

### 3.4 Health and Resilience

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<b>Akinwande Damola Victor</b> European University Cyprus	Theoretical Explanation of Employees' Remote Work Experience in Cyprus during and after the Lockdown
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**Theoretical Explanation of Employees' Remote Work Experience in Cyprus  
during And After The Lockdown**

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**by**

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# INTRODUCTION

- The outbreak of the COVID-19 pandemic forced government across the globe to implement policies that mandated people to limit their daily commuting, social interactions, and even outdoor activities to the barest minimum possible.
- Most organizations that could, resulted to remote working as fast as possible (even those who concluded it is unproductive before now) in order to keep business ongoing, bringing remote working to be on popular demand as it is now.
- Prior to COVID-19 outbreak, working from home, remote work and telecommuting were adopted by a few companies because of the advantages involved, such that eligible workers could design their workstyle themselves (Lapierre, Van Steenberg, Peters, & Kluwer, 2016).

## LOCKDOWN AS A NON-PHARMACEUTICAL MEASURE

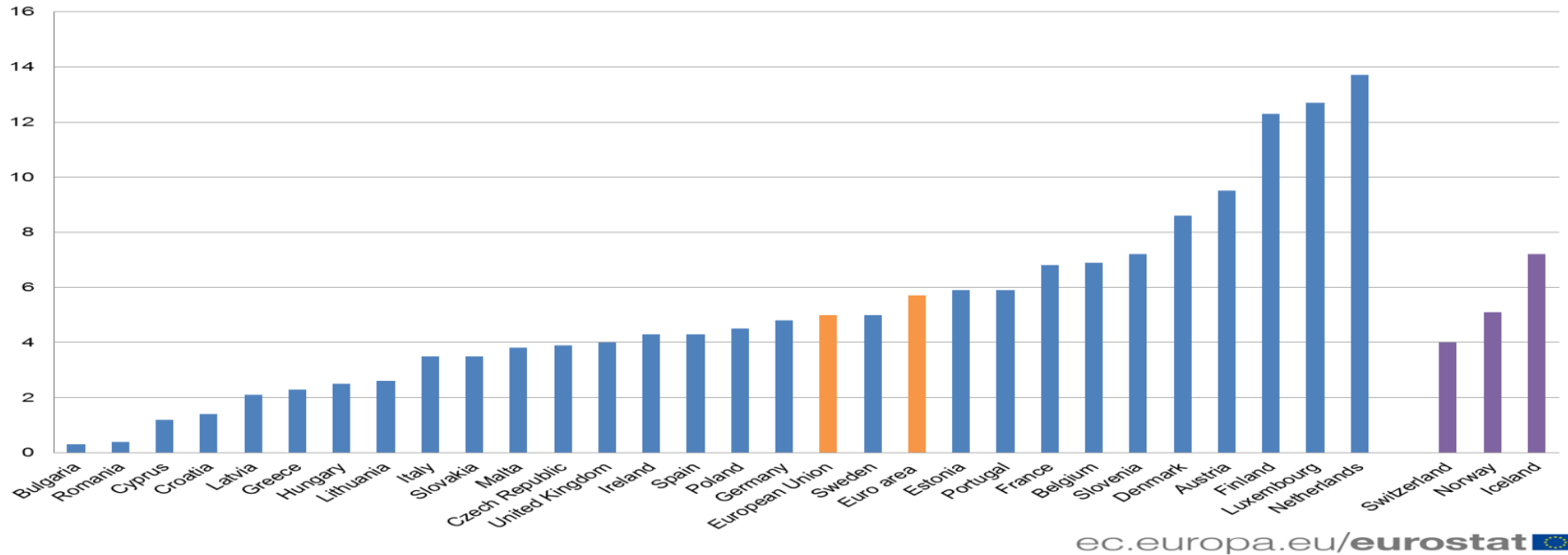
- Lockdown among other social actions is defined as a form of non-pharmaceutical intervention to manage the spread of pandemics or epidemics
- Such social actions such as school closure, curfew, movement restrictions and more give health authorities ample time to gather enough information on severity, morbidity, and mortality of the outbreak (Monto and Fukuda 2020)
- These methods have proven very effective from time in managing endemics and pandemics as against vaccines which always comes after the pandemic is widespread or after the first wave (Petersen *et al.* 2020).

