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**WELL-BEING, HEALTH, AND WORK-LIFE  
BALANCE OF EMERGENCY HEALTHCARE  
WORKERS IN KAUNAS**

**Master Thesis**

**(Study programme Applied Public Health)**

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## SUMMARY

Study programme Applied Public Health

### WELLBEING, HEALTH, AND WORK-LIFE BALANCE OF EMERGENCY HEALTHCARE WORKERS IN KAUNAS

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**Aim of the study:** To assess the associations between subjective well-being, health, and work-life balance among Kaunas city emergency station healthcare workers.

**Objectives:** 1. To determine the work-life balance of emergency health care employees; 2. To assess the subjective well-being and health of the research population; 3. To compare work-life balance (WLB), subjective well-being (SWB), and health among the different study groups; 4. To evaluate associations of the SWB, health, and WLB of the study population.

**Method:** This cross-sectional study was conducted from April to May 2023, aiming to assess the WLB, SWB, and health of workers at a Kaunas city ambulance station. An online questionnaire (encompassing standardized scales European Quality of Life Survey 2016, WHO-5 well-being index, EQ-5D-5L, EQ VAS) link was distributed within a safe email; the calculated sample size was  $n=175$ , the response rate - 35.42%. Data analysis employed descriptive statistics, Chi-square tests, non-parametric tests, correlation analyses, and scatter plots.

**Results:** 67.7% of the respondents reported good WLB, while 32.3% struggled, particularly the younger employees. Common issues included work-related fatigue (79%) and family responsibilities interference (51.6%). The mean WLB score was 6.1 with an SD of 1.57. SWB (mean score 14,  $SD=2.2$ ) was evaluated as better well-being in 51.6% of the participants (scoring above 13), and poor well-being in 48.4% of the healthcare workers. Health assessments highlighted issues in pain/discomfort (58.1%) and anxiety/depression (51.6%), with an average EQ VAS health score of 80. No significant professional differences in SWB, health, or WLB were seen. Significant correlations observed among study participants: WLB and SWB ( $r=0.479$ ,  $p<0.001$ ), WLB and health ( $r=0.366$ ,  $p=0.003$ ), SWB and health ( $r=0.446$ ,  $p<0.001$ ).

**Conclusion:** The study demonstrated that emergency healthcare workers in Kaunas city ambulance station struggle with WLB, with younger workers feeling it most acutely. It also identified issues affecting workers' well-being and health, including high potential depression rates, pain, discomfort, and anxiety, irrespective of age, gender, or role. Despite these prevalent challenges, the study identified

positive correlations between WLB, SWB and health, suggesting that improvements in one area could beneficially impact the others.

**Keywords:** Work-life balance, Subjective well-being, Self-rated Health, Emergency Healthcare workers.

## SANTRAUKA

Studijų programa Taikomoji visuomenės sveikata

### SKUBIOSIOS PAGALBOS DARBUOTOJŲ GEROVĖ, SVEIKATA, DARBO IR ASMENINIO GYVENIMO BALANSAS KAUNE

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**Tikslas:** Įvertinti Kauno miesto greitosios medicinos pagalbos stoties sveikatos priežiūros darbuotojų subjektyvios gerovės, sveikatos bei darbo ir asmeninio gyvenimo balanso sąsajas.

**Uždaviniai:** 1. Nustatyti skubiosios medicinos pagalbos darbuotojų darbo ir asmeninio gyvenimo balansą; 2. Įvertinti tiriamosios populiacijos subjektyvią gerovę ir sveikatą; 3. Palyginti darbo ir asmeninio gyvenimo balansą (DAGB), subjektyvią gerovę ir sveikatą tarp skirtingų tiriamųjų grupių; 4. Įvertinti tiriamosios populiacijos subjektyvios gerovės, sveikatos ir DAGB sąsajas.

**Metodika:** Šis momentinis epidemiologinis tyrimas buvo atliktas 2023 metų balandžio – gegužės mėn. Tyrimo anketos (su standartizuotomis skalėmis European Quality of Life Survey 2016, WHO-5 well-being index, EQ-5D-5L, EQ VAS) nuoroda buvo išsiųsta saugiu el. paštu; apskaičiuota tyrimo imtis buvo  $n=175$ , atsako dažnis - 35.42%. Duomenims analizuoti buvo naudojamos aprašomosios statistikos (Chi-kvadratas), neparametrinės statistinės analizės testas, koreliacinė analizė ir sklindančių taškų diagramos.

**Rezultatai:** 67,7% tyrime dalyvavę Kauno miesto greitosios medicinos pagalbos stoties darbuotojai nurodė gerą DAGB; 32,3% dalyvių, ypač jaunesni darbuotojai, turi iššūkių palaikant darbo ir asmeninio gyvenimo pusiausvyrą. Dažnos problemos buvo su darbu susijęs nuovargis (79 %) ir kišimasis į šeimos pareigas (51,6 %). Vidutinis DAGB balas buvo 6,1 (SN=1,57). Subjektyvi gerovė (vidutinis balas 14, SD=2,2) buvo įvertinta kaip geresnė 51,6% dalyvių (virš 13 balų), o bloga – 48,4% sveikatos priežiūros darbuotojų. Sveikatos vertinimai išryškino skausmo/diskomforto (58,1 %) ir nerimo/depresijos (51,6 %) problemas, o vidutinis EQ VAS sveikatos balas buvo 80. Koreliacijos parodė reikšmingas sąsajas tarp DAGB ir subjektyvios gerovės ( $r=0,479$ ,  $p < 0,001$ ), DAGB ir sveikatos ( $r=0,366$ ,  $p=0,003$ ) bei subjektyvios gerovės ir sveikatos ( $r=0,446$ ,  $p < 0,001$ ).

**Išvados:** Tyrimas parodė, kad greitosios medicinos pagalbos darbuotojai Kauno miesto greitosios medicinos pagalbos stotyje kovoja su darbo ir asmeninio gyvenimo pusiausvyra, o labiausiai tai jaučia jaunesnio amžiaus darbuotojai. Taip pat buvo nustatytos problemos, turinčios įtakos darbuotojų gerovei ir sveikatai, įskaitant didelį galimą depresijos lygį, skausmą, diskomfortą ir nerimą, neatsižvelgiant į amžių, lytį ar vaidmenį. Nepaisant šių vyraujančių iššūkių, tyrimas nustatė teigiamą koreliaciją tarp darbo

ir asmeninio gyvenimo pusiausvyros, gerovės ir sveikatos, o tai rodo, kad patobulinimai vienoje iš sričių gali turėti teigiamą poveikį kitoms sritims.

**Raktiniai žodžiai:** Darbo ir gyvenimo pusiausvyra, Europos darbo sąlygos, Subjektyvi gerovė, Sveikatos įsivertinimas, Skubios medicinos darbuotojai.

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## **ABBREVIATIONS AND CONCEPT**

CBI – Copenhagen Burnout Inventory

COVID-19 – Coronavirus Disease 2019

dF – degrees of Freedom (commonly used in statistical analysis, inferred)

EQLS- European Quality of Life Survey

EMS – Emergency Medical Services

EQ-5D-5L – European Quality of Life Five Dimensions questionnaire with Five Levels

EQ VAS – European Quality of Life Visual Analogue Scale

EWCTS – European Working Conditions Telephone Survey

ICD-10 – International Classification of Diseases, Tenth Revision

JCQ – Job Content Questionnaire

OECD – Organization for Economic Co-operation and Development

SD – Standard Deviation

SPSS – Statistical Package for the Social Sciences

SWB – Subjective Well-Being

WLB – Work-Life Balance

WHO – World Health Organization

WHO-5 – World Health Organization-Five Well-Being Index

# INTRODUCTION

The Eurofound surveys regularly monitor the quality of life, living conditions, and various health-related factors at the European level, providing crucial insights into the well-being, work-life balance, and overall health of the population (1). This comprehensive data collection is essential for identifying the needs for programs and deeper research into these areas. In the global healthcare landscape, the focus often shifts to socially valued healthcare systems known for their comprehensive services. However, the well-being and health of the healthcare providers themselves within these systems are equally crucial. It is essential to address their unique challenges and ensure their well-being to maintain the quality of care they provide.

## **Research problem**

Globally, the well-being of healthcare workers has been extensively studied with a focus on job stress, organizational support, and work-life balance and their impacts on health outcomes and patient care quality (2, 3). Particularly, emergency healthcare workers are frequently highlighted due to their significant stress levels and significant work-life balance challenges (4). Studies across various regions, including Lithuania, consistently demonstrate a high prevalence of burnout among healthcare professionals, often correlating this burnout with poor work-life balance (5). Specific studies in Kaunas hospitals have also highlighted how the work environment impacts health, showing the clear connection between work conditions and health (6). Despite this, focused investigations into the well-being, health, and work-life balance of emergency healthcare workers within unique geographic and cultural contexts like Lithuania remain scarce. This study aims to bridge this gap by delving into the specific experiences of emergency healthcare workers and exploring the varying levels of issues across different professional roles within the Emergency Station at Kaunas.

## **Relevance of the work**

European studies have highlighted the variability of work-life balance outcomes among individuals across different regions, with some countries reporting more positive experiences than others (2). This variability underscores the influence of regional working policies, cultural expectations, and support systems on work-life balance. In Lithuania, preliminary research has begun to address the broader healthcare environment but has yet to delve deeply into the unique challenges faced by emergency healthcare workers (3). This research aims to bridge this gap by conducting a detailed examination of work-life balance, subjective well-being, and health among emergency healthcare workers in Kaunas City. Employing a cross-sectional observational approach, this study not only seeks to add to the existing literature on healthcare worker well-being but also to contribute specific insights relevant to the

Lithuanian context. Through this lens, the research intends to inform policy and intervention strategies that could enhance the well-being of emergency healthcare workers, thereby improving patient care quality and healthcare delivery within the region.

### **Scientific novelty**

The novelty of this research lies in its targeted examination of a group that has not been extensively studied within the Lithuanian context, that is, the emergency healthcare workers of Kaunas. By applying well-established research methods to explore the relationships between work-life balance, subjective well-being, and health in this new demographic, the study generates fresh insights that extend the existing body of knowledge. Additionally, this research introduces new data on the Lithuanian healthcare system, which could serve as a benchmark for further studies and comparisons both within the country and in similar healthcare systems globally.

### **Theoretical and practical significance of this research**

Theoretically, this study enriches the academic discussion around occupational health by providing new evidence from a unique setting. It extends theories of work-life balance and well-being to include the experiences of Lithuanian emergency healthcare workers, offering a comparative perspective that enhances the global understanding of these issues. Practically, the findings have significant implications for the design of intervention strategies that are culturally and contextually appropriate. They can be used to develop targeted support programs that improve job satisfaction and mental health among healthcare workers, thus positively impacting the overall effectiveness of healthcare delivery in Lithuania.

### **Personal contribution of the author**

My involvement in this research has been comprehensive and hands-on, ensuring the integrity and relevance of the work. From designing the methodology and collecting data through direct surveys to analysing the results and interpreting them within the framework of current academic debates, I have played a pivotal role in every stage. This hands-on approach has not only provided me with a deep understanding of the issues at hand but has also guaranteed that the research adheres to high academic standards. My contribution extends to integrating the findings into broader health policy discussions, aiming to make a tangible impact on the healthcare system in Lithuania. By situating this study within the broader academic discourse and grounding it in recent research, we highlight the unique contribution it aims to make. This investigation not only responds to a global concern but also addresses a significant gap in our understanding of the experiences of emergency healthcare workers in Lithuania, particularly in Kaunas City.

## **AIM AND OBJECTIVE OF THE STUDY**

**Aim:** To assess the associations between subjective well-being, health, and work-life balance among Kaunas city emergency station healthcare workers.

### **Objectives:**

1. To determine the work-life balance of emergency health care employees.
2. To assess the subjective well-being and health of the research population.
3. To compare work-life balance, subjective well-being, and health among the different study groups.
4. To evaluate associations of the subjective well-being, health, and work-life balance of the study population.

# 1. LITERATURE REVIEW

The demands of the modern world are increasing because it is developing too fast. As a result, maintaining a healthy work-life balance has proven challenging, especially for those working in fields that generate a lot of stress, such as emergency medical personnel (4). With that, it is crucial to ensure the well-being of emergency healthcare workers, not just for their own satisfaction and happiness, but also for the quality of care they provide to patients (7). Studies conducted among Kaunas hospital physicians have revealed significant associations between the psychosocial working environment and subjective health (6). Additionally, these studies have indicated a high prevalence of burnout among hospital physicians in the Kaunas region (8). Furthermore, a positive relationship has been observed between work-life balance and various dimensions of burnout (9). We can speculate from this that the work-life balance of hospital physicians in the Kaunas region may be unbalanced. On the other hand, emergency healthcare workers face traumatic challenges daily, which they are trained to handle. However, these experiences can still have an impact on their health or well-being as human beings (10). This challenging work environment is characterized by shift work, high patient turnover, and significant time-sensitive tasks. This demanding and unpredictable setting can lead to high levels of stress and pressure for these workers (4). Moreover, the unpredictable workload in this department can make it challenging to prioritize their own health, potentially disrupting their work-life balance (7). Considering these factors, there is a clear need to comprehensively understand these aspects among emergency healthcare workers. Therefore, this study aims to investigate the work-life balance, subjective well-being, health, and among emergency healthcare workers in Kaunas City. By using a cross-sectional observational approach, the research objectives are to identify the work-life balance of emergency healthcare workers, evaluate their subjective well-being and health, compare these factors across different study groups, and examine their connections. By providing valuable insights into these critical areas, this study aims to promote the development of effective policies and interventions that support the well-being of emergency healthcare workers and ultimately enhance the quality of care they offer to their patients.

## 1.1 Work-Life Balance

Achieving a work-life balance has long been a coveted goal for both individuals and organizations. The concept is defined as “the extent to which an individual is equally engaged in and equally satisfied with his or her work and family role” by Greenhaus in 2003. This definition builds on the work of Marks and MacDermid and identifies three key components: time (i.e. equal division of time between roles), involvement (i.e. equal psychological involvement in roles), and satisfaction (i.e. equal satisfaction gained from both roles) and stated that the balance is not an absolute state but a continuum that reflects an individual's life orientation across roles. At one end of the spectrum is balance, and imbalance at the other.

The concept of work-life balance raises questions about its achievability, particularly for healthcare workers who prioritize work over their own well-being. Additionally, older healthcare workers may have different perspectives on work-life balance than younger workers (11). In Ireland, the healthcare system faced a significant challenge with doctors leaving their positions. To gain valuable insights into the experiences of hospital doctors regarding their work and achieving a healthy work-life balance, a qualitative study was conducted. This research aimed to explore various aspects of work-life balance, including the impact of long working hours, work overload, and the effects on their mental and physical well-being. The findings revealed that a considerable majority of survey respondents (73%) experienced the strain of work-life imbalance, and they openly expressed the detrimental consequences it had on their personal lives and overall well-being. Despite their dissatisfaction with the imbalance, the respondents came to accept it as a prevailing norm within the field of hospital medicine. The study emphasized the significance of health workforce planning, which focuses on ensuring the presence of suitably skilled staff in the right locations and at the appropriate times to deliver quality care. In addition, it highlighted the importance of work-life balance in safeguarding doctors' well-being and promoting their long-term retention within the healthcare profession (11).

