ( $r=0,325$ , $p=0,000$ ). Also, correlation between experienced stressful factors and depersonalization scale was found. Most stronger correlation was determined between depersonalization scale and answers „have you got a claims and reproaches from patients” ( $r=0,452$ , $p=0,000$ ) and “have you got a claims and reproaches from patients family” ( $r=0,353$ , $p=0,000$ ). Study results show the clear correlation between nurses depersonalization and colleagues negative comments about their work results ( $r=0,342$ , $p=0,000$ ). Also, reliable correlation observable with workload ( $r=0,326$ , $p=0,000$ ). Statistically significant correlation was found between lack of personal accomplishment and to low salary ( $r=0,159$ , $p=0,037$ ). |   |
| Gerikienė V., Bartkutė D. 2014 | The correlations of nurses professional satisfaction factors with | 74 (N=92) general practice nurses working in therapy profile departments | Questionnaire consisted from nurses' professional satisfaction factors (Gerikienė, 2014) | The correlations of professional satisfaction factors with the burnout components show the problems and the possibilities of nurses job. 1 figure demonstrate how nurses distributed between emotional exhaustion, depersonalization and personal   | Gerikienė V., Bartkutė D. 2014. The correlations of nurses professional satisfaction factors with the burnout components. Profesinės studijos: teorija ir praktika (Professional studies: theory and practice), 13, 7-12. |



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|                    | the burnout components.  |  | and Maslach, Jackson, Leiter (1996) professional satisfaction questionnaire (MBI-HSS). The professional burnout components were divided to 3 levels according to Siu, Yuen, Cheung (2012, cit. Maslach, Jackson, Leiter, 1996).  | accomplishment.  |  |
| Gerikienė V. 2015. | The relationship between nurses' attitude toward work and work satisfaction and burnout syndrome | 74 (N=92) general practice nurses working in therapy profile departments | Questionnaire consisted from nurses' attitude to nurses' profession (Gerikienė, 2007) and Maslach, Jackson, Leiter (1996) professional satisfaction questionnaire (MBI-HSS). The professional burnout components were divided to 3 levels according to Siu, Yuen, Cheung (2012, cit. | The aim of the research is to analyse the correlations of nurses attitude toward work with the burnout syndrome and work satisfaction. The research results show the correlations ( $p < 0.05$ ) of nurses attitude toward work with the burnout components and work satisfaction. | Gerikienė V. 2015. The relationship between nurses' attitude toward work and work satisfaction and burnout syndrome. Profesinės studijos: teorija ir praktika (Professional studies: theory and practice), 15, 7-12. |

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|   |  |   | Maslach, Jackson, Leiter, 1996).   |  |   |
| Galdikiene N., Asikainen P., Balciunas S., Suominen T. 2016   | Experienced stress among nursing teams in primary health care                      | Data was conducted among nurses from 29 teams (187) in 18 different primary health care centres | Descriptive study using Expanded Nursing Stress Scale (ENSS) developed by French <i>et al.</i> (2000)  | The stress experienced by nurses depends on the team. The study results reveal both individual and team level stress. The effect of the team size is moderate, but the background factors of the teams had little association with the sub-categories of stress. Workload tended to cause more stress in larger teams. At the nurses' team level, a strong positive correlation was found between all of the stress subcategory areas investigated, except for that of "discrimination". Different teams followed different stress profiles, but based on their common features, various clusters were identified which should be noticed by management. | Galdikiene N., Asikainen P., Balciunas S., Suominen T. 2016. Experienced stress among nursing teams in primary health care. <i>Clinical Nursing Studies</i> , 4(1), 81-89.  |
| Endriulaitienė A., Žardeckaitė – Matulaitienė K., Markšaitytė R., Pranckevičienė A., Doug R. Tillmanc D.R., Hofc D.D. 2016. | Burnout and Stigma of Seeking Help in Lithuanian Mental Health Care Professionals. | 231 health care professionals (nurses included also)  | Burnout of mental health care professionals was assessed using Lithuanian version of Maslach Burnout Inventory – General Survey (MBI-GS, Schaufeli, Leitner, Maslach, & Jackson, 1996, | Emotional exhaustion was dominating in all groups of professionals, while lack of professional efficacy was the lowest component of burnout. Mental health nurses had the most negative attitudes towards seeking for psychological help when compared to psychologist, psychiatrists and social workers. Self-stigma of   | Endriulaitienė A., Žardeckaitė – Matulaitienė K., Markšaitytė R., Pranckevičienė A., Doug R. Tillmanc D.R., Hofc D.D. 2016. Burnout and Stigma of Seeking Help in Lithuanian Mental Health Care Professionals. <i>The European Proceeding of Social &amp; Behavioural Sciences</i> EpSBS, eISSN: 2357-1330, 254-265.<br><a href="http://dx.doi.org/10.15405/epsbs.2016.07.02.25">http://dx.doi.org/10.15405/epsbs.2016.07.02.25</a> |