# REMOTE WORKING, THE NEW NORMAL

- Remote working, also known as telework, telecommuting, or virtual work, refers to a work arrangement where the employee performs work duties at a location other than the physical property of the employer or employing organization (Morganson, Major, Oborn, Verive, & Heelan, 2010).
- The idea of remote working started in 1973 with the aim to eradicate the need to travel to work everyday, pioneered by Jack Niles, it was then known as “teleworking” (Nilles, Carlson, Gray, & Hannaneman, 1976).
- Remote working as an option of work has been on a rise even before COVID-19, owing its adoption to advances in technology (Golden & Fromen, 2011). As a trend, it started since the 80s and was aimed at avoiding travel congestion and save money on pricey office space (Erasmus 2020)
- This simply indicates that when businesses originally considered remote working, they were thinking about promoting business rather than employee welfare

**Figure 1:**

**Employed persons aged 15-64 usually working from home in the EU, 2017**  
(% of total employment)

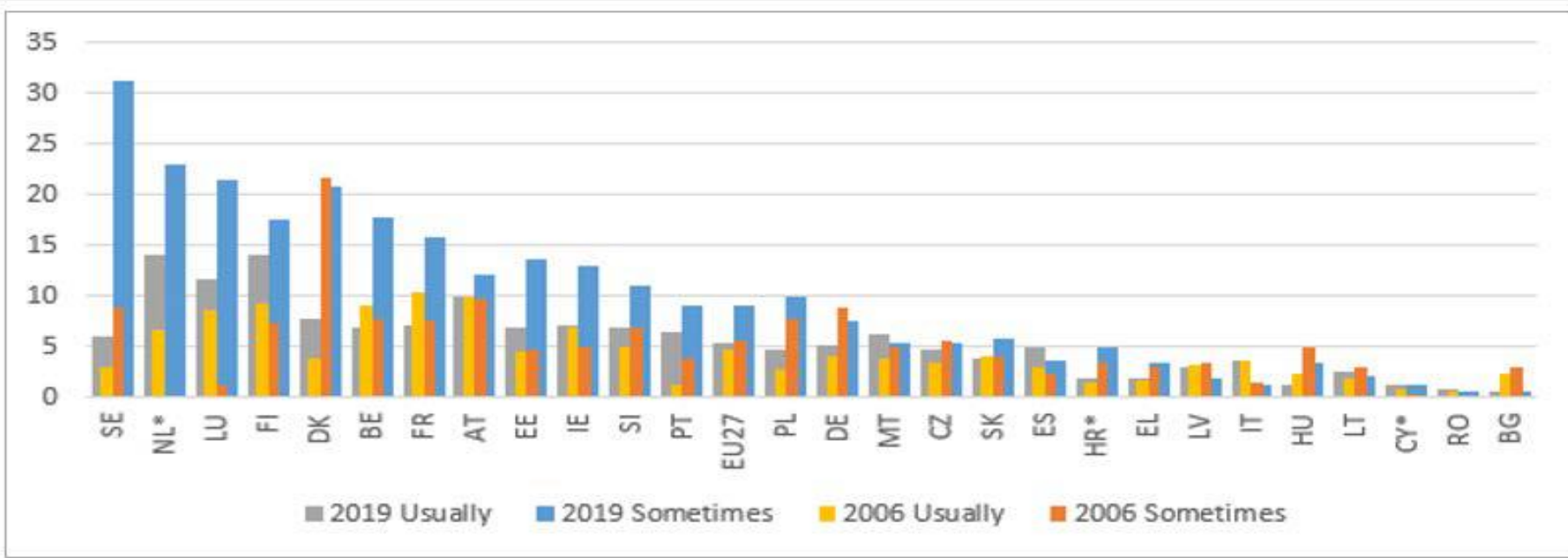


[ec.europa.eu/eurostat](http://ec.europa.eu/eurostat)