Given the significant impact of work-life balance on both our personal and professional lives, it is surprising that there have been relatively few studies conducted specifically on work-life balance among emergency healthcare workers. Although there have been studies conducted in Lithuania that assess psychological work factors and the work environment among healthcare workers in general, there is a dearth of research specifically focused on emergency healthcare workers. Therefore, there is a clear need for further in-depth studies on work-life balance in this specific group.

Outside of Lithuania, work-life balance has been evaluated in European welfare states, revealing that Scandinavian countries generally exhibit better work-life balance (12). In the United States in 2016,

a cross-sectional survey was conducted to examine the clustering of work-life balance behaviors in different work settings and its relationship with burnout and safety culture. This study highlighted the various challenges that healthcare workers face in terms of work-life balance, which can vary depending on their professional role and the length of time they have been in their specialty (13). Furthermore, a study conducted in the United States in 2020 focused on the working conditions of emergency healthcare workers. The findings indicated that adverse working conditions were associated with a higher likelihood of positive screening for depression among these workers (14).

*Previous studies identified the challenges and dynamics of achieving work-life balance among healthcare professionals. Initially defined by Greenhaus, the concept involves balancing time, involvement, and satisfaction between work and personal life. Studies reveal significant struggles among healthcare workers, particularly due to demanding work schedules and organizational norms that often lead to work-life imbalance. This emphasizes the importance of addressing work-life balance issues within the healthcare sector, particularly for emergency healthcare workers, to ensure their well-being and mental health (14).*

## **1.2 Subjective Well-being and Health**

Subjective well-being refers to the individual's subjective evaluation of their life satisfaction, happiness, positive affect, and the absence of negative affect or distress. It is a multi-dimensional construct that encompasses various cognitive and affective factors related to individuals' overall life quality (15). According to the World Health Organisation, health refers to a state of complete physical, mental, and social well-being, not merely the absence of disease or infirmity (16). Health is a multi-dimensional concept that encompasses different aspects of an individual's well-being, including physical, mental, and social health. Prioritizing the well-being and health of healthcare workers is essential for the overall functioning and success of healthcare organizations (9, 17).

A Randomized Clinical Trial was conducted at the Mayo Clinic in Minnesota to promote physician well-being, job satisfaction, and professionalism. The trial involved 74 practicing physicians in the Department of Medicine and incorporated facilitated discussion groups focused on mindfulness, reflection, shared experiences, and small group learning over a period of nine months. The intervention provided participants with protected time for participation. The study demonstrated that by creating a supportive and healthy work environment, healthcare professionals can experience improved well-being, leading to enhanced patient care, increased job satisfaction, and greater organizational effectiveness (18).

The well-being of emergency healthcare workers is influenced by various factors, and understanding these factors is crucial for developing effective interventions. While exposure to traumatic events is inherent to their job roles (9). But studies also revealed that it is not the primary contributor to declining well-being and turnover among Emergency First Responders. (19). Instead, organizational stressors emerge as significant influences, affecting multiple domains of economic, social, physical, and psychological well-being. This highlights the importance of organizational responsibility in fostering a supportive work culture characterized by cooperation, collaboration, mutual respect, and trust. Insufficient trust between supervisors and EFRs, as well as a poor understanding of professional roles, contribute to work-related stress and reduced job satisfaction. Additionally, organizational resources, such as fair pay perception and the availability of safety equipment, impact economic and psychological well-being (19). Another study revealed that peer support, well-designed organizational structures, and employee reward systems balance the negative impact of adverse work factors on emergency department providers' well-being (20). A study was carried out in various European welfare states, uncovering evidence regarding the detrimental effects of an inadequate work-life balance on public health. The research also highlighted the influence of working time regulations and characteristics of the welfare state on employees' work-life balance (12).

*Subjective well-being and health are presented as crucial factors that influence the overall functioning and success of healthcare organizations. Various interventions, such as facilitated discussion groups and mindfulness sessions, have demonstrated positive impacts on healthcare professionals' well-being, leading to improved patient care and job satisfaction. The review highlights the influence of workplace environments and organizational support on the well-being of healthcare workers, suggesting the need for continued focus on developing supportive work cultures. Considering the limited number of studies on the subjective well-being and health of emergency healthcare workers, there is a compelling need to gain deeper knowledge in this field to prevent a forementioned consequences.*

### **1.3 Comparison of Work-Life Balance, Subjective Well-being, and Health**

When studying the comparison of work-life balance among different groups of individuals, differences can be observed based on factors such as gender, professional roles, responsibilities, and marital status. These variations stem from the diverse responsibilities, expectations, perceptions, and behaviors of individuals (12). For instance, individuals who must manage household chores, work, and take care of children may experience work-life imbalance. Conversely, single individuals without dependents may have more time for personal activities and self-care (11). Therefore, marital status and

responsibilities, such as caring for dependents at home, can significantly impact work-life balance, leading to differences among various groups of people (12). Similarly, when studying the comparison of subjective health and well-being among different groups, factors like comorbidities, disabilities, socio-economic conditions, and demographics play a role. These factors can also influence the subjective health and well-being of emergency healthcare workers in various ways (12). Several studies have been conducted among healthcare workers, highlighting the differences in these factors among different groups of individuals.

A study investigating the perceived work environment and well-being of emergency healthcare workers during the COVID-19 pandemic compared different healthcare professionals. The findings revealed that nurses had higher odds of screening positive for depression/anxiety compared to attendings. This indicates that nurses may be more vulnerable to experiencing mental health challenges in the workplace during times of increased stress and crisis (14). These results underscore the importance of considering specific professional roles when examining the well-being of emergency healthcare workers and highlight the need for targeted support and interventions for nurses.

In another study conducted in an emergency department in Aotearoa New Zealand, higher rates of personal burnout were observed among female healthcare professionals, with 47.9% reporting burnout. Among nurses, the prevalence of personal burnout was even higher, with 50.9% experiencing this condition. This research highlights the influence of gender and professional role on burnout levels within the healthcare setting (17). Another study suggests that in terms of the elasticity of life satisfaction with respect to work-life balance, the positive effect is greater for men than for women. This surprisingly suggests that men desire additional time for leisure and personal care more strongly than women (21)

Furthermore, a study conducted among healthcare workers in the United States revealed that individuals with less than 6 months of experience in their respective specialty reported significantly better work-life balance compared to those with more experience. However, no significant differences were observed among other categories of years in the specialty. Additionally, healthcare workers who reported 8-hour shifts had significantly better work-life balance compared to those working other shift lengths (13). Working on the day or night shift also interferes with the overall sleep quality of healthcare workers. A study revealed the proportion of those with poor sleep quality was significantly higher in those working night shifts (74.6%) than those working daytime shifts (67.2%) (22). In a study involving Spanish Palliative Care Professionals, statistically significant differences were found in the well-being of professionals based on their marital status. Particularly, as compared to single professionals, married professionals showed better levels of well-being (23).

*These research articles shed light on various factors that influence the work-life balance, well-being, and health of healthcare workers, such as gender, marital status, profession, and experience in the field. These differences underscore the need for targeted interventions and support systems that consider these varying needs and circumstances to improve the overall health and well-being of healthcare workers.*

#### **1.4 Associations of Subjective Well-being, Health, and Work-Life Balance**

By examining the correlations between subjective well-being, health, and work-life balance, we can gain insight into the interconnections among these factors. One study conducted a survey of emergency healthcare workers during the COVID-19 pandemic and found that the perceived work environment had a significant impact on the well-being of the workers (14). Similarly, another study conducted a systematic review of work-related factors, behavior, well-being outcomes, and job satisfaction of workers in the emergency medical service and found that high job autonomy or job control and positive interactions with patients were associated with increased positive well-being. In contrast, violence, and harassment as well as work overload were detrimental to positive well-being. With that, the quality of the work environment significantly affected the mental health and well-being of the workers (24). Another study investigated the mental and physical factors that influence well-being among South Korean emergency workers and found that job stress, work hours, and sleep quality were significant predictors of poor well-being (25). However, these studies suggest that the work environment is positively associated with well-being and mental health, and a positive work environment and effective stress management strategies are critical to maintaining the well-being of emergency healthcare workers. Evidence from 34 OECD countries indicates a positive correlation between work-life balance and life satisfaction. This relationship was assessed using data from the OECD Better Life Index. The findings also suggest a positive association between self-reported health and life satisfaction (21). On the other hand, a study was done on salutogenic work factors among Swedish primary healthcare employees emphasizes the importance of researching salutogenic work factors, which focus on promoting health and well-being rather than solely preventing disease. It highlights three key areas that are significant for employee health: recovery, work-life balance, and work experiences. Developing interventions and strategies with a salutogenic approach can enhance employee well-being and create healthier work environments (26).

The impact of long working hours on various health outcomes has been extensively investigated in recent years. A study focused on depression and found inconclusive evidence regarding the harmfulness

of long working hours. The review included 22 cohort studies with a total of 109,906 participants, but no significant differences in depression risk were observed across different working hour categories. The authors emphasized the need for further research to better comprehend the association between long working hours and depression (27). Another study examined the relationship between long working hours and alcohol consumption, as well as risky drinking and alcohol use disorder. The review included 14 cohort studies with 104,599 participants. The results indicated a positive association between long working hours and increased alcohol consumption. However, the evidence quality was rated as low, and no conclusive evidence was found for the effect on risky drinking or alcohol use disorder. More research is needed to establish a clearer understanding of the relationship between long working hours and alcohol-related outcomes (28). The third study focused on the impact of long working hours on stroke. It included 22 studies with a total of 839,680 participants. The findings were uncertain for stroke incidence and mortality when comparing different working hour categories to standard working hours. The evidence quality was rated as low to moderate. Further research is necessary to gain a better understanding of the association between long working hours and stroke (29). Lastly, the WHO/ILO Joint Estimates study examined the global exposure to long working hours and its burden on ischemic heart disease and stroke. In 2016, it was estimated that 488 million people, or 8.9% of the global population, were exposed to long working hours. This exposure was associated with 745,194 deaths and 23.3 million disability-adjusted life years (DALYs) from ischemic heart disease and stroke. The study emphasizes the need for interventions to reduce hazardous working hours and promote occupational safety and health (30).

*In conclusion, while the relationship between long working hours and specific health outcomes such as depression, alcohol-related issues, and stroke is complex, there is a and more conclusive evidence in these areas. The significant burden of ischemic heart disease and stroke attributable to long working hours underscores the importance of addressing this issue through appropriate interventions and policies to ensure worker well-being and safety. These studies demonstrate that job autonomy, job control, and positive interaction with patients have a direct positive impact on the well-being of emergency healthcare workers, leading to increased well-being. Conversely, factors such as violence, harassment, workload, work hours, job stress, and sleep quality have an indirect negative effect on well-being, resulting in decreased well-being. Additionally, long working hours are associated with an increased risk of various diseases. The varied findings emphasize the complexity of these relationships and the necessity for further research to develop targeted interventions that improve health outcomes and promote a positive work environment for healthcare professionals.*

## **1.5 Standard Scales used to determine Subjective well-being, health, and work-life balance**

Various studies have utilized different measures and instruments to explore well-being, work-life balance, and health among healthcare workers. Lithuania employed the standardized Medical Outcomes Study Short Form-36 Health Survey, comprising 36 general health questions, to evaluate physicians' subjective health status (6). In Spain, the Personal Well-Being Index from the International Well-Being Index (2006) was considered suitable for assessing personal well-being, consisting of eight questions (23). Similarly, in the United States, the Work-Life Climate scale, a psychometrically valid instrument with eight questions, provided insights into individual differences in work-life balance behaviour (13). Another researcher in the United States developed a tailored questionnaire focusing on well-being, health, and working conditions among emergency healthcare workers, which proved instrumental in understanding their perceived work environment and well-being during the COVID-19 pandemic (14). In Ireland, qualitative analysis and in-depth insights were gathered using free-text questions pertaining to working conditions and work-life balance (11). Meanwhile, a study in Kaunas, Lithuania, employed the Job Content Questionnaire (JCQ) and Copenhagen Burnout Inventory (CBI) to examine occupational stress and various dimensions of burnout among hospital physicians (8). New Zealand researchers developed the WoWe@AED (Workplace Wellbeing at the Adult Emergency Department) tool by drawing from multiple sources to assess workplace well-being among emergency healthcare workers (17). Similarly, in France, the Work-Family Conflict Scale (WFC) was employed to evaluate the working conditions of emergency physicians (4). A broader study encompassing 34 OECD countries utilized the Better Life Index, selecting indicators such as leisure time, personal care, self-reported health, and long-term unemployment rates to assess work-life balance, health, and job conditions (21). Apart from that, a study was conducted to determine the association between work-life balance and health across a variety of European countries and to explore the variation of work-life balance between European countries. They used the data from the European Working Condition Survey, WHO-5 Well-being Index, and self-rated health as an indicator of health status (12).

In the European Quality of Life Survey, participants were asked how frequently they face work-life balance problems (31). These questions explored various aspects of work-life balance, such as the ability to manage responsibilities, satisfaction with working hours, and the impact of work on personal life (12). The WHO-5 is a short questionnaire consisting of 5 simple and non-invasive questions and participants were allowed to express their agreement or disagreement on a Likert scale. Higher scores on the scale indicated higher levels of well-being. The scale has adequate validity both as a screening tool in clinical trials and has been applied successfully as a generic scale for well-being across a wide range

of study fields as well as in research studies (12) to assess well-being over time or to compare well-being between groups (32). To evaluate health status, EQ-5D-5L has been widely applied in populations with specific diseases, including various chronic non-communicable diseases, such as diabetes mellitus, neoplasms, multiple sclerosis, cardiovascular disease, and infectious diseases, such as HIV and Dengue fever (33). Among the various scales employed in previous literature, it is crucial to utilize a standardized and validated scale that is both efficient and timesaving, given that the study involves emergency healthcare workers. Additionally, studying the population in Lithuania using a scale that has already been translated and validated in the Lithuanian language enhances the comprehension and accuracy of measurement for these factors.

The wide array of tools employed across different studies underscores the multidimensional nature of well-being and the importance of selecting appropriate instruments to capture the complex interplay of factors affecting healthcare professionals globally. This diversity in measurement approaches also reflects the ongoing need to tailor research methodologies to specific contexts and populations, aiming to generate actionable insights that can lead to effective interventions and support systems for healthcare workers.