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|  |  |  | translated<br>by A.<br>Endriulaitienė & G.<br>Genevičiūtė-<br>Janonienė) | seeking help correlated<br>significantly with higher psychologists' and<br>nurses' levels of burnout. |  |
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ANNEX 4

CYPRUS – RESEARCH RESULTS

| AUTHROS  | STUDY  | SAMPLE   | DESIGN   | RESULTS  | PUBLICATION DETAILS   |
|--|--|--|--|--|---|
| Papastavrou, E., Merkouris, A., Efstathiou, G. Et al, 2016 | Results of RN4CATS-CY survey in Cyprus   | Nurses acute care                                | Maslach  | Almost half of the sample was satisfied of the current job and burnout syndrome was correlated with age and years of experience, with older nurses and nurses with more registered years to report less burnout levels.  | Report to the MoH   |
| Karaniola MN, Papathanassoglou EE., 2013                   | Exploration of the burnout syndrome occurrence among mental health nurses in Cyprus.             | 226 Greek – Cypriot Psychiatric – mental nurses  | Self reported questionnaires: Hamilton Anxiety Scale, Beck Depression Scale, Maslach Burnout Inventory   | Participants reported low levels of burnout. However, 10% of them manifested clinically significant anxiety and depressive symptoms. Emotional exhaustion and depersonalization were associated with depressive ( $r=0.562$ , $p<0.0001$ , and $r=0.616$ , $p<0.0001$ , respectively) and anxiety ( $r=0.394$ , $p<0.0001$ , and $r=0.448$ , $p<0.0001$ , respectively) symptoms. Further research investigating the biological aetiopathology of these psychological alterations is warranted | Karaniola MN, Papathanassoglou EE. Arch Psychiatr Nurs. 2013 Dec;27(6):319-26. doi: 10.1016/j.apnu.2013.08.004).  |
| Raftopoulos V1, Charalambous A, Talias M, 2012             | The factors associated with the burnout syndrome and fatigue in Cypriot nurses: a census report. | 1482 nurses working in private and public sector | nonymous questionnaire that included several aspects related to burnout; the MBI scale, questions related to occupational stress, and questions pertaining to self reported fatigue. | In total, 12, 8 met burnout criteria. The prevalence of fatigue in nurses was found 91.9%. and was higher in females. Burnout can be associated with job stress, age, the level of emotional exhaustion and depersonalization.   | Raftopoulos, V., Charalambous, A., Talias, M. (2012). The factors associated with the burnout syndrome and fatigue in Cypriot nurses: a census report. BMC Public Health 20 (12): 457 |

ANNEX 5

ITALY – RESEARCH RESULTS

| PUBLICATION            | STUDY  | SAMPLE   | DESIGN   | RESULTS   | PUBLICATION DETAILS |
|------------------------|--|--|--|---|---------------------|
| Klersy et al, 2007     | “Burnout in Health care providers of dialysis service in Northern Italy- a multicenter study”    | Nurses and physicians working in dialysis units  | Maslach Burnout Inventory; MOS-36; GHQ30   | Burnout scores were lower than Italian normative sample, with no significant differences between physicians and nurses. However 30% of nurses had high emotional exhaustion vs 18% of physicians. | Scientific Paper    |
| Tremollada et al, 2015 | “Stress, Burnout and Job Satisfaction in 470 Health Professionals in 98 Apheresis Unit in Italy” | Nurses and physicians working in apheresis units | Self- Report Questionnaires: Socio-demographic questionnaire, Job Satisfaction Scale (JSS), Health Professions Stress and Coping Scale (HPSCS), Link Burnout Questionnaire (LBQ) | Stress levels of nurses were mostly low (57,7%) or medium (25,7%) while physicians showed medium and high stress levels.  | Scientific Paper    |