Source: Eurostat, 2018

**Figure 2:**

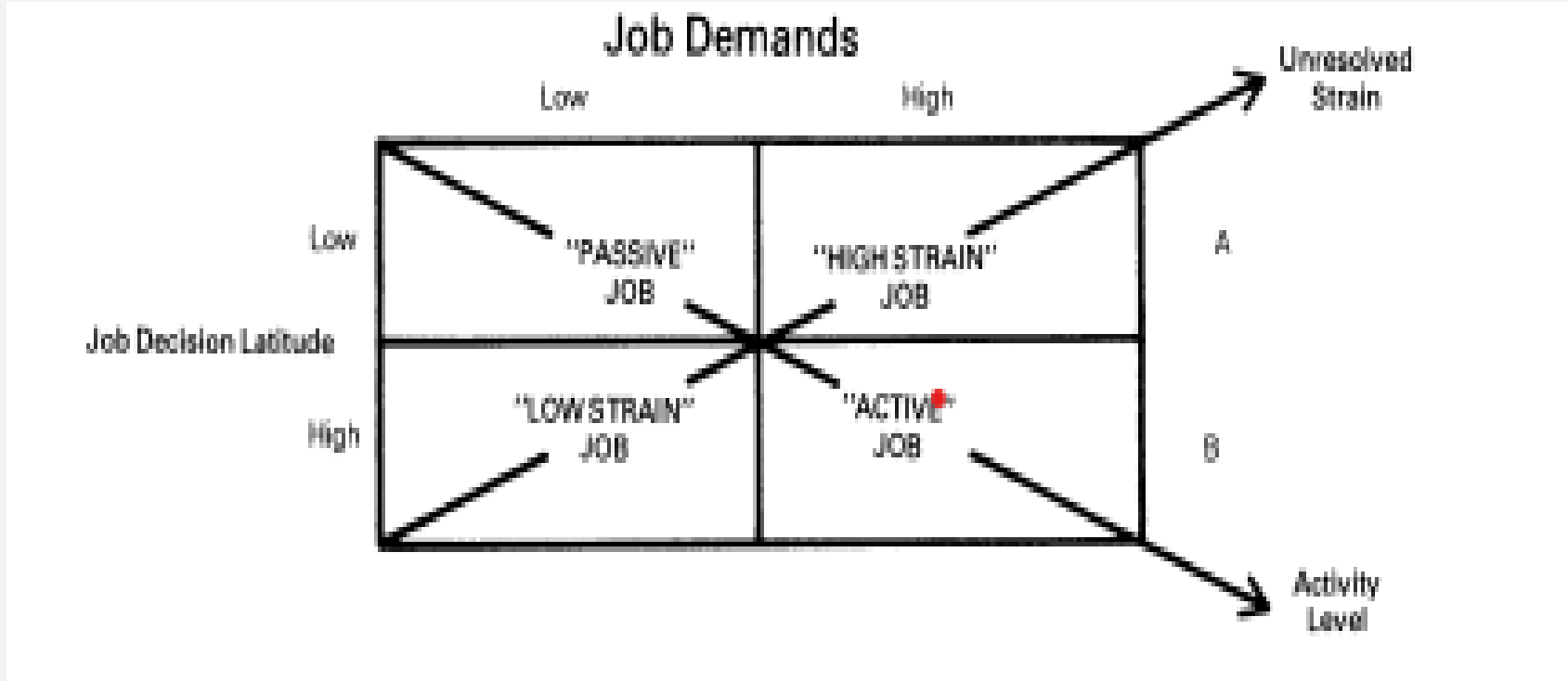
*Share of workers aged 15-64 working from home by frequency of work from home (%) and country, 2006 and 2019*



Source: Eurostat (LFSA\_EHOMP).