*Existing research has emphasized the prevalence of burnout and the impact of the work environment on healthcare workers' subjective health and well-being, emphasizing the need for further investigation and targeted interventions. Prioritizing healthcare workers' well-being is vital for fostering a supportive work culture and ensuring their long-term retention and satisfaction.*

*The literature review highlights the escalating demands of modern life, emphasizing the difficulties faced by emergency healthcare workers in maintaining work-life balance, which in turn impacts their well-being and the quality of patient care. Studies reveal that these workers experience significant stress and burnout, influenced by intense work environments characterized by irregular hours and high-stress situations. Notably, the review underscores the need for comprehensive studies to better understand and address these challenges, specifically within the context of Kaunas, where existing research is limited. This study seeks to bridge this gap by exploring the work-life balance, subjective well-being, and health of these workers, aiming to inform strategies that enhance their working conditions and overall health outcomes.*

## **2 RESEARCH METHODOLOGY**

### **2.1 Study type**

This study aimed to assess the work-life balance, subjective well-being, and health of emergency healthcare workers in Kaunas. A cross-sectional observational design was employed, focusing on a diverse group of emergency healthcare personnel, including doctors, nurses, paramedics, drivers, and other staff working at emergency stations.

### **2.2 Organization and sampling of the study**

The study was conducted from April to May 2023. The methodology involved a convenience sampling approach where the vice director of the Kaunas city ambulance station facilitated the distribution of an online questionnaire to all employees, comprising approximately 210 healthcare specialists and 120 drivers and driver-paramedics. This method was chosen due to its feasibility and the rapid access it provided to all potential respondents across different professional roles within emergency healthcare settings. The target sample size of 175 was determined to achieve a 95% confidence interval with a 5% margin of error. This calculation was based on the total eligible population at the station (330 staff members), aiming to capture a comprehensive snapshot of the workforce's experiences and attitudes. The actual survey response rate was 35.42%, with 62 completed questionnaires received. In order to find out the reasons for the low response rate, the deputy director was contacted, who assured that the staff are very busy, and as a rule, the surveys, which have been frequent in their team, are considered to be disruptive to work, so they mostly involve about 50 people. The lower-than-expected response rate can be attributed primarily to the high demands and work pressures faced by healthcare workers and emergency staff at the ambulance station. The nature of their roles often limits their availability and willingness to participate in additional tasks outside their critical duties. Furthermore, although reminders were sent twice to encourage participation, these did not significantly increase the response rate. It is important to note that all received questionnaires were fully completed and valid for statistical analysis, reflecting a high level of engagement and completeness among those who participated.

### **2.3 Research Instrument**

The study utilized a combination of standardized and validated scales along with self-developed questions to measure work-life balance, subjective well-being, and health (See Annex 6-7). The

questionnaire incorporated standardized scales such as the European Quality of Life Survey 2016 for work-life balance (31), the WHO-5 well-being index for Subjective well-being (32), the EQ-5D-5L and EQ VAS for Health (33, 34).

Specific questions concerning work-life balance from the European Quality of Life Survey 2016 were incorporated into the questionnaire. These questions covered various aspects of work-life balance, such as managing responsibilities, satisfaction with working hours, and the impact of work on personal life. Participants provided their responses indicating the work-life balance problems they face every day, several times a week, several times a month, several times a year, less often/rarely, or never which are scored from 0 to 5 respectively. We computed a composite work-life balance indicator by summing the scores from the three stress measures. For example, a respondent experiencing issues 'several times a week' would score 3 (1 + 1 + 1), while someone reporting 'never' having issues would score 15 (5 + 5 + 5). To enhance clarity, we transformed this score into a 1–10 scale, where 1 represents the lowest and 10 is the highest level of work-life balance, reflecting an absence of issues on any of the three dimensions. (31).

The WHO-5 well-being index was used to assess subjective well-being. This short questionnaire consisted of five simple and non-invasive questions. Participants indicated for each of the five statements which are closest to how they have been feeling over the last two weeks on a Likert scale of 0 to 5, where 0 represents "At no time", 1 represents "Some of the time", 2 represents "Less than half of the time", 3 represents "More than half of the time", 4 represents "Most of the time", 5 represents "All of the time". The subjective well-being score is calculated by totalling the figures of the five answers ranging from 0 to 25. Higher scores on the scale indicated higher levels of well-being (32).

The EQ-5D-5L scale was used to evaluate the subjective health of the research population. It included five dimensions: mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. Participants indicated their level of problems in each dimension on a five-point scale. Responses are then divided into two groups of people reporting perfect health profiles (no problem in any of the five dimensions of health) and other health profiles (slight to extreme problems in any of the five dimensions of health). Using EQ VAS health scores were achieved ranging from 0 (worst possible health) to 100 (best possible health) of the participants (33- 34). In addition, to determine the overall health, participants were asked to rate their health on a scale from 'very good' to 'very bad.' Following the categorization used in prior research, 'very good' and 'good' responses were interpreted as indicative of 'Good or better health,' whereas 'fair,' 'bad,' and 'very bad' were grouped as 'fair or worse health (9).

In addition to the standardized scales and questionnaires, custom-developed questions were included to gather more detailed insights into the study population. These questions covered

demographics, working hours, sleep patterns, child responsibility, and COVID-19 infection history. By combining standardized and custom questions, a comprehensive understanding of the factors influencing subjective well-being, health, and work-life balance among emergency healthcare workers in Kaunas was obtained.

### **2.3 Statistical Analysis**

The collected data were coded and analysed using the statistical program "IBM SPSS 23" following a standard statistical approach. Data were initially subjected to descriptive analysis to understand the distribution and characteristics of the study population. The analysis identified and listed various variables for further examination, including demographic factors, work-life balance, health, and well-being indicators. Cross-tabulations were performed followed by Chi-square tests to determine the significance of differences among socio-demographic groups with a significance level set at  $p < 0.05$ . This approach helped in identifying if there were statistically significant differences in work-life balance, health, and well-being across different demographic groups. Nonparametric tests, such as the Mann-Whitney and Kruskal-Wallis tests, were used to compare groups when data did not meet normal distribution assumptions. Additionally, correlation tests were conducted to explore the associations among work-life balance, subjective well-being, and health outcomes, providing insights into how these factors interrelate within the study population.

### **2.4 Research Ethics**

Ethical considerations were upheld throughout the study. All respondents were provided with information about the purpose of the study and the assurance of confidentiality in the questionnaire preamble. The gathered information was kept confidential and anonymized to ensure the privacy of the research participants. The permission from the Kaunas city ambulance station was received in 2023 to conduct this study, as documented in Annex 2. The study project was presented to the Bioethics Centre of the Lithuanian University of Health Sciences, and approval was obtained on April 19, 2023. A copy of the approval is included in Annex 1.

### 3 RESULTS

#### 3.1.Socio-demographic characteristics of respondents

This study comprises a diverse group of respondents – employees at the emergency health care station, which works 24/7. Table 3.1.1 illustrates the socio-demographic characteristics of the respondents with proportions, comprising of 17 males (Mean age = 37.12, SD = 12.79) and a predominance of 45 female respondents (Mean age = 41.56, SD = 14.64). In further analysis, age (mean= 40.34, SD=14.20) was analysed in three age groups 18-34 years (41.9%), 35-49 years (25.8%), and 50 to 64 years (32.3%) as standardized in other studies, to facilitate comparisons (31). The majority of the respondents were Nurses (43.5%), followed by Paramedics (30.6%), Doctors (22.6%). The remaining 3.3% comprised of other roles, specifically administrative staff, and drivers. In our study, the distribution of marital status among participants was nearly even, with 52% married and 48% unmarried. This demographic provides a comprehensive perspective on the diverse life situations of the healthcare workers involved.

**Table 3.1.1 Social-Demographic Characteristics of Study Participants**

<b>Variable characteristics</b>	<b>Groups</b>	<b>N</b>	<b>%</b>
<b>Sex</b>	Male	17	27.4
	Female	45	72.6
	Total	62	100
<b>Age (years)</b>	18 to 34	26	41.9
	35 to 49	16	25.8
	50 to 64	20	32.3
	Total	62	100
<b>Profession</b>	Doctor	14	22.6
	Nurse	27	43.5
	Paramedics	19	30.6
	Others (administrative staff and driver)	2	3.3
	Total	62	100
<b>Marital Status</b>	Married	32	51.6
	Unmarried	30	48.4
	Total	62	100

Table 3.1.2 represents the general characteristics of the participants, including caregiving responsibilities, experience, COVID-19 history, working hours (mean=53.23, SD=12.95), and sleeping hours (mean=6.37, SD=7.9), which were strategically grouped for comparison with the key factors: work-life balance, subjective well-being, and health.

**Table 3.1.2 General Characteristics of the Respondents**

<b>Variables</b>	<b>Groups</b>	<b>N</b>	<b>(%)</b>
Having children under the age of 18 years	None	44	71
	1 or more	18	29
	<b>Total</b>	<b>62</b>	<b>100</b>
Having elderly family members or dependants who need care/help	Yes	19	30.6
	No	43	69.4
	<b>Total</b>	<b>62</b>	<b>100</b>
Experience	Up to 5 years	30	48.4
	More than 5 years	32	51.6
	<b>Total</b>	<b>62</b>	<b>100</b>
H/o COVID-19 infection	Never infected	8	12.9
	infected once	37	59.7
	infected multiple times	17	27.4
	<b>Total</b>	<b>62</b>	<b>100</b>
Working Hours per week	Less equal to 48 hours	36	58.1
	More equal to 49 hours	26	41.9
	<b>Total</b>	<b>62</b>	<b>100</b>
Sleeping Hours per day	At least 7 hours around a clock	31	50
	Less than 7 hours round a clock	31	50
	<b>Total</b>	<b>62</b>	<b>100</b>

**Table 3.1.3 Respondent’s Work-Life Balance, Subjective Well-being, and Health**

<b>Variables</b>	<b>Groups</b>	<b>N</b>	<b>(%)</b>
Work-life balance	Good	42	67.7
	Poor	20	32.3
	<b>Total</b>	<b>62</b>	<b>100</b>
Subjective Well-being using the WHO-5 score	Good	32	51.6
	Poor	30	48.4
	<b>Total</b>	<b>62</b>	<b>100</b>
Self-rated health using EQ-5D-5L Health Profile	Perfect Health profile*	16	25.8
	Other health profile**	46	74.2
	<b>Total</b>	<b>62</b>	<b>100</b>

\* No problem on any of the five dimensions of health

\*\*Having slight to extreme problems in at least one of the 5 dimensions of Health

Work-life balance was dichotomized into good and poor, subjective well-being was assessed using the WHO-5 index, with scores grouped above or below 13 indicating better and poor well-being respectively, and health was evaluated using the EQ 5D 5L scale, categorized as Perfect Health (11111) with no problems in any 5 health dimensions and others slight to extreme problems.

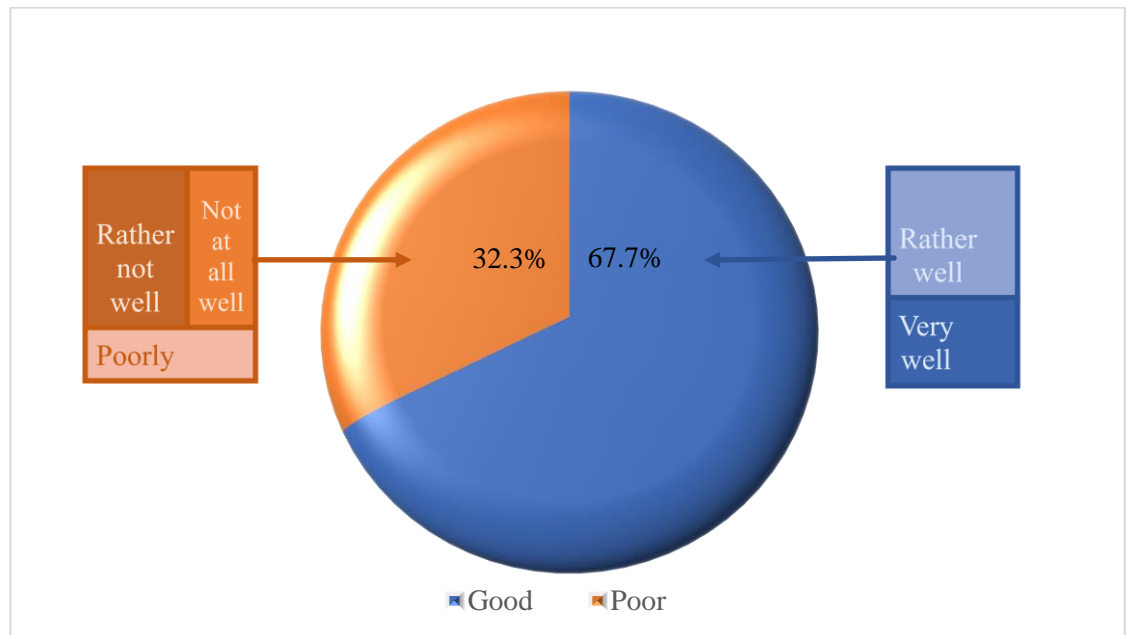
### **3.2 Work-life balance of emergency health care employees**

The findings illustrated in Table 3.2.1, reveal diverse perceptions in evaluating the alignment of participants' working hours with their family or social commitments indicating their work-life balance.

**Table 1.2.1 Perceptions of Work-Life Balance Among Respondents**

<b>In general, how do your working hours fit in with your family or social commitments outside work?</b>	<b>N</b>	<b>%</b>
Very well	17	27.4
Rather well	25	40.3
Rather not well	9	14.5
Not at all well	6	9.7
Poorly	5	8.1
<b>Total</b>	<b>62</b>	<b>100</b>

We observed the decreasing trend of responses proportion from working hours fitting very well to poorly with the social commitments. To aid the interpretability of our study, we further dichotomized the answers as “Good work-life balance” (“Very well” or, “Rather well”) and “Poor work-life balance” (“Rather not well” or, “Not at all well” or, “Poorly”).



**Fig. 3.2.1 Proportion of Study Population by Poor and Good Work-Life Balance**

Fig 3.2.1 Reveals that 67.7% of respondents consider their work-life balance as good, indicating choices such as “very well” (27.4%) and “rather well” (40.3%). In contrast, 32.3% express poor work-life balance, associating with responses like “rather not well” (14.5%), “not at all well” (9.7%), or “poorly” (8.1%). To delve deeper into these perceptions, an exploration of age and gender dynamics was conducted.

From Table 3.2.2, it is evident that work-life balance is significantly influenced by age among emergency healthcare workers in Kaunas.

Younger individuals, particularly those aged 18 to 34, reported a poor work-life balance (65%), as opposed to older age groups, with a Chi-Square value of 10.747,  $df = 2$ , and a  $p$ -value = 0.005, indicating a strong association.