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| Italia et al, 2008    | "Evaluation and art therapy treatment of the burnout syndrome in oncology units" | Nurses and Doctors working in oncology unit (adult and pediatric) | Maslach Burnout Inventory  | Data showed a medium-high level of burnout in professionals working in an adult oncology unit and a medium-low level of burnout in professionals working in a pediatric oncology unit. Burnout decreased after a program of art therapy interventions.   | Scientific Paper |
| Quattrin et al, 2006  | "Level of Burnout Among Nurses Working in Oncology in an Italian Region"         | Nurses working on oncology wards                                  | Questionnaire divided into three parts: sociodemographic and job characteristics of the population, Maslach Burnout Inventory, perceptions about coping mechanisms and strategies adopted by the organization to help nurses cope with stress. | 35% of the nurses had high level of emotional exhaustion; 17% had a high level of depersonalization and 11% had a high level of personal achievement. Significantly high levels of emotional exhaustion were found in nurses older than 40 with a working seniority of more than 15 years. An important cause of stress reported by nurses is poor organization. | Scientific Paper |
| Argentero et al, 2008 | "Staff Burnout   | Nurses and  | Maslach Burnout  | Overall burnout  | Scientific Paper |

|                      |   |  |                           |  |                  |
|----------------------|---|--|---------------------------|--|------------------|
|                      | and Patient Satisfaction with the quality of Dialysis Care”   | Physicians working in a Dialysis unit  | Inventory                 | scores were lower than the Italian normative sample, with no significant differences between physicians and nurses. Data showed that high levels of burnout in physicians and nurses were associated with poor patient satisfaction in dialysis units.           |                  |
| Renzi et al, 2005    | “Burnout and job satisfaction comparing healthcare staff of a dermatological hospital and a general hospital” | Nurses and Physicians working in a dermatological hospital and a general hospital. | Maslach Burnout Inventory | Among both physicians and nurses, job satisfaction was associated with a lower likelihood of burnout, independently of clinical specialty. Nurses working in a general hospital, compared with those working in dermatology had a higher probability of burnout. | Scientific Paper |
| Galletta et al, 2016 | “Working and Environmental Factors on Job Burnout: A Cross-   | Nurses from an Italian hospital  | Maslach Burnout Inventory | Considering the total sample, the results showed moderate levels of burnout for all the three  | Scientific Paper |

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|----------------------|---|---|--|--|---------------------------------------|
|                      | sectional Study among Nurses”   |   |  | dimensions. Comparing nurses with low and moderate/high burnout levels, the results showed a significant difference in all the three components and for almost all the examined organizational variables (organizational empowerment, workload, job control, team quality).                |                                       |
| Violante et al, 2009 | “Correlation between job satisfaction and stress factors, burn-out and psychosocial well-being among nurses working in different healthcare settings” | Nurses working in different context: hospital wards for acute patients, units for long-term patients, and home care for chronic patients. | Questionnaire composed by socio-demographic, burnout (Maslach Burnout Inventory), stress and psychosocial (INRS) standardized variables. | About 30% of the total sample is unsatisfied, 28% of the sample suffered emotional exhaustion, 20% depersonalization and 43% declared a low level of personal accomplishment. Data showed that coming from extracommunitarian Countries, working with acute patients, home-care of chronic | Scientific Paper (Article in Italian) |