# JOB-DEMAND CONTROL THEORY

- **Figure 3:** Job strain model

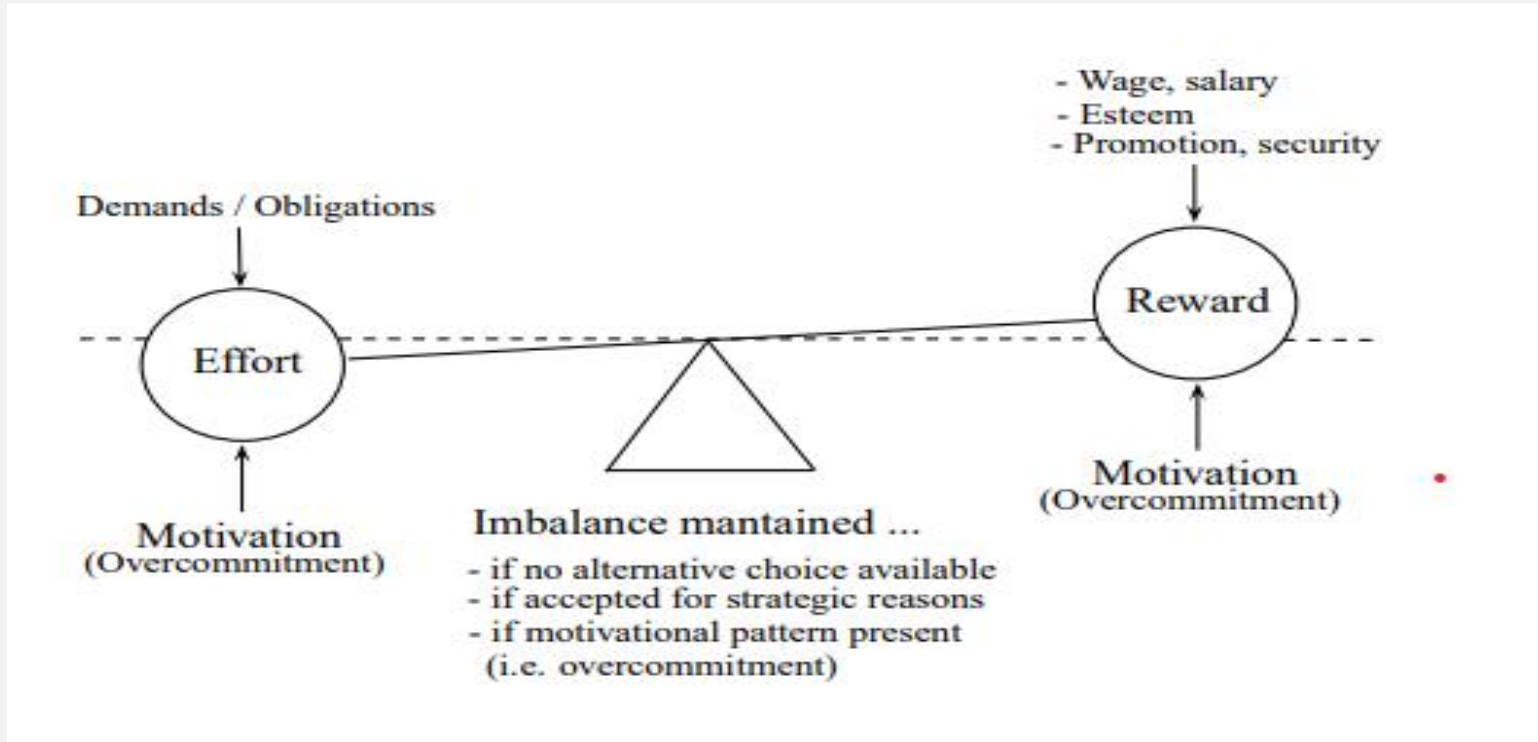


Source: (Karasek Jr 1979)



# EFFORT-REWARD IMBALANCE MODEL

**Figure 4:** Schematic representation of ERI-model



**Source:** (Siegrist 2002)

## SUMMARY AND CONCLUSION

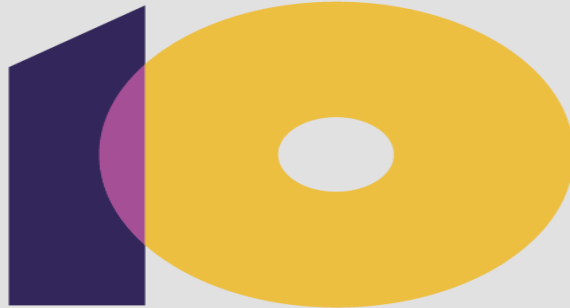
- Occupational Benefits of Remote Working
- Occupational Risks of Remote Working
- Challenges and Limitations of Remote Working
- Future Expectations