**Table 3.2.2 Comparison of Socio-demographic Characteristics Across Categories of Work-Life Balance**

Socio-demographic characteristics	Good (%)	Poor (%)
Sex		
Male	31	20
Female	69	80
<b>Total</b>	<b>100</b>	<b>100</b>
$\chi^2=0.817, dF=1, p>0.05$		
Age		
18 to 34	31	65
35 to 49	23.8	30
50 to 64	45.2	5
<b>Total</b>	<b>100</b>	<b>100</b>
$\chi^2=10.747, dF=2, p=0.005$		
Profession		
Doctor	21.4	25
Nurses	40.5	50
Paramedics	33.3	25
Others	4.8	0
<b>Total</b>	<b>100</b>	<b>100</b>
$\chi^2=1.618, dF=3, p=0.655$		

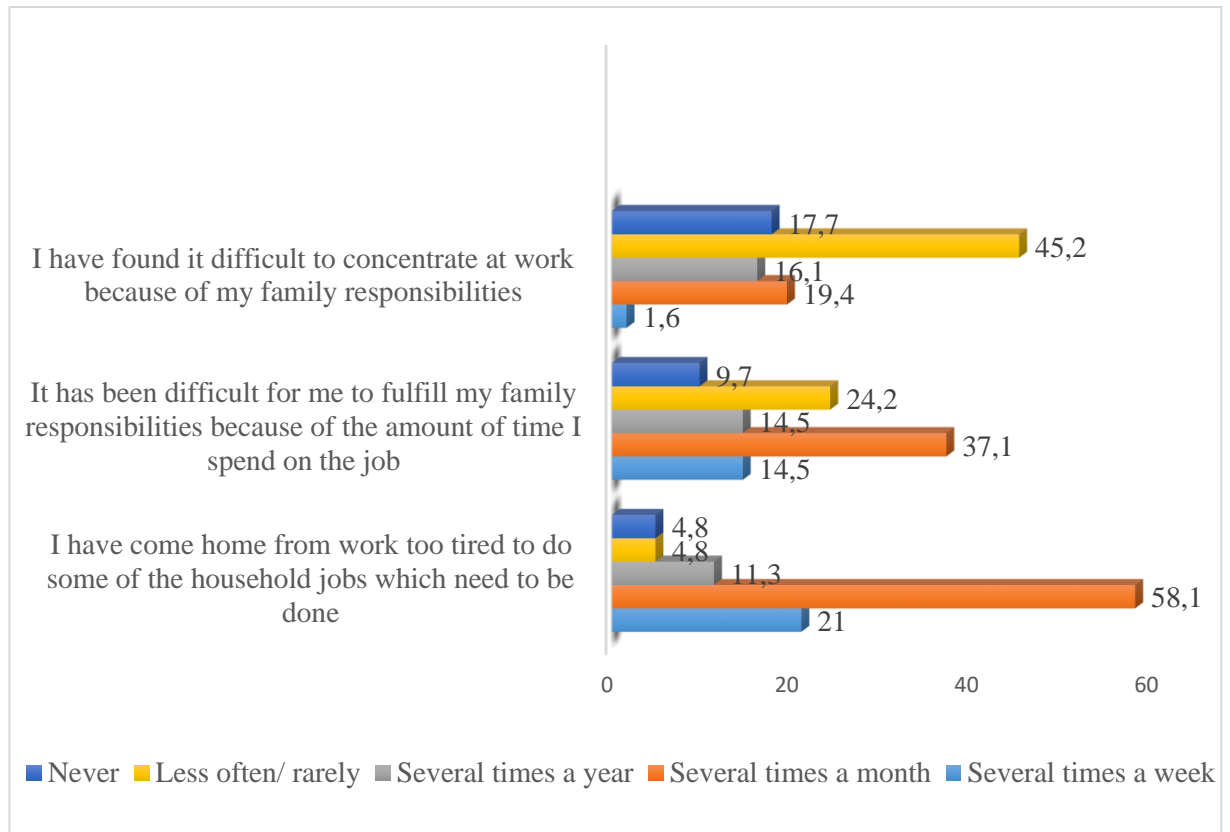
Gender and professional role did not show a significant correlation with work-life balance, as evidenced by p values  $>0.05$  for gender and profession. These findings point towards the need for examining workload and other related factors that may be impacting the work-life balance of the younger working population.

To assess work-life balance issues in detail, we utilized the standard scale from the EQLS 2016 survey, which addresses three specific dimensions.

Participants were asked about the following:

- are too tired from work to do household jobs;
- experience difficulties fulfilling family responsibilities because of time spent at work;
- have difficulties concentrating at work because of family responsibilities.

Respondents express the frequency of these work-life imbalances, choosing from options such as every day, several times a week, several times a month, several times a year, less often/rarely, or never (See Annex 3).



**Fig.3.2.2 The proportion of Respondents Reporting Work-Life Balance Challenges According to their Occurrence.**

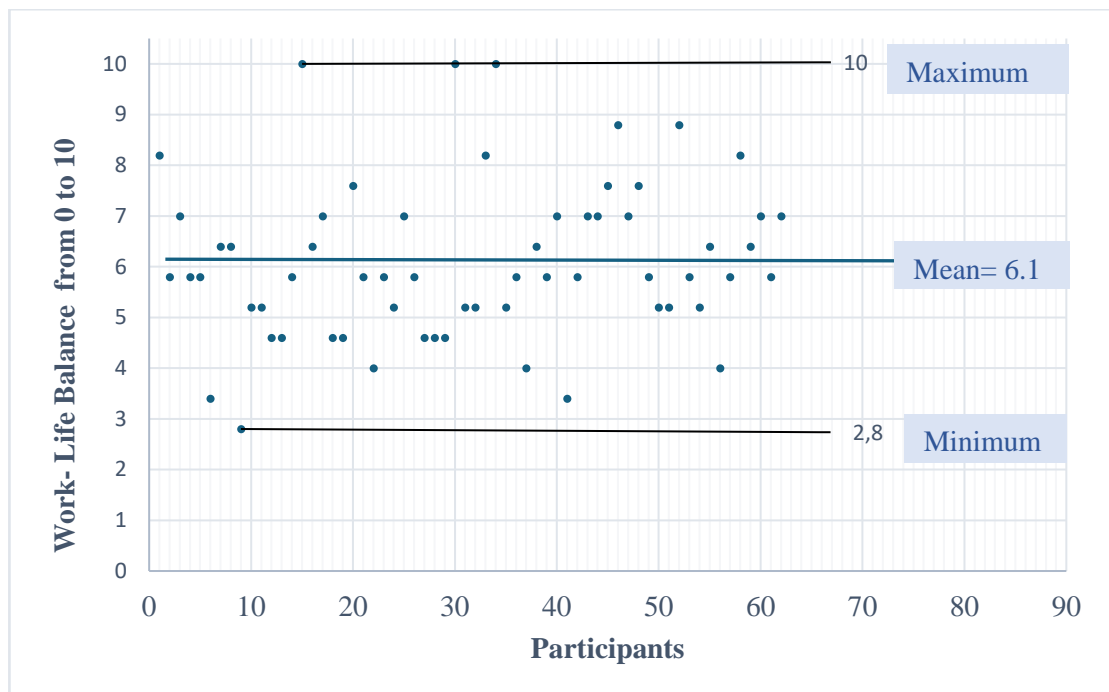
The survey results illuminate in Fig.3.2.2 the diverse work-life balance experiences among the participants. A notable 21% reported frequently coming home too tired from work to manage household chores, primarily occurring several times a month (58.1%). Moreover, 37.1% faced difficulties fulfilling family responsibilities several times a month, with 14.5% encountering this challenge regularly. Regarding concentration at work amid family responsibilities, a substantial 45.2% reported experiencing this less often or rarely, while a significant 19.4% faced this issue several times a month. These findings underscore the nuanced nature of work-life balance issues, ranging from fatigue affecting domestic tasks to challenges in meeting family responsibilities and work focus.

**Table 3.2.3 Proportion of the participants who faced work-life challenges at least several times a month.**

Male %(N)			Female %(N)			Total %(N)
18 to 34 years	35 to 49 years	≥ 50 years	18 to 34 years	35 to 49 years	≥50 years	Age 18 to 64 years
Too tired from work to do household jobs.						
46.2 (6)	46.2 (6)	7.7 (1)	50 (18)	16.7 (4)	33.3 (12)	79 (49)
Difficulty in fulfilling family responsibilities because of time spent at work.						
28.6 (2)	71.4 (5)	0 (0)	44 (11)	24 (6)	32 (8)	51.6 (32)
Difficulty concentrating at work because of family responsibilities.						
50 (2)	50 (2)	0 (0)	88.9 (8)	11.1(1)	00	20.9 (13)

From Table 3.2.3, the study reveals that most participants confront monthly work-life balance challenges, with 79% reporting fatigue from work and 51.6% struggling with family responsibilities, though these findings are not statistically significant ( $p > 0.05$ ). Notably, more than 90% of males encountering issues such as feeling too tired from work, difficulty fulfilling family responsibilities, and struggling to concentrate at work are under 50 years old, with 46.2% in the 18 to 34 age group and 46.2% in the 35 to 49 age group. Conversely, the majority of females experiencing work-life balance issues belong to the 18 to 34 age group. Additionally, 20.9% of participants experience difficulties concentrating at work due to family responsibilities. Notably, the incidence of concentration issues decreases with age, highlighting a significant age-related trend (Chi-Square=10.155,  $p=0.006$ ).

We developed a composite work-life balance indicator using three stress-related measures, each rated from 0 (daily issues) to 5 (no issues) discussed earlier in the methodology. For example, frequent issues scored lower, while the absence of issues scored higher with 15. This total was then adjusted to a 1–10 scale for clarity, with 10 indicating optimal work-life balance and 0 indicating severe balance issues.



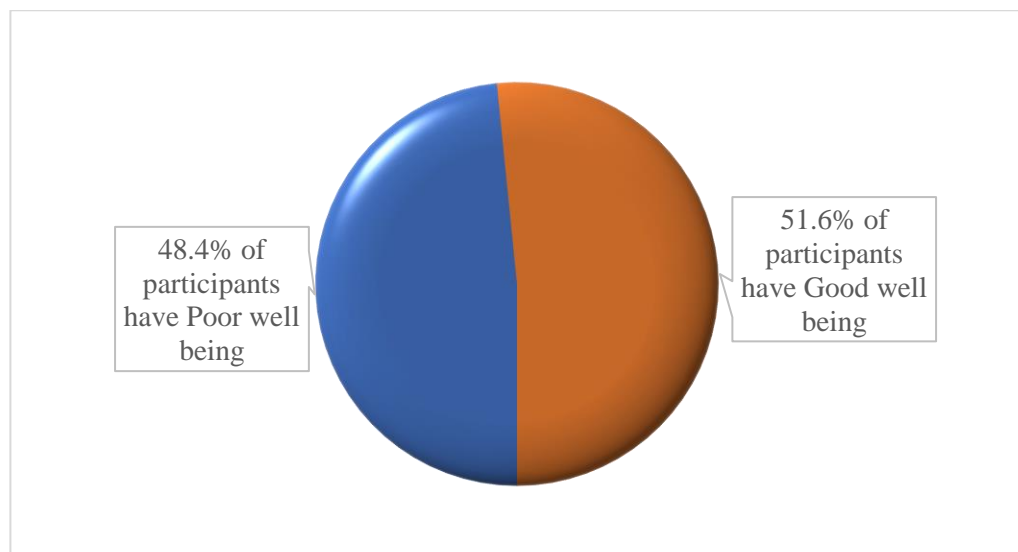
**Fig. 3.2.3 Summary of Work-life balance indicator**

Fig 3.2.3 revealed a diverse distribution of work-life balance levels, with participants employing indicators ranging from 2.8 to 10. Notably, the most prevalent WLB rating was 5.8, selected by 22.6% of participants, contributing to a cumulative 58.1% choosing indicators within the range of 5.2 to 6.4. The mean WLB indicator for the study population was calculated at 6.1 with a standard deviation of approximately 1.57345. Approximately 77.4% of participants fell within one standard deviation of the mean, indicating a significant clustering around the central tendency. While the mean is above the midpoint, indicating a generally positive work-life balance but it's not extremely high, suggesting that there might be room for improvement in enhancing work-life balance for some individuals.

*The analysis of work-life balance within the study population revealed age as a critical factor, with younger individuals reporting more challenges, highlighting a potential area for intervention. Gender and profession were not significantly associated with work-life balance. Frequent work-related fatigue and interference with family responsibilities were common, particularly among younger adults. Overall, while the mean work-life balance indicator suggests a moderate level of satisfaction, the variance indicates room for improvement, especially to support the younger workforce in achieving better work-life balance.*

### 3.3 Subjective well-being of the research population

The Subjective well-being outcome was assessed using the WHO-5 scale comprising five dimensions of subjective well-being: I have felt cheerful and in good spirits/I have felt calm and relaxed/I have felt active and vigorous/I woke up feeling fresh and rested/My daily life has been filled with things that interest me. Participants responded to each of the five statements which are closest to how they have been feeling over the past two weeks (See Annex 4) And were scored as all the time- 5, most of the time- 4, more than half of the time-3, less than half of the time-2, some of the time-1, at no time-0. A total raw score on WHO-5 goes from 0 to 25 and a score below 13 indicates poor well-being and is an indication for testing for depression under ICD-10. The WHO-5 scale was dichotomized into these categories, aligning with established guidelines (WHO Collaborating Center for Mental Health, 1998).



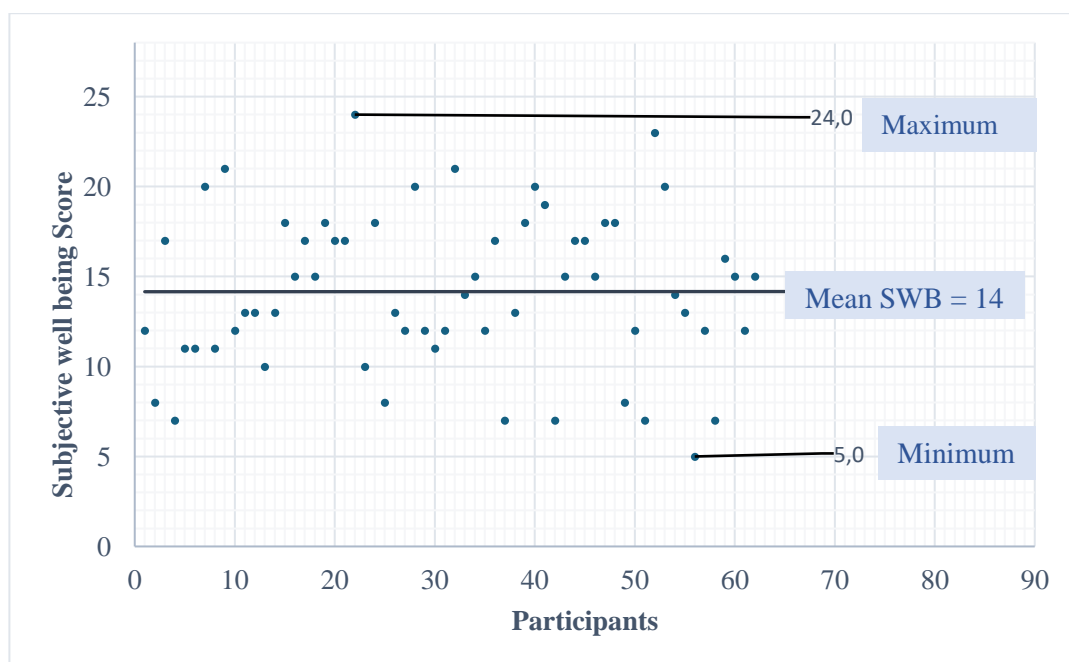
**Fig. 3.3.1 Distribution of Respondents by Good or Poor Subjective Well-being Raw**

Fig. 3.3.1 illustrates the distribution of respondents based on subjective well-being raw scores, categorizing them into two groups: poor and better well-being. It shows that about of the population (48.4%) scored below 13 and needs to be screened for depression ICD-10. Whereas half of the participants (51.6%) scored above 13 indicating Good well-being outcomes. Subsequent analysis explores these percentages by age and gender for a better understanding.