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|                     |   |  |  | patients, assumption of psychodrugs and anxiety were factors significantly associated with a low job satisfaction compared the other subgroups.   |                                       |
| Tabolli et al, 2006 | “Job satisfaction, burnout and stress amongst nursing staff: a survey in two hospitals in Rome” | Nurses working in two Italian hospitals  | Maslach Burnout Inventory, General Health Questionnaire (GHQ-12) and a validated questionnaire to examine job satisfaction.        | Emotional exhaustion was observed in 38% of respondents. About 33% of respondents showed a GHQ-12 score typical for disorders such as anxiety or depression. High levels of job satisfaction were found to be associated to a lower likelihood both of emotional exhaustion at MBI and psychiatric morbidity at GHQ-12. | Scientific Paper (Article in Italian) |
| Dorz et al, 2004    | “Burnout syndrome among health workers caring for AIDS patients: predictive variables”          | Nurses and doctors working with people with AIDS in 20 hospitals of North-Centre Italy | Maslach Burnout Inventory, Coping Orientations to Problems Experiences (COPE), State-Trait Anxiety Inventory (STAI) and Depression | The results suggested important correlations among burnout, coping style, depression and anxiety. Inadequate strategies used as Focusing on and Venting of emotion,   | Scientific Paper (Article in Italian) |

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|-----------------------|--|---|---|---|--|
|                       |  |   | Questionnaire (DQ).   | Behavioral Disengagement and depression predicted high level of Emotional Exhaustion and Depersonalization.   |  |
| Labardini et al, 2013 | “Stress and burnout among nursing students: a descriptive study” | Nursing Students of the University of Milan | Stress quick evaluation (VRS), a self-evaluation scale to estimate the adaptive reaction on stressful events and the Burnout Potential Inventory (BPI-Short Version). | Results showed that distress was present in most of the students maintaining high levels throughout the three years of the course. The risk of burnout syndrome was present in half of the students. The presence of distress in students was mainly due to the lack of free time and the low perceived quality of social relationship. | Scientific Paper (Article in Italian)<br><a href="http://www.ipasvi.it/ecm/rivista-linfermiere/rivista-linfermiere-page-17-articolo-206.htm">http://www.ipasvi.it/ecm/rivista-linfermiere/rivista-linfermiere-page-17-articolo-206.htm</a> |
| Duzi et al, 2014      | “Burnout Syndrome in Nurses”                                     | Nurses working in an Italian hospital       | Maslach Burnout Inventory, Burnout Potential Inventory (BPI)  | For what concern chronic diseases wards, the level of emotional exhaustion was high in the 12% of nurses, medium in the 25% and low in the 63%. BPI showed a low risk   | Scientific Paper (Article in Italian)<br><a href="http://www.ipasvi.it/ecm/rivista-linfermiere/rivista-linfermiere-page-23-articolo-275.htm">http://www.ipasvi.it/ecm/rivista-linfermiere/rivista-linfermiere-page-23-articolo-275.htm</a> |

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|                   |   |   |  |  |   | of burnout in 96% of the sample.<br>For intensive care wards the level of emotional exhaustion was high in the 32% of the sample, medium in the 26% and low in the 42%. BPI showed a low risk of burnout in 84% of the sample. The highest levels of emotional exhaustion were found in nurses older than 40 with a working seniority of more than 21 years. |
| Zucca et al, 2014 | “Domestic care job’s changes in the daily life: quality of work and validation of skills” | Domestic care workers   | Interviews and self-report questionnaires  | Data showed some psychological and physical disorders due to the practice of the profession: 68% of the sample had back pain and 40,6% referred other physical pains. 39,4% of the domestic care workers referred insomnia and 33,9% referred anxiety or depression.   | Report carried out by Iref (Istituto di Ricerche Educative e Formative), Patronato Acli and Acli Colf (Report in Italian) |  |
| Buria et al, 2013 | “Burnout and its components: a comparison of critical care unit nursing and               | Nurses working in the Department of Emergency and Acceptance, | Maslach Burnout Inventory, Multidimensional Organizational Health Questionnaire (MOHQ) | The results showed that the percentage of presence of burnout in critical care nurses is 0% while for colleagues in wards turned out to be 12%. The critical unit nurses had a greater percentage of emotional exhaustion, than these from ward, but depersonalization component was much lower in the critical care unit nurses than in their ward colleagues. Data showed that depersonalization is the factor | Scientific Paper  |  |

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|--|---------------|--|--|--|--|
|  | ward nursing” | intensive care and nurses working in surgical, medical and pediatric wards |  | which brings health care workers to assume an hostility and cynicism attitude, erupting into a real disease. |  |
|--|---------------|--|--|--|--|