# Thank you!

Questions

Comments

Suggestions



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**Biennial PhD  
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**HELLENIC  
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*Health Management*

*Health promotion and disease prevention*



Exploring the association of Empowerment with the gender gap in health, focusing on symptoms of Chronic Musculoskeletal Pain and Depression of Women in Cyprus

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## **ABSTRACT**

Empowerment, the process by which a person increases control over decisions concerning their life, is a multi-dimensional construct that may positively affect health. In parallel, low socioeconomic status (SES) increases the risk of morbidity and mortality, in part, due to the substantial impact associated with it, resulting in feelings of powerlessness. Life expectancy of women in the European Union and more specifically in Cyprus is longer than men, however this survival advantage is not always accompanied by a better state of health and wellbeing. Women tend to experience chronic pain more often than men, in many cases coupled with impairment of daily activities and accompanied by depressive symptoms that significantly affect their quality of life. Taking into consideration the culture and position of women in patriarchal societies, one of them being Cyprus, one may assume that women are, to a certain extent, oppressed, therefore experiencing feelings of powerlessness that may adversely affect their health. Over and above SES and other important factors, we aim at exploring empowerment in relation to women's health and wellbeing and more specifically in association with chronic pain and depression.

**Keywords: Empowerment, Women, Patriarchy, Gender Gap in Health**

*Approx 6100 words*

## INTRODUCTION

Historically, the need to empower people emerged from the fact that people stratified to specific race and gender societal strata have been *oppressed* as a result of ruling power exerted on them, a power that became established over the years, leading to discrimination and *alienation*, and rendered them powerless. Making people aware of their situation and guiding them to take action towards “self-determination” were the first steps in the establishment of the empowerment theory (Freire, 1970; Gutiérrez, 1990).

Particularly for women, the fact that for years they were considered as *objects* in relation to men, who consider themselves the *subject* (De Beauvoir, 1952) has resulted in women being denied power and consequently, the decision making process concerning their own fate and lives. Over the years, this oppression became deeply embedded in social norms and people’s consciousness resulting in a permanent feeling of “disempowerment”(Gutiérrez, 1990; Kabear, 1999).

Freire (1970) on the other hand, developed a theory of how the oppressed could gain their freedom and enjoy their rights as human beings, arguing that this freedom cannot be given to the oppressed or by the oppressors. This can only be given “*with the oppressed*”, through both education and action, leading them to *conscientization*, a status where they are fully aware of their oppressed state, and they are determined to act towards liberation. Both De Beauvoir and Freire, without mentioning the word *empowerment*, laid the foundation for the feminist and empowerment theories, respectively, that will be discussed in this review.

## THEORETICAL BACKGROUND OF EMPOWERMENT

Empowerment is an ecological construct that has been extensively discussed for more than 40 years in several contexts. The need was initially identified from the fact that institutions rendered people powerless (Berger & Neuhaus, 1977), whereas supporting people to take action and improve their situation was considered a better practice than prevention, when it came to treating patients with mental health issues (Rappaport, 1981). This initial discussion on the possible use of empowerment in social psychology and public health, followed the theory on the education of the oppressed in a way that would break this power cycle that made people passive victims. A theory that would allow them, through awareness to claim their freedom to decide, taking at the same time the responsibility to do so (Freire, 1970). One may argue that people are in favour of making their own decisions, but it’s a fact that people who are *oppressed*, being part of certain social groups, may face the ‘*fear of liberation*’ a reluctance and a feeling of inability to decide for issues that are affecting their life (Freire, 1970).

Power is a force that produces intended and foreseen effects on others. This power is exerted through a superiority, either actual or perceived, that may have its origin in either gender, race, ethnicity, or wealth. On an organised level, political decisions and policy makers are also suppressing the ability of the individuals to make decisions (Laverack, 2019).