**Table 3.3.1 Comparison of Socio-demographic characteristics and Poor or Good Subjective well-being among respondents**

<b>Socio-demographic characteristics</b>	<b>Poor (%)</b>	<b>Good (%)</b>
Sex		
Male	16.7	37.5
Female	83.3	62.5
<b>Total</b>	<b>100</b>	<b>100</b>
$\chi^2=3.377, dF=1, p=0.066$		
Age		
18 to 34	56.7	28.1
35 to 49	26.7	25
50 to 64	16.7	46.9
<b>Total</b>	<b>100</b>	<b>100</b>
$\chi^2= 7.405, dF=2, p=0.25$		
Profession		
Doctor	23.3	21.9
Nurses	44.3	43.8
Paramedics	30	31.3
Others	3.3	3.1
<b>Total</b>	<b>100</b>	<b>100</b>
$\chi^2=0.025, dF=3, p=0.999$		

The comparison of socio-demographic characteristics with WHO Well-being score in Table 3.3.1 indicates no statistically significant difference in well-being scores based on sex, age, or profession among the study respondents. With p-values exceeding the conventional threshold for significance ( $p > 0.05$ ), the results suggest that within this sample, WHO Well-being scores do not vary markedly with these socio-demographic factors.



**Fig. 3.3.2 Subjective well-being score distribution**

To study possible changes in well-being, the WHO 5 Well-being index score is used ranging from 0 to 25. In Fig.3.3.2 a score of 0 represents the worst possible, whereas a score of 25 represents the best possible well-being. Figure 5 summarizes the scores that vary widely, ranging from a minimum of 5 to a maximum of 24, highlighting the diversity in participants' perceptions of their well-being. The average score, representing the central tendency, is approximately 14, indicating a moderate level of subjective well-being among the group. Approximately 42 participants (68%) have scores within one standard deviation (2.2) of the mean, indicating that a majority fall within a moderately consistent range around the average subjective well-being score (Fig. 3.3.2).

*The subjective well-being of emergency healthcare workers in Kaunas was evaluated using the WHO-5 scale, revealing a split in well-being scores: approximately half of the participants (48.4%) fell below the threshold score of 13, suggesting a need for depression screening per ICD-10 guidelines. In contrast, the other half (51.6%) reported scores indicative of better well-being. Notably, the distribution of well-being scores showed no significant variations when cross-analyzed with socio-demographic factors such as sex, age, or profession. Despite the diversity of well-being perceptions, the mean score was 14 out of 25, slightly above the critical threshold, with the majority of respondents clustering around this well-being level.*

### 3.4 Health of the Research Population

The health status of the study population was evaluated using the EQ 5D 5L and EQ VAS scale. Each participant's health profile was formed ranging from 11111 to 55555, corresponding to different levels of health problems in the dimensions of mobility, self-care, usual activities, pain or discomfort, and anxiety or depression to reflect the severity of health issues, with Level 1 denoting no problem, Level 2 indicating a slight problem, Level 3 representing a moderate problem, Level 4 indicating a severe problem, and Level 5 signifying an extreme problem in each dimension (See Annex 5) For further analysis, two groups of health profiles were made of Level 1 (no problem) and other groups having slight to extreme problems for each dimension.

**Table 3.4.1 Proportion of respondents having no problem (Level 1) and slight to extreme problem (Level 2 to 5) in any of the 5 Dimensions of Health**

	<b>Mobility n (%)</b>	<b>Self-care n (%)</b>	<b>Usual activities n (%)</b>	<b>Pain / discomfort n (%)</b>	<b>Anxiety / depression n (%)</b>
<b>Level 1 (No problem)</b>	53(85.5)	60(96.8)	51(82.3)	26(41.9)	30(48.4)
<b>Levels 2 to 5 (Slight to extreme problem)</b>	9(14.5)	2(3.2)	11(17.8)	36(58.1)	32(51.6)
<b>Total</b>	<b>62(100)</b>	<b>62(100)</b>	<b>62(100)</b>	<b>62(100)</b>	<b>62(100)</b>

Table 3.4.1 illustrates the health profiles of the study participants were delineated across various domains, reflecting their subjective experiences in distinct health dimensions. In our study focusing on emergency healthcare workers, we delved into their health profiles across five pivotal domains: mobility, self-care, usual activities, pain/discomfort, and anxiety/depression. Remarkably, despite the physically demanding and high-stress nature of their roles, a significant majority reported no issues in mobility (85.5%) and self-care (96.8%). This finding underscores the resilience and robust health status typically associated with emergency healthcare professionals. However, it's intriguing to note that challenges still surface within these domains, with a small yet notable proportion of participants encountering difficulties (14.5% in mobility and 3.2% in self-care). Even more compelling is the observation in the domain of usual activities, where 17.8% of participants reported problems, underscoring potential impacts on their daily operational efficiency. The most striking revelations emerge in the realms of pain/discomfort and

anxiety/depression, where approximately half of the participants disclosed experiencing issues (58.1% and 51.6%, respectively). This highlights a critical area of concern within this workforce, pointing to the significant physical and psychological toll exerted by their demanding profession.

**Table 3.4.2 Comparison of Socio-demographic characteristics and Perfect Health Profiles and Other Health Profiles among respondents**

Socio-demographic characteristics	*Perfect Health Profiles	**Other Health Profiles
Sex		
Male	43.8	21.7
Female	56.3	78.3
Total	100	100
$\chi^2=2.89, dF=1, p=0.089$		
Age		
18 to 34	31.3	45.7
35 to 49	31.3	25.9
50 to 64	37.5	30.4
Total	100	100
$\chi^2= 1.018, dF=2, p=0.60$		
Profession		
Doctor	12.5	26.1
Nurses	50	41.3
Paramedics	31.3	30.4
Others	6.3	2.2
Total	100	100
$\chi^2=1.791, dF=3, p=0.617$		

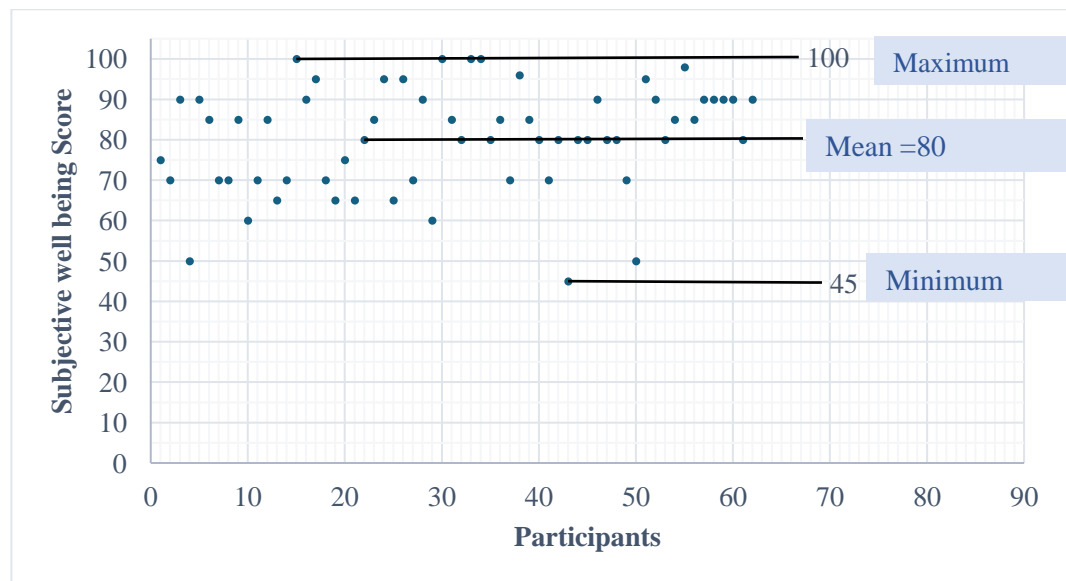
\* No problem on any of the five dimensions of health

\*\*Having slight to extreme problems in at least one of the 5 dimensions of Health

In the analysis from Table 3.4.2, there was no statistically significant association between socio-demographic characteristics and health profiles. Males were more likely to report perfect health compared to females, but this was not statistically significant. Distribution among age groups appears

relatively even in the perfect health profiles category. In the other health profiles, younger respondents (18 to 34) report more health problems. Yet, the Chi-square test suggests no significant difference across age groups ( $\chi^2= 1.018, p=0.60$ ). A slight variation is observed in the distribution of health profiles among professions, with doctors being the least likely to report perfect health and nurses the most likely. However, the lack of statistical significance ( $\chi^2=1.791, p=0.617$ ) indicates that profession alone does not have a significant impact on the health profiles of respondents.

In assessing the overall health of the study population, participants were asked to rate their health on a scale from 'very good' to 'very bad.' Following the categorization used in prior research (9), 'very good' and 'good' responses were interpreted as indicative of 'Good or better health,' whereas 'fair,' 'bad,' and 'very bad' were grouped as 'fair or worse health.' The majority of participants perceived their health as either 'good' or 'fair,' with approximately 29% falling into the 'poor health' category. This shows that the perception of the health of the participants was good even though the majority of them had health problems. To further analyze it statistically we used EQ VAS to see the significant differences in perception of health and health problems.



**Fig. 3.4.1 Distribution of Respondents in EQ-VAS Health Scores**

Fig 3.4.1 represents the EQ VAS data, reflecting participants' subjective assessments of their current health rating from 0 to 100 (0 represents worst health and 100 represents best health), providing valuable insights into the perceived health of the study population. Notably, most respondents indicated

a positive perception of their health, with the most frequent rating at 80 on the scale. This concentration suggests that a significant proportion of participants views their health favorably, falling within the upper-middle to high range. While responses vary across the scale, the overall distribution is somewhat positively skewed, indicating an overall optimistic assessment of health. The presence of a few outliers at the lower and higher ends of the scale suggests diversity in individual perceptions, with some participants expressing particularly low or high evaluations of their health.

**Table 3.4.3 Comparison of EQ 5D 5L profile groups and EQ-VAS Health Score among respondents**

Variable	Group	Mean	Mann-Whitney U	Z-score	p-value
EQ-VAS Health Score	11111 (no problem)	91.75	96.500	-4.410	<0 .001
	Others (Slight to extreme problems)	76.43			

In Table 3.4.3, assessing the health status of emergency healthcare workers in Kaunas using the EQ-5D-5L scale, two distinct groups were identified: those reporting 'no problems' in any of the five domains (11111) and those with 'slight to extreme problems' in at least one domain. The EQ VAS scores, reflecting 'Your health today', demonstrated a mean value of 80.39, indicating a positive self-perceived health status within the study. A significant difference was observed when comparing the EQ VAS scores between the two groups via the Mann-Whitney U test. Those with 'no problems' in all domains exhibited a notably higher mean (91.75) in their health scores compared to their counterparts, signaling a markedly better self-perceived health status ( $p < 0.001$ ). This finding suggests that self-perceived health is significantly associated with the absence or presence of problems in the five health domains assessed by the EQ-5D-5L. The results suggest that interventions aimed at reducing health problems could have a meaningful impact on perceived health status.

*Our study looked at the health of emergency healthcare workers in Kaunas using the EQ-5D-5L scale and the EQ VAS scale. We found that most workers reported being healthy in important areas like mobility and taking care of themselves. Despite the tough demands of their job, some workers still experience problems with pain/discomfort, anxiety/depression. We saw a clear difference when we looked at overall health scores: people with no reported problems had much higher scores, meaning they*

*felt healthier overall. These findings highlight the strong and weaker areas of health among these workers and point to the need for better support, especially concerning pain and anxiety or depression.*

### 3.5 Comparison of work-life balance, subjective well-being, and health among groups

Table 3.5.1 illustrates, the Kruskal-Wallis test was employed to investigate differences in subjective well-being, work-life balance, and health utility scores across various professional groups, including doctors, nurses, paramedics, and others.

**Table 3.5.1 Comparative Summary of Subjective Well-Being, Work-Life Balance, and Health by Profession Group**

<b>Profession</b> <b>Variable</b>	<b>Doctor</b>	<b>Nurses</b>	<b>Paramedics</b>	<b>Others</b>
Subjective Well-being				
Mean	13.7	14.4	14.1	14
dF	dF=4.1	dF= 4.6	dF= 4.2	dF= 8.5
H=0.280, p=0.964				
Health				
Mean	73.6	81.9	81.9	92.5
dF	dF= 14	dF=12.7	dF= 11.3	dF= 3.5
H=4.389, p=0.222				
Work-life Balance				
Mean	6.5	5.9	6.1	6.4
dF	dF=1.4	dF=1.8	dF=1.5	dF=0.8
H=3.502, p=0.321				

The Kruskal-Wallis test indicated no statistically significant differences in subjective well-being, health, and work-life balance across professional groups, with p-values exceeding the threshold for significance. Although doctors reported slightly lower well-being and health scores compared to other professions, and nurses reported a lower mean work-life balance score, these variations were not

statistically confirmed ( $p > 0.05$  for all). This suggests that the profession does not significantly influence these aspects of work and life among the participants. Therefore, the hypothesis that these factors vary significantly across different professional roles is not supported by the data.

To have a deep comparative insight about these factors, they were also studied among different groups like working hours more or less than 48 hours per week, marital status, child or dependent responsibility, COVID-19 infection history. But these group as well doesn't show any significance difference. However, sleeping hours groups of less than 7 hours and at least 7 hours per day showed significant difference ( $p < 0.05$ ), suggesting sleeping less than 7 hours tends to have poor work life balance, poor well-being and low health scores.

*The analysis of subjective well-being, health, and work-life balance across different professional groups within the healthcare sector revealed no statistically significant differences. Regardless of profession, whether doctors, nurses, paramedics, or other roles, similar levels of well-being, health, and balance were reported, indicating that professional roles do not significantly influence these aspects of life. Furthermore, variables such as working hours, marital status, or COVID-19 infection history showed no significant impacts. However, sleep duration emerged as a critical factor; those sleeping less than seven hours exhibited poorer subjective well-being, health, and work-life balance. .*

### 3.6 Associations of the subjective well-being, health, and work-life balance

From Table 3.6.1, the analysis confirms the hypothesis of a positive relationship among subjective well-being, health, and work-life balance.

**Table 3.6.1 Correlations Among Subjective Well-Being, Health Scores, and Work-Life Balance**

Variable Pair	Spearman's Correlation Coefficient	p-value
Work-life Balance and Subjective well-being	0.479	<0.001
Work-life Balance and Health	0.366	0.003
Subjective Well-being and Health	0.446	<0.001

Spearman's correlation coefficients demonstrate moderate positive associations: work-life balance correlates with subjective well-being ( $\rho = 0.479$ ,  $p < 0.001$ ), work-life balance with health ( $\rho = 0.366$ ,  $p = 0.003$ ), and subjective well-being with health ( $\rho = 0.446$ ,  $p < 0.001$ ).

These findings suggest that individuals reporting better work-life balance tend to have higher subjective well-being and health scores, supporting the interconnectedness of these aspects within the study population.

In examining the relationship among work-life balance, subjective well-being, and health, from table 3.6.2 study finds notable gender differences.

**Table 3.6.2 Correlations among Subjective Well-Being, Health Scores, and Work-Life Balance by Gender**

Variable Pair	Female		Male	
	Spearman's rho	p-value	Spearman's rho	p-value
Work-life Balance and Well-being	0.454	0.002	0.533	0.028
Work-life Balance and Health	0.317	0.034	0.441	0.077
Well-being and Health	0.536	< 0.001	0.168	0.520

For women, a strong and significant correlation exists between work-life balance and subjective well-being ( $\rho = 0.454$ ,  $p = 0.002$ ), and a moderately significant link between work-life balance and current health status ( $\rho = 0.317$ ,  $p = 0.034$ ). Additionally, the correlation between subjective well-being and health is robust and highly significant ( $\rho = 0.536$ ,  $p < 0.001$ ). For men, the correlation between work-life balance and subjective well-being is moderately significant ( $\rho = 0.533$ ,  $p = 0.028$ ), but the associations with health today, although positive, do not reach a level of statistical significance ( $\rho = 0.441$ ,  $p = 0.077$  for work-life balance and health;  $\rho = 0.168$ ,  $p = 0.520$  for subjective well-being and health).

These findings suggest that while work-life balance is importantly related to subjective well-being for both genders, it's linked more with perceived health for women. The stronger statistical significance in women's results points to a potentially greater impact of work-life balance on their overall well-being and health perception compared to men.

Table 3.6.3 illustrates the relationships between work-life balance, subjective well-being, and health today across various professions, significant correlations were identified.

**Table 3.6.3 Correlations among Subjective Well-Being, Health Scores, and Work-Life Balance by Profession**

Variable Pair	Doctors		Nurses		Paramedics	
	Spearman's rho	p-value	Spearman's rho	p-value	Spearman's rho	p-value
Work-life Balance and Well-being	0.849	<0.001	0.527	0.005	0.322	0.18
Work-life Balance and Health	0.396	0.16	0.473	0.01	0.394	0.095
Well-being and Health	0.243	0.402	0.750	<0.001	0.189	0.437

Doctors demonstrated a strong and significant positive correlation between work-life balance and subjective well-being ( $\rho = 0.849$ ,  $p < 0.001$ ), though their health today showed a non-significant trend in relation to work-life balance ( $\rho = 0.396$ ,  $p = 0.161$ ).

Nurses exhibited significant moderate positive correlations across all measured relationships, with the strongest being between subjective well-being and health today ( $\rho = 0.750$ ,  $p < 0.001$ ).

Paramedics showed non-significant correlations in all categories. The 'Other' profession category had an insufficient sample size to provide a reliable analysis.

These results suggest profession-specific patterns in the interplay of well-being and work-life factors.

**Table 3.6.4 Correlations among Subjective Well-Being, Health Scores, and Work-Life Balance by Age**

Variable Pair	18 to 34 years		35 to 49 years		≥50 years	
	Spearman's rho	p-value	Spearman's rho	p-value	Spearman's rho	p-value
Work-life Balance and Well-being	0.293	0.147	0.832	<0.001	0.088	0.712
Work-life Balance and Health	0.197	0.335	0.780	<0.001	0.119	0.616
Well-being and Health	0.348	0.081	0.620	0.010	0.444	0.050

From Table 3.6.4, the study found a strong relationship between work-life balance, subjective well-being, and health for participants aged 35 to 49 years, with significant correlations ( $\rho=0.832$  and  $\rho=0.780$ , both  $p<0.01$ ) suggesting these factors are closely interlinked in midlife. For those over 50, only well-being showed a moderate correlation with health ( $\rho=0.444$ ,  $p=0.050$ ), indicating varying dynamics of these factors with age.

*Our study took a close look at how the well-being, health, and work-life balance of emergency healthcare workers in Kaunas are connected. We found that workers with a good balance between their job and personal life tend to feel happier and healthier. This link was pretty clear people who felt they had balance were more likely to say they were doing well both in their well-being and health. Even when we checked if these links were different for men and women, or people of different ages or professions, we found that this pattern generally held true, although it was stronger for some than for others. In short, feeling good about how work fits with life outside of it goes hand-in-hand with feeling good overall.*

## 4. DISCUSSION OF THE RESULTS

To the best of our knowledge, this is the first study to examine socio-demographic characteristics (gender, age, and profession) in the relationship between work-life balance, subjective well-being and health among the healthcare workers in Kaunas Emergency Station. The descriptive results revealed that the majority of the participants have a good work-life balance (67.7%). Whereas, noticeable (32.3%) of people have poor work-life balance. This finding is consistent with the EWCTS 2021, which reported that 81% of people across the EU27 experienced good work-life balance, indicating a generally positive perception of work-life balance across Europe (34). In our study, we found no difference in work-life balance between gender groups, aligning with research conducted among public primary healthcare workers in Lithuania and hospital doctors in Ireland (3, 11) In contrast, a survey of the general population across 27 European countries revealed that men reported poorer work-life balance than women (12) This suggests that gender may not significantly influence work-life balance among healthcare workers, who might share similar work and social responsibilities regardless of gender, unlike the general population. On the other hand, younger individuals, particularly those aged 18 to 34, reported a poor work-life balance (65% reporting poor), as opposed to older age groups, with a Chi-Square value of 10.747, df of 2, and a p-value of 0.005, indicating a strong association. This result aligns with the study done in Lithuania which states youngest respondents aged 18 to 34 years in this group indicate that good work-life balance is less frequent than among respondents aged 45 to 54 years (36). Younger workers may face more challenges in work-life balance due to less control over their work schedules, fewer resources, or less influence within their professional roles. Additionally, they may have higher social demands outside of work or less experience in managing work-life conflicts.

Work-life issues should not be confused with work-life balance. The latter refers to the possibility of work fitting well with other activities, and the former involves the psychological blurring of boundaries. A worker can have a good work-life balance and at the same time experience some degree of work-life interference, whether life interfering with work or work interfering with life (36). According to the EQLS 2016, it was seen that work-life balance issues show an increasing trend from the year 2007 to 2016. In 2016, it was 60% and 38% of participants faced issues with too tired to come home from work and difficulty fulfilling family responsibilities because of time spent at work respectively. Similarly, in our study, it was found that 79% of participants experienced fatigue from work and 51.6% of participants grappled with family responsibilities. In 2021, it was found that 27% of respondents often worried about work, and 32% were frequently too tired after work. In both the EQLS and EWCTS studies, as well as in our study, the issue of concentrating at work was less prevalent compared to other

problems (EQLS = 19%, EWCTS = 10%, and our study = 20.9%).. 90% of males encountering all these three problems were under 50 years old. The majority of females facing these issues were under the age group 18 to 34, which is similar to the results of EQLS 2016. The possible reason for persistent work-life interference despite good balance could be the demanding nature of emergency healthcare work, including irregular hours, high stress, and emotional demands, which can lead to significant fatigue and time management challenges, impacting workers' ability to engage in personal life activities effectively (36).

In 2016, the mean work-life balance score in Lithuania was 5.9. In this research, the mean work-life balance indicator for emergency healthcare workers in Kaunas was found to be 6.1 While the EWCTS 2021 survey does not provide the exact work-life balance score for Lithuania Although there is a slight increase in the mean value compared to the 2016 study, which was conducted at the population level across Lithuania, challenges remain. This study, focused specifically on emergency healthcare workers in Kaunas, may not show significant improvement due to the unique stresses of their work environment. The reason for the slight improvement yet the presence of room for growth might be attributed to increased awareness and the implementation of work-life balance initiatives over the years. However, the persistent significant work-life balance challenges suggest that the existing measures may not fully address the unique demands faced by emergency healthcare workers, necessitating tailored interventions. In the future, strategies to tackle work-life balance problems could also be studied, and programs could be arranged accordingly to address these issues more effectively.

In terms of subjective well-being, the WHO-5 well-being index was used. In some studies the cut-off score  $<7$  was used as the depression risk, whereas according to WHO its recommended score of 13 or less indicates poor well-being and a need for depression screening. In our study, nearly half of the participants have poor well-being which aligns with the other studies done in Lithuania among teachers (37). This shows that the prevalence of poor well-being in our findings is not isolated but reflects a broader trend identified in other professional groups within Lithuania, highlighting a potential systemic issue in occupational mental health management. In Lithuania, most of the studies were done on the burnout of healthcare workers and lacked research about the subjective well-being of the healthcare workers. However, research done in 27 European countries to determine well-being shows a majority of participants have good well-being but their cut-off was  $<7$  score, which could be the possibility of having good well-being for the majority of people. This variation in methodology may account for the differences in reported well-being levels, emphasizing the need for standardized measures to accurately compare well-being across studies and regions (12).

In terms of health, EQ 5D 5L and EQ-VAS were used to determine the overall health aspect of this study population. It was found that the majority of the participants have slight to extreme problems in at least one of the 5 dimensions of health and only one-fourth of the participants have no problems in any of the 5 dimensions of health. This result resonates with the other studies in Europe, among the general population (38). Our findings indicate substantial reports of pain/discomfort (58.1%) and anxiety/depression (51.6%), echoing global concerns about musculoskeletal diseases and psychological risks of healthcare workers as documented by previous studies (37-38).

Our analysis revealed no significant difference in health outcomes across different demographic or professional groups, suggesting that the challenges and resilience observed are universally distributed among emergency healthcare workers in Kaunas. These finding differs from the previous studies done in Lithuania among hospital physicians suggesting poor physical and mental health were seen more in women than men (3). This could suggest either a unique aspect of the emergency healthcare environment in Kaunas, where gender does not influence health outcomes as significantly or because of the unequal proportion of male and female participation in the survey. Furthermore, the positive health perception reported through EQ VAS scores, despite the presence of health issues, might reflect a discrepancy between perceived and actual health status, or possibly, a cultural characteristic of healthcare workers in Lithuania (39). We found sleeping less than 7 hours tends to have a low health score, which highlights the importance of adequate sleep to have better health outcomes. This correlation aligns with existing research, which identifies inadequate sleep as a significant risk factor for lower back pain among healthcare workers (40). This highlights the critical need for interventions aimed at improving sleep quality as part of overall health management strategies. In previous research, it was found that poor work-life balance is associated with health problems for both men and women across Europe, which aligns with our studies (12). This stresses the need for continued efforts to enhance work-life balance as a means to improve health outcomes, particularly in high-stress professions like emergency healthcare.

### **Advantages of research**

1. **Employment of Validated Measurement Tools:** One of the core strengths of this study is the utilization of the WHO-5 Well-Being Index, European working condition survey questions, and the EQ-5D-5L, including EQ VAS, which are validated and widely recognized for their reliability. These instruments ensure that the assessment of subjective well-being, health, and work-life balance is grounded in established methodologies, enhancing the credibility of the findings.

2. **Specific Focus on a Key Worker Group:** This research addresses a significant gap by concentrating on emergency healthcare workers in Kaunas, a group that operates under high stress yet is

often overlooked in health and well-being studies. This focus allows for the generation of targeted insights that can inform specific interventions to support this critical workforce.

3. **Comprehensive Analytical Approach:** By investigating the interrelations between work-life balance, subjective well-being, and health outcomes, this study offers a holistic view of the factors impacting the lives of emergency healthcare workers.

### **Limitations of research**

1. **Cross-sectional Study Design:** The cross-sectional nature of the study, while effective for establishing a baseline understanding, limits the ability to discern causality or track longitudinal changes. Future research could benefit from a longitudinal design to capture the evolving dynamics of these factors over time.

2. **Geographical and Contextual Specificity:** Focusing solely on emergency healthcare workers in Kaunas may restrict the generalizability of the findings to other regions or healthcare contexts. Although this specificity provides in-depth local insights, the applicability of the results to broader populations may require further validation.

3. **Reliance on Self-reported Measures:** The study's dependence on self-reported data for assessing subjective well-being and health perceptions introduces potential biases, such as social desirability or recall inaccuracies. Incorporating objective measures and qualitative data could enrich the findings and offer a more rounded understanding of the participants' experiences.

4. **Sample Size and Response Rate:** Despite achieving a sample size adequate for analysis, the response rate and overall sample diversity might not fully represent the broader emergency healthcare workforce. Enhancing the sample size or achieving a higher response rate in future studies could improve the robustness and representativeness of the research findings.

5. **Lack of Qualitative Insights:** While the quantitative approach provides valuable metrics, the absence of qualitative data may overlook the nuanced, personal experiences of emergency healthcare workers. Integrating interviews or focus groups in future studies could uncover deeper insights into the quantitative trends observed.

## CONCLUSIONS

1. The research revealed that majority (around 68 %) of emergency healthcare workers in Kaunas have good work-life balance. A notable proportion of the workforce perceives their work-life balance as poor, particularly among younger workers. Whereas they also face significant challenges in achieving work-life balance: frequent work-related fatigue and interference with family responsibilities.

2. The study highlighted a concerning level of subjective well-being among emergency healthcare workers, with about a half of the participants reporting scores indicative of potential depression. A significant number of workers experience issues related to pain/discomfort and anxiety/depression, indicating the possibility of physical and psychological toll of emergency healthcare work. Participants facing no problems in any of the 5 dimensions of health have a better perception of health compared to those with slight to extreme problems in any of the 5 dimensions of health.

3. The comparison across different professions, marital status, having family responsibilities, COVID-19 infection history, and working hours groups within the study population did not reveal significant differences in work-life balance, subjective well-being, and health. However, sleeping less than 7 hours a day was significantly associated with poor work-life balance, subjective well-being, and health of the participants.

4. The research found significant positive correlations between work-life balance, subjective well-being, and health among all study participants. Female healthcare workers exhibited stronger correlations between Work-life balance and Subjective well-being compared to males. Doctors showed the most pronounced relationship between work-life balance and subjective well-being, while nurses exhibited significant moderate positive correlations across all measured relationships, with the strongest being between subjective well-being and health. Additionally, individuals aged 35 to 49 years demonstrated the strongest correlations, suggesting that these groups may be particularly sensitive to the impact of work-life balance on health and well-being.

## PRACTICAL RECOMMENDATIONS

Based on the comprehensive survey conducted to assess work-life balance, health, and subjective well-being among emergency healthcare workers in Kaunas, several targeted recommendations have been developed. These are designed to address the specific challenges identified in the study and to enhance overall well-being at both individual and organizational levels. The following recommendations are intended to support emergency healthcare workers more effectively and to promote systemic improvements within healthcare settings.