Examining the circumstances where people need support, by developing their ability to take control over their lives, may be a more efficient way to help them eventually become less reliant on their caregivers or institutions (Berger & Neuhaus, 1977; Rappaport, 1981).

In order to *empower* people, the first step would be to make them aware of their situation and then guide them to take action towards self-determination, thus describing the steps in the establishment of the empowerment theory (Freire, 1970; Gutiérrez, 1990).

The *oppressed* can gain their *freedom* and enjoy their rights as human beings, arguing that this freedom cannot be given by *oppressors* but rather, it can be achieved by involving the *oppressed* in the process, through both education and action, *conscientization*, a status where they are fully aware of their oppressed state, and they are determined to act towards liberation (Freire, 1970).

Empowerment, being both the end result and the process to reach the desired outcome, comprises of several constructs that spread on many levels and are affected by several factors. The primary classification of empowerment is in the dimensions relating to the individual and the ones relating to the context that the individual lives and works, especially for women that have been evidently disempowered for centuries in patriarchal environments (Rawat, 2014). This basic distinction between the person and the surrounding structure has been extensively discussed and several similar theories have been developed. One of the fundamental ones, supports that the empowerment of the individual, which is widely recognised as *psychological empowerment*, is not enough. In order for empowerment to be achieved, the environment plays also an important role, therefore the *community* and *organisational empowerment* were also acknowledged, stressing the social and structural importance in achieving empowerment (Rappaport, 1981, 1987; Wallerstein, 1992). The fundamental importance of this dimension is also reflected in the definition “holistic unit of analysis” (Swift & Levin, 1987) stressing how intertwined these two aspects are. Zimmerman and Rappaport (1988) conclude that “individual reporting of a greater amount of participation scored higher on indices of empowerment”.

Riger (1993) on the other hand critically argues that the whole theory of empowerment is applicable in an ‘individualistic’ context that does not significantly take into consideration the community aspects. She further discusses the issue of racial and class barriers to the acquisition of power and that what it sometimes is achieved is the perception of empowerment rather than a real change to the actual status of a person or a group of people. Even in a situation where the person has a conceived empowerment rather than an actual change in their power status, the popular saying ‘fake it till you make it’ may serve in the actualization of change towards a more empowered condition, as it explains that “empowerment denotes both the perceived experience as well as the real and objective acquisition of power (Simon, 1990; Swift & Levin, 1987). This may actually resemble the extended discussion between the effects of relative and absolute socio-economic status leading to the perceived and actual social ranking.

In the context of individual empowerment, education is an important facilitator (Laverack, 2019). Education, one of the social determinants of health and a vital parameter of socioeconomic status, contributes to several benefits that could be categorised as both physical, psychological and social. Further to contributing to brain development and delaying biological ageing, it can help people be more aware of health matters and adopt healthy behaviours. In addition, education provides a sense of control and empowerment (Cohen & Syme, 2013). The empowerment resulting from education is what has been defined as personal (Laverack, 2019) or psychological (Rappaport, 1981), meaning that it results from the individual and education and can significantly enhance individual awareness, leading in a condition of conscientisation (Freire, 1970).

The fact that empowerment has a community and organizational level, besides the individual one, is what makes it an “emerging mental health technology” (Swift & Levin, 1987), a tool that has been utilized widely by several disciplines since the 80s. However, a shift to a more

“mainstream” use of the term, has arguably turned it into a catchword and leaving it empty of any political and social change, thus losing its initial focus and meaning (Batliwala, 2007). Wallerstein (1992) stresses the significance of the environment and the social context that may result in people lacking control and decision-making over their lives and having consequently poorer health, highlighting the social risk factors for disease and mortality. She further argues that “through challenging physical and social risk factors in a collective setting, people gain a belief they can control their world, a sense of their commonality, an ability to work together to acquire resources, and an actual transformation of socio-political conditions”.