### **Individual Level Recommendations**

1. *Encourage Adequate Sleep*: Promote practices and habits that support at least 7 hours of sleep per night to improve overall well-being and work-life balance.
2. *Ergonomic Support s*: Educate workers on ergonomic practices to reduce pain and discomfort, especially for those frequently experiencing these issues.
3. *Self-Screening for Depression*: Encourage self-screening using tools aligned with ICD-10 guidelines to identify symptoms of depression early and seek appropriate interventions.

### **Organization-Level Recommendations**

1. *Targeted Support for Younger Workers*: Develop mentorship and support programs specifically for younger workers (ages 18-34) who report lower levels of work-life balance.
2. *Combat Work-Related Fatigue*: Implement policies that limit excessive work hours and introduce mandatory breaks to combat fatigue. Consider shift adjustments and workload management to ensure adequate rest..
3. *Family Support Initiatives*: Offer flexible working arrangements and family support services, such as on-site childcare or partnerships with local childcare providers, to help employees manage family responsibilities better.
4. *Mental Health Programs*: Establish comprehensive mental health support systems, including counseling and therapy options, to address issues related to depression and anxiety.

### **System-Level Recommendations**

1. *Inclusive Interventions*: Acknowledge that the study revealed no significant differences in subjective well-being, health, and work-life balance among different professions within the emergency healthcare sector in Kaunas. Therefore, interventions to improve these aspects should be inclusive and widely applicable to all workers within this sector.

2. *Programs to Decrease Depression and Anxiety:* Collaborate with healthcare providers to develop workshops and programs focused on mental health, particularly targeting the reduction of depression and anxiety among healthcare workers.

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# ANNEXES

## Annex 1

### The copy of approval of Bioethics Centre at LSMU



LIETUVOS SVEIKATOS MOKSLŲ UNIVERSITETAS

BIOETIKOS CENTRAS

Kodas 302536989, Tilžės g. 18, LT- 47181, Kaunas, tel.: (8 37) 327233, [www.lsmuni.lt](http://www.lsmuni.lt), el.p.: [bec.registracija@lsmuni.lt](mailto:bec.registracija@lsmuni.lt)

Medicinos akademija (MA) *2023.04.19* Nr. BEC-TVS(M)-122  
Magistrantūros studijų programa –  
Taikomoji visuomenės sveikata (studijos  
užsienio kalba)  
I k. magistrantui Trupti Sanjay Ghate  
Darbo vadovė lekt. Lolita Šileikienė  
LSMU Profilaktinės medicinos katedra

#### DĖL PRITARIMO TYRIMUI

LSMU Bioetikos centras, įvertinęs Trupti Sanjay Ghate pateiktus dokumentus, magistranto tiriamajam darbui tema „Well-being, Health and Work-life balance in Emergency Health care workers in Kaunas“ pritaria\*.


*Dr. Ausra Urbonienė*

\* Pastaba: šis pritarimas neatleidžia tiriamąjį mokslinį darbą vykdančių asmenų nuo prievolės laikytis Bendrojo duomenų apsaugos reglamento nuostatų ir nuo atsakomybės gauti nacionalinio arba regioninio bioetikos komiteto leidimą, jei toks leidimas būtinas pagal LR Biomedicininų tyrimų etikos įstatyme numatytus reikalavimus.

## The copy of permission of the Head of Institution Page 1

Verdas ir pavardė	Trupti Sanjay Gbate
Gimimo data	21 <sup>o</sup> February 1995
Adresas	Sukilėlių Prospektas 53, Kaunas 50105
Telefono Nr.	+37062379980
El. pašto Nr.	trupti.sanjay.gbate@stud.lsmu.lt

Viešosios įstaigos Kauno miesto greitosios  
medicinos pagalbos stoties  
Direktoriui

  
Direktorius pavaduotoja medicinos  
atliekanti direktoriaus funkcijas  
Ilona Kajakaitė

PRAŠYMAS

22<sup>nd</sup> March 2023  
Data

Prašau Jūsų leidimo atlikti tyrimą, kuris yra mano  
Visuomenės sveikatos magistro baigiamąjį darbo dalis  
dietovos sveikatos mokslų universitete. Mano tyrimo  
tikslas - kauno greitosios medicinos pagalbos darbuotojų  
savijauta, sveikata, darbo ir asmeninio gyvenimo  
pusiausvyra.

[sipareigoju užbaigus mokslinį tyrimą ar atlikus anketinę apklausą 2 savaičių  
laikotarpyje supažindinti Kauno m. GMPS administraciją su tyrimo metu atliktos  
duomenų analizės išvadomis

  
parašas

Trupti Sanjay Gbate  
vardas ir pavardė

## The copy of permission of the Head of Institution Page 2

Viešoji įstaiga Kauno miesto greitosios medicinos pagalbos stotis

### Įsipareigojimas saugoti asmens duomenų paslaptį

#### Aš suprantu

- kad tvarkysiu asmens duomenis, kurie negali būti atskleisti ar perduoti neįgalotiems asmenims ar institucijoms;
- kad draudžiama perduoti neįgalotiems asmenims slaptažodžius ir kitus duomenis, leidžiančius programinėmis ir techninėmis priemonėmis sužinoti asmens duomenis ar kitaip sudaryti sąlygą susipažinti su asmens duomenimis;
- kad netinkamas asmens duomenų tvarkymas gali užtraukti atsakomybę pagal Lietuvos Respublikos įstatymus.

#### Aš įsipareigoju

- saugoti asmens duomenų paslaptį;
- tvarkyti asmens duomenis, vadovaudamasis Lietuvos Respublikos įstatymais ir kitais teisės aktais, taip pat pareiginiiais nuostatais ir taisyklėmis, reglamentuojančiomis man patikėtas asmens duomenų tvarkymo funkcijas;
- neatskleisti, neparduoti tvarkomas informacijos ir nesudaryti sąlygų įvairiomis priemonėmis su ja susipažinti nei vienas asmeniui, kuris nėra įgaliotas naudotis šia informacija tiek įstaigos viduje, tiek iš jos ribų;
- pranešti įstaigos vadovui ar duomenų apsaugos įgaliotiniui apie kiekvieną įtartiną situaciją, kuri gali kelti grėsmę asmens duomenų saugumui.

#### Aš žinau

- kad už šio įsipareigojimo nesilaikymą ir Lietuvos Respublikos asmens duomenų teisinės apsaugos įstatymo pažeidimą turėsiu atsakyti pagal galiojančios Lietuvos Respublikos įstatymus;
- kad asmuo, patyręs žalą dėl neteisėto asmens duomenų tvarkymo arba kitu duomenų valdytojo ar duomenų tvarkytojo veiksnu ar neveikimu, turi teisę reikalauti atlyginti jam padarytą žalą ir neturtinę žalą (pagal Lietuvos Respublikos asmens duomenų teisinės apsaugos įstatymo 29 str. 1 d.);
- kad duomenų valdytojas, duomenų tvarkytojas ar kitas asmuo, atlygina asmeniui padarytą žalą, patirtą nuostolį išveikaliauja įstatymų nustatyta tvarka iš asmens duomenis tvarkančio darbuotojo, dėl kurio kaltės atsirado ši žala (29 str. 3 d.);

Aš esu susipažinęs su aukščiau išdėstytais punktais:

\_\_\_\_\_ kita įrašyti

Naudotojas:

Šis pasižadėjimas buvo pasirašytas dalyvaujant

Tsypki Sonjay G habe  
(vardas, pavardė)

Nerijus Mikėlonis  
(vardas, pavardė) *greitosios medicinos  
diagnostikos funkcijas*

LSMU VSF Tys Ik. studentė

Direktorius  
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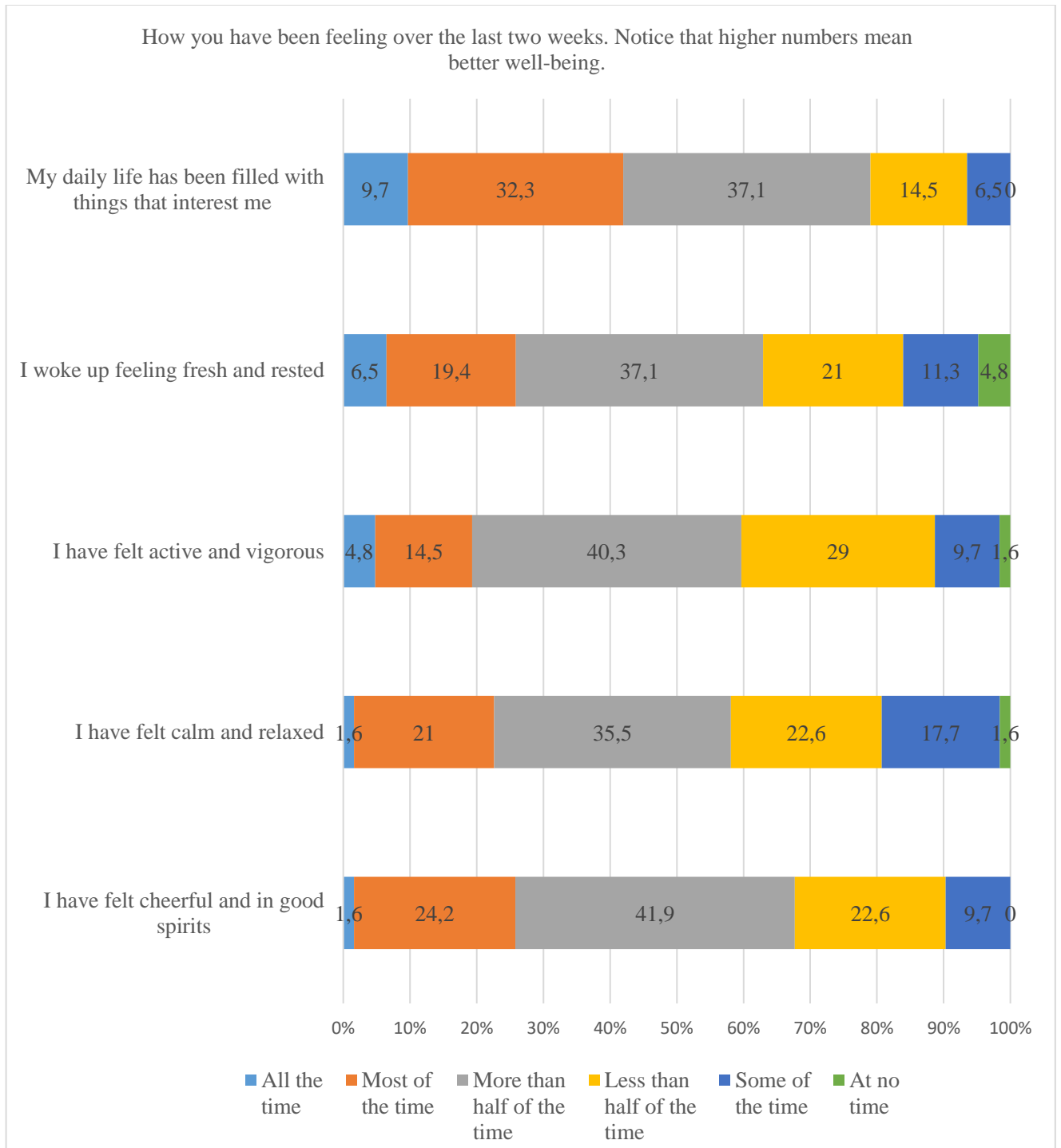
22<sup>nd</sup> March 2023

(data, parašius)

*Blor*

**Table. Opinions expressed by respondents for the different statements regarding the Work-Life Balance issues**

<b>Statement</b>	<b>Every day</b>	<b>Several times a week</b>	<b>Several times a month</b>	<b>Several times a year</b>	<b>Less often/rarely</b>	<b>Never</b>	<b>Total</b>
I have come home from work too tired to do some of the household jobs which need to be done	10.3	16.4	22.0	40.7	10.7	0	100
It has been difficult for me to fulfil my family responsibilities because of the amount of time I spend on the job	21.2	33.5	16.0	25.5	3.8	0	100
Self-medication is completely safe I have found it difficult to concentrate at work because of my family responsibilities	12.2	40.4	37.6	8.0	1.9	0	100



**Fig. Opinions expressed by respondents for the different statements regarding the Subjective well-being**

**Table. Opinions expressed by respondents for the different statements regarding Health**

<b>5 dimensions of Health</b>	<b>5 levels of problems</b>	<b>Participants %</b>
Mobility	I have no problems in walking about	85,5
	I have slight problems in walking about	9,7
	I have moderate problems in walking about	4,8
	I have severe problems in walking about	0
	I am unable to walk about	0
Self-Care	I have no problems washing or dressing myself	96,8
	I have slight problems washing or dressing myself	1,6
	I have moderate problems washing or dressing myself	1,6
	I have severe problems washing or dressing myself	0
	I am unable to wash or dress myself	0
Usual Activities (e.g. work, study, housework, family or leisure activities)	I have no problems doing my usual activities	82,3
	I have slight problems doing my usual activities	11,3
	I have moderate problems doing my usual activities	6,5
	I have severe problems doing my usual activities	0
	I am unable to do my usual activities	0
Pain/ Discomfort	I have no pain or discomfort	41,9
	I have slight pain or discomfort	50
	I have moderate pain or discomfort	8,1
	I have severe pain or discomfort	0
	I have extreme pain or discomfort	0
Anxiety/ Depression	I am not anxious or depressed	48,4
	I am slightly anxious or depressed	41,9
	I am moderately anxious or depressed	9,7
	I am severely anxious or depressed	0
	I am extremely anxious or depressed	0

## THE RESEARCH QUESTIONNAIRE

Dear Respondent,

My name is Trupti Sanjay Ghate. We are conducting a research study as part of my master's thesis in Applied Public Health at the Lithuanian University of Health Sciences, focused on understanding the well-being and work-life balance of Emergency Healthcare workers. Your participation in this study is very important to the understanding of this important topic, and we thank you in advance for your time in answering the survey questions.

This survey will take approximately 5-7 minutes to complete and consists of a series of questions related to your well-being, health, and work-life balance. Your responses will be kept confidential and anonymous, and participation in this study is completely voluntary - you can stop participating in the study and withdraw from it at any time and no longer provide your data in the survey of this study.

We appreciate your input into this research. We hope that the information gathered will be valuable and will help improve the well-being, health, and work-life balance of EMS workers in the future. There is no right or wrong answer. If you have any questions or concerns about the research, please do not hesitate to contact the Principal Investigator for clarification Trupti Ghate, via e-mail: [trupti.sanjay.ghate@stud.lsmu.lt](mailto:trupti.sanjay.ghate@stud.lsmu.lt) or the study supervisor Lolita Šileikienė, via e-mail: [lolita.sileikiene@lsmu.lt](mailto:lolita.sileikiene@lsmu.lt)

Thank you for your time and understanding.

*Please mark the correct answers.*

### 1. How old are you?

*please specify* (years)

### 2. What is your sex?

- Male
- Female
- Other
- Preferred not to say

### 3. Marital Status

- Single
- Married

- In a domestic partnership
- Divorced
- Widowed

**4. How many children under the age of 18 do you have?**

- None
- One
- Two
- Three or more

**5. Do you have any elderly family members or dependents who require your care/help?**

- Yes
- No

**6. What is your profession?**

- Doctor
- Nurse
- Paramedics
- Other: *please specify* \_\_\_\_\_

**7. For how many years have you been working in an Emergency Healthcare setting/ in an urgent care facility?**

- Less than 1 year
- 1-5 years
- 6-10 years
- 11-15 years
- More than 15 years

**8. In general, how do your working hours fit in with your family or social commitments outside work?**

- Very well
- Rather well
- Rather not well
- Not at all well
- Poorly
- Do not know

**9. How often has each of the following happened to you during the last 12 months?**

*Mark it [x] in the table*

	Every day	Several times a week	Several times a month	Several times a year	Less often/ rarely	Never
9.1. I have come home from work too tired to do some of the household jobs which need to be done						

9.2. It has been difficult for me to fulfil my family responsibilities because of the amount of time I spend on the job						
9.3. I have found it difficult to concentrate at work because of my family responsibilities						

**10. How many hours do you work in a usual week?**

*please specify* \_\_\_\_\_ hours/week

**11. How many hours a day do you usually spend at work round the clock?**

*please specify* \_\_\_\_\_ hours/round the clock

**12. How many hours do you usually sleep round the clock?**

*please specify* \_\_\_\_\_ hours/ round the clock

**13. How many hours a day do you have for your leisure/ family time?**

*please specify* \_\_\_\_\_ hours/day

**14. Please indicate for each of the five statements which is closest to how you have been feeling over the last two weeks. Notice that higher numbers mean better well-being.**

*Mark it [x] in the table*

<i>Over the last two weeks</i>	All the time	Most of the time	More than half of the time	Less than half of the time	Some of the time	At no time
1. I have felt cheerful and in good spirits.						
2. I have felt calm and relaxed.						
3. I have felt active and vigorous.						
4. I woke up feeling fresh and rested.						
5. My daily life has been filled with things that interest me.						

**15. In general, how is your health?**

- Very good
- Good
- Fair
- Bad
- Very bad

**16. Have you ever been infected with COVID-19? If yes, how many times have you been infected?**

**Please choose one of the following options:**

- I have never been infected with COVID-19.
- I have been infected with COVID-19 once.
- I have been infected with COVID-19 multiple times.

**17. Have you had a severe case of COVID-19 or experienced long-lasting effects on your health because of COVID-19? Please choose one of the following options:**

- I have not had a severe case of COVID-19 and have not experienced any long-lasting effects on my health.

- I had a severe case of COVID-19 but did not experience any long-lasting effects on my health.
- I had a severe case of COVID-19 and experienced long-lasting effects on my health.
- I did not have a severe case of COVID-19, but experienced long-lasting effects on my health.

**18. Under each heading, please tick the ONE box that best describes your health TODAY.**

**MOBILITY**

- I have no problems in walking about
- I have slight problems in walking about
- I have moderate problems in walking about
- I have severe problems in walking about
- I am unable to walk about

**SELF-CARE**

- I have no problems washing or dressing myself
- I have slight problems washing or dressing myself
- I have moderate problems washing or dressing myself
- I have severe problems washing or dressing myself
- I am unable to wash or dress myself

**USUAL ACTIVITIES** (*e.g work, study, housework, family or leisure activities*)

- I have no problems doing my usual activities
- I have slight problems doing my usual activities
- I have moderate problems doing my usual activities
- I have severe problems doing my usual activities
- I am unable to do my usual activities

**PAIN / DISCOMFORT**

- I have no pain or discomfort
- I have slight pain or discomfort
- I have moderate pain or discomfort
- I have severe pain or discomfort
- I have extreme pain or discomfort

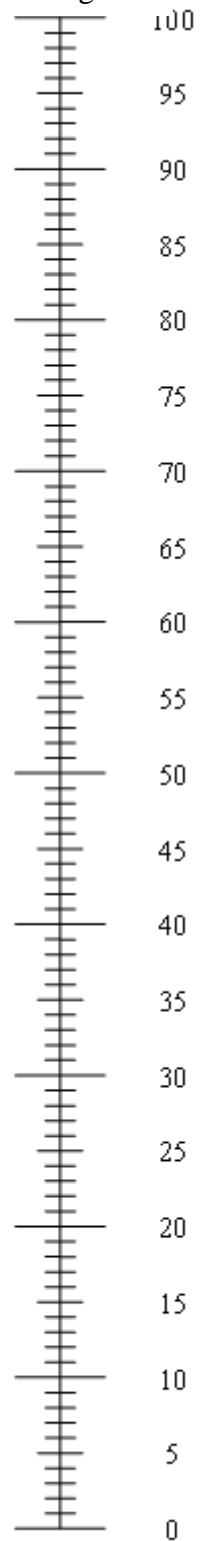
**ANXIETY / DEPRESSION**

- I am not anxious or depressed
- I am slightly anxious or depressed
- I am moderately anxious or depressed
- I am severely anxious or depressed
- I am extremely anxious or depressed

- We would like to know how good or bad your health is TODAY.
- This scale is numbered from 0 to 100.
- 100 means the best health you can imagine.  
0 means the worst health you can imagine.
- Please mark an X on the scale to indicate how your health is TODAY.
- Now, write the number you marked on the scale in the box below.

YOUR HEALTH TODAY =

The best health  
you can imagine.



The worst health  
you can imagine.

Gerbiamas Respondente,

Mano vardas Trupti Sanjay Ghate – esu Lietuvos sveikatos mokslų universiteto Visuomenės sveikatos fakulteto I kurso magistro studijų studentė. Vykdomė mokslinį tyrimą, kuris yra mano Taikomosios visuomenės sveikatos programos magistro darbo, skirto greitosios medicinos pagalbos darbuotojų gerovės bei darbo ir asmeninio gyvenimo pusiausvyros vertinimui, dalis. Jūsų dalyvavimas šiame tyrime labai reikšmingas šios svarbios temos supratimui, todėl iš anksto dėkojame už jūsų laiką atsakymams į tyrimo anketos klausimus.

Ši apklausa užtruks apie 5–7 minutes. Ją sudaro klausimai, susiję su jūsų gerove, sveikata bei darbo ir asmeninio gyvenimo pusiausvyra. Užtikriname, kad jūsų atsakymai bus konfidencialūs ir anonimiški. Dalyvavimas šiame tyrime yra visiškai savanoriškas - jūs galite bet kada nutraukti dalyvavimą tyrime ir iš jo pasitraukti bei nebeteikti savo duomenų šio tyrimo apklausoje.

Mes vertiname Jūsų indėlį šiame tyrime. Tikimės, kad surinkta informacija bus vertinga ir padės gerinti greitosios medicinos pagalbos darbuotojų gerovę, sveikatą bei darbo ir asmeninio gyvenimo pusiausvyrą ateityje. Būkite kiek įmanoma nuoširdesni. Nėra teisingo ar neteisingo atsakymo. Jei kiltų klausimų ar neaiškumų dėl tyrimo, nedvejodami susisiekiame su pagrindine tyrėja Trupti Sanjay Ghate el. paštu: [trupti.sanjay.ghate@stud.lsmu.lt](mailto:trupti.sanjay.ghate@stud.lsmu.lt) arba su jos darbo vadove Lolita Šileikiene el. paštu: [lolita.sileikiene@lsmu.lt](mailto:lolita.sileikiene@lsmu.lt)

Ačiū už skirtą laiką ir supratimą

***Prašome pažymėti teisingus atsakymus***

**1. Kiek Jums metų?**

*prašome patikslinti* \_\_\_\_\_ metų

**2. Kokia Jūsų lytis?**

- Vyras
- Moteris
- Kita
- Pageidauju neatsakyti

**3. Kokia Jūsų šeimyninė padėtis?**

- Nevedęs / Netekėjusi
- Vedęs / Ištekėjusi
- Gyvenu partnerystėje
- Išsiskyręs / Išsiskyrusi
- Našlys/ Našlė

**4. Kiek turite vaikų iki 18 metų?**

- Neturiu
- Vieną
- Du
- Tris ir daugiau

**5. Ar turite pagyvenusių šeimos narių ar išlaikytinių, kuriems reikalinga jūsų priežiūra / pagalba?**

- Taip, turiu
- Ne, neturiu

**6. Kokia Jūsų profesija?**

- Gydytojas
- Slaugytojas
- Paramedikas
- Kita: *prašome patikslinti* \_\_\_\_\_

**7. Kiek metų Jūs dirbate greitosios medicinos pagalbos / skubios sveikatos priežiūros įstaigoje?**

- Mažiau nei 1 metus
- 1-5 metus
- 6-10 metų
- 11-15 metų
- Daugiau nei 15 metų

**8. Bendrai, kaip jūsų darbo laikas dera su jūsų šeimos ar socialiniais įsipareigojimais už darbo ribų?**

- Labai gerai
- Gana gerai
- Greičiau neblogai
- Visai neblogai
- Prastai
- Nežinau

**9. Kaip dažnai per praėjusius 12 mėnesių Jums pasitaikė kiekvienas iš šių dalykų?**

*Pažymėkite [x] lentelėje*

	Kasdien	Kelis kartus per savaitę	Keletą kartų per mėnesį	Keletą kartų per metus	Rečiau / retai	Niekada
<b>9.1. Aš parėjau iš darbo toks (-ia) pavargęs (-usi), kad negalėjau atlikti namų ūkio darbų, kuriuos reikėjo atlikti</b>						
<b>9.2. Man buvo sunku įvykdyti savo pareigas šeimai dėl to, kad ilgai buvau darbe</b>						

9.3. Man buvo sunku susikaupti darbe dėl šeimyninių rūpesčių						
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10. Kiek valandų dirbate per įprastą darbo savaitę?

*prašome patikslinti* \_\_\_\_\_ valandų per savaitę

11. Kiek valandų įprastai per parą praleidžiate darbe?

*prašome patikslinti* \_\_\_\_\_ valandų per dieną

12. Kiek valandų per parą įprastai miegate?

*prašome patikslinti* \_\_\_\_\_ valandų per parą

13. Kiek valandų per dieną skiriate laisvalaikiui/šimos laikui?

*prašome patikslinti* \_\_\_\_\_ valandų per dieną

14. Pažymėkite geriausią atsakymą prie kiekvieno iš penkių teiginių apie tai, kaip jautėtės per pastarąsias dvi savaites Atkreipiame dėmesį, kad didesni skaičiai reiškia geresnę savijautą.

*Pažymėkite [x] lentelėje*

<i>Per praėjusias dvi savaites</i>	Vislaik	Beveik vislaik	Daugiau nei pusto laiko	Mažiau nei pusto laiko	Kartais	Niekada
1. Jauiausi linksmas ir pakilios nuotaikos.						
2. Jauiausi ramus ir atsipalaidav.						
3. Jauiausi aktyvus ir energingas.						
4. Atsibuds jauiausi žvalus ir pailsįs.						
5. Mano kasdieniniame gyvenime buvo daug mane dominančių dalykų.						

15. Kaip apskritai tavo sveikata?

- Labai gerai
- geras
- Sąžininga
- Blogas
- Labai blogai

16. Ar sirgote COVID-19 liga? Jei taip, kiek kartų buvote užsikrėtę? Pasirinkite vieną iš šių atsakymų:

- Aš niekada nebuvo užsikrėtęs COVID-19
- Aš buvau užsikrėtęs COVID-19 vieną kartą
- Aš buvau užsikrėtęs COVID-19 daug kartų

**17. Ar sirgote sunkia COVID1-9 forma su ilgalaikėmis pasekmėmis sveikatai? Pasirinkite vieną iš šių atsakymų:**

- Nesirgau sunkiu COVID-19 ir nepatyrčiau ilgalaikių pasekmių savo sveikatai
- Sirgau sunkiu COVID-19, bet nepatyrčiau jokių ilgalaikių pasekmių savo sveikatai
- Sirgau sunkiu COVID-19 ir patyrčiau ilgalaikes pasekmes savo sveikatai
- Sirgau nesunkiu COVID-19, tačiau patyrčiau ilgalaikių pasekmių savo sveikatai

**18. Kiekvienoje teiginių grupėje varnele pažymėkite po VIENĄ langelį, esantį greta teiginio, tiksliausiai apibūdinančio Jūsų sveikatą ŠIANDIEN.**

<b>JUDĖJIMAS</b>	
Man vaikščioti nesunku	q
Man vaikščioti sunkoka	q
Man vaikščioti vidutiniškai sunku	q
Man vaikščioti labai sunku	q
Aš negaliu vaikščioti	q
<b>SAVĖS PRIEŽIŪRA</b>	
Man visiškai lengva nusiprausti ar apsirengti	q
Man sunkoka nusiprausti ar apsirengti	q
Man vidutiniškai sunku nusiprausti ar apsirengti	q
Man labai sunku nusiprausti ar apsirengti	q
Aš nesugebu nusiprausti ar apsirengti	q
<b>ĮPRASTA VEIKLA</b> (pvz.: darbas, mokslas, namų ruošą, šeimos ar laisvalaikio užsiėmimai)	
Man visiškai lengva užsiimti savo įprasta veikla	q
Man sunkoka užsiimti savo įprasta veikla	q
Man vidutiniškai sunku užsiimti savo įprasta veikla	q
Man labai sunku užsiimti savo įprasta veikla	q
Aš nesugebu užsiimti savo įprasta veikla	q
<b>SKAUSMAS / DISKOMFORTAS</b>	
Aš nejaučiu skausmo ar diskomforto	q
Aš jaučiu šiekį tokį skausmą ar diskomfortą	q
Aš jaučiu vidutinišką skausmą ar diskomfortą	q
Aš jaučiu smarkų skausmą ar diskomfortą	q
Aš jaučiu nepaprastą skausmą ar diskomfortą	q
<b>NERIMAS / DEPRESIJA</b>	
Nesu sunerimęs (-usi) ar apimtas (-a) depresijos	q
Esu šiek tiek sunerimęs (-usi) ar apimtas (-a) depresijos	q
Esu vidutiniškai sunerimęs (-usi) ar apimtas (-a) depresijos	q
Esu smarkiai sunerimęs (-usi) ar apimtas (-a) depresijos	q
Esu nepaprastai sunerimęs (-usi) ar apimtas (-a) depresijos	q

- Norėtume žinoti, kiek gera ar bloga jūsų sveikata ŠIANDIEN.
- Ši skalė sunumeruota nuo 0 iki 100.
- 100 reiškia geriausią sveikatą, kokią tik galite įsivaizduoti.
- 0 reiškia blogiausią sveikatą, kokią tik galite įsivaizduoti.
- Pažymėkite skalę X ženklu taip, kad nurodytumėte, kokia jūsų sveikata ŠIANDIEN.
- Prašome dabar užrašyti žemiau esančiame langelyje jūsų pažymėtą numerį.

JŪSŲ SVEIKATA ŠIANDIEN =