The term “Community Empowerment” was introduced in order to describe the many levels of the construct, thus denoting the importance of the environment surrounding the individual (Israel et al., 1994; Laverack & Wallerstein, 2001). Discussing the effect of the environment on the individual, Kieffer (1984) notes that “while not seen as unilaterally imposed on the individual by his/her environment, powerlessness is viewed as an experience embedded in and reinforced by the fabric of social institutions” (Kieffer, 1984) further stressing the ecological importance of the construct.

Keeping the social, cultural, and political aspects of empowerment, is important in saving the context, since it has recently been downgraded to a popular word, adopted by neo-liberal policies that result in a “transition of empowerment out of the realm of societal and systemic change and into the individual domain - from a noun signifying shifts in social power to a verb signalling individual power, achievement, and status” (Batliwala, 2007).

Based on initial feminist theories, the independence of women is materialised first through their educational advancement, and economic and financial independence rather than through political independence. Taking into consideration that equality in legislation has been achieved in many countries throughout the 20th century, this did not necessarily result in more women having decision-making positions (De Beauvoir, 1952). Power has been deprived from women over the years, in patriarchal, male-dominating societies, where power was exerted onto women, depriving them from their right for “self-determination” (Miller, 2014). The conclusion can therefore be reached that the construct of gender is another factor of oppression, which may occur with other types of disempowering situations such as poverty or racial discrimination. Since individual empowerment is stronger and more efficient when it takes place in a favourable context, it can be significantly compromised in communities with strong patriarchal influence (Rawat, 2014). At the same time the uneven distribution of power minimizes the access of women to the needed resources for better health, for themselves and their families. (Training Manual for Gender Mainstreaming in Health, 2012), verifying that community and organisational empowerment are important contributing factors to achieving gender equality.

One of the eight Millennium Development Goals established in 2015 was the promotion of gender equality and women’s empowerment, with other goals including the main one being the eradication of extreme poverty, which is indirectly related to women’s powerlessness. The report denotes that following the adoption of the Beijing Platform for Action on women’s empowerment, there is a significant increase of women in parliaments. The report concludes though that despite the fact that there has been an improvement, inequalities still exist. (UN, 2015). In 2016, the Sustainable Development Goals (SDG) were issued; among the 17 goals, one is to “Achieve gender equality and empower all women and girls.” The



SDG are considered an improvement compared to the Millennium Development Goals since now a more holistic approach is being implemented. (Odera & Mulusa, 2020; WHO, 2019b) . Policies and programs have been implemented to empower women and the real challenge comes with measuring the construct, given that due to its complexity, empowerment is difficult to define and even more complex to measure (Wallerstein, 1992). Further to the individual, all dimensions, including economic, political and social need to be taken into account when measuring empowerment (Laverack & Pratley, 2018). Money equals power and financial independence is a way of empowerment. Education can enhance a woman's income thus contributing indirectly to empowerment. Several examples of empowerment programs implemented in third world countries are available, where women are supported to start their own business in order to improve their quality of life and consequently improving their health (Kar et al., 1999).

Feminist theorists question the context of empowerment interventions in third world countries by external agents, specifically the ones based only on economic empowerment through microfinancing. They argue that this may happen in a "neo-liberal" environment that cannot be detached from the political and structural changes that need to be implemented in order to give women more decision-making power in practice (Khader, 2011).

Women of color are considered having a double disadvantage, including both their gender and race, and therefore empowerment is viewed as the solution for improving their situation (Gutiérrez, 1990). In parallel "participation" was found to correlate more to the intrapersonal empowerment of African Americans, compared to white population, meaning that African Americans would benefit more from community empowerment rather than the individual, compared to white Americans (Zimmerman et al., 1992).

Empowerment in several cultures is also related with religion, both on an individual and community level with the effect being controversial and related significantly to the religion or culture where it is applied. The paradox that is encountered is that women practice religion with more diligence than men, whereas most religions are patriarchal, therefore "encouraging" women's oppression. The phenomenon has been explored, reaching the conclusion that women are using religion to empower themselves (Ozorak, 1996). It is indeed a contradiction that, in general, religions are not supporting women's emancipation and therefore by considering that they should be subordinate to men they are depriving them of their freedom and equal rights, consequently undermining their empowerment. At the same time it cannot be ignored that religious women can feel empowered by the love of God that may help them to stand up for themselves and increase control over their lives (Burke, 2012). The example of women that were significantly empowered by participating in religious communities, with positive effects on their health, such as the reduction in cardiovascular risk of African American women who participated in a church-based intervention, compared to the group that was self-helped (Yanek et al., 2001), actually supports the fact that participation in a community, being a religious one, can be empowering.

Moving on the same trajectory as religion, family can empower women, especially in certain cultures that have a strong bond within the family and extended family, usually not in western cultures. What has been observed through women's empowerment programs in third world countries is that, any increase in women's income was used to improve the quality of life of the whole family (Kar et al., 1999). Being responsible for their children's well-being can help women be more empowered while at the same time the presence of the family can act as an agency of empowerment. On the other hand, women maybe be severely abused within their

own homes by their partners, where empowerment is needed to help them take the necessary actions to escape from these situations and many examples of community organisations are providing support.

From the observed diversity in terms of how empowerment applies in different societies, cultures, and countries one can reach the conclusion that the process of women acquiring more power is not only related to their individual empowerment, that is mainly facilitated by education and economic independence but also to their micro and macro environment and the measures to be taken in that direction adjusted accordingly.

## DEFINITIONS OF EMPOWERMENT

Empowerment is grammatically a noun that is used to describe both a process and its outcome, a noun that derives from the word power but does not necessarily mean the handing over of power. When attempting to define empowerment, one comes across a diversity in the definitions listed in dictionaries and associated publications, thus verifying the complexity and broad spectrum of the dimensions and levels that contribute to this extensively discussed construct. Based on the etymological definition, it can be either considered as the granting of power or authority to a person or the process where a person is enabled to make their own decisions, but still there is no universally acceptable definition (Swift & Levin, 1987). The fact that there is no clear, single definition of empowerment is what actually adds up to its value, given that there is space for adjustment in the context of women's empowerment (Kabeer, 1999). In the same context though, the vagueness in the idea of empowerment has significantly affected the effectiveness of women's empowerment programs in third world countries (Khader, 2011).

When the concept is applied to health, then this lack of clarity in the definition of empowerment may broaden the construct and trigger further scientific discussions and debates: it has been characterized as an "emerging technology" for mental health claiming at the same time that it's a *catchphrase* that has been misused or even abused by people who don't necessarily agree with the concept of empowerment, simply because it sounds appealing (Swift & Levin, 1987). The expectations assigned to this word raise the question whether it is the "Holy Grail" of health promotion (Rissel, 1994) or if all these definitions, or lack of, regarding empowerment are actually a "polysemy or cacophony", an interesting composition of concepts or a loud mixture of non-related, ill-defined ideas (Aujoulat et al., 2007). The importance of the concept is stressed in all cases, characterised "a term that confuses even as it inspires" (Simon, 1990).

"Buzzword" is a word often used to describe empowerment (Batliwala, 2007; Tengel, 2007), together with several concerns as also described above that it sounds trendy and is frequently used outside its actual context that will be further discussed below. Stressing the fact that Empowerment is a "social construct", Wallerstein (1992) defines it as "*a social-action process that promotes participation of people, organisations and communities towards the goals of increased individual and community control, political efficacy, improved quality of community life and social justice.*" Kieffer (1984) on the other hand defines empowerment as "a developmental process from powerlessness to 'participatory competence'. A dynamic long-term development from socio-political illiteracy or 'infancy' to socio-political 'adulthood'." According to Gutierrez (1990) there are three connotations of empowerment, one coming from the political approach, one from the psychological and a third one that is a combination of the other two. The definition provided stresses the political aspect describing

it as “the process of increasing personal, interpersonal, or political power so that individuals, families, and communities can take action to improve their situation.” (Gutiérrez, 1990; Gutierrez LM, 1995)

Another approach to defining the way people exercise power, is the so called ‘power over’ that describes the situation that a force is imposed upon people, the power from within referring to condition where a person decides to take action on their own initiative and the combination of the two, the ‘power with’ that actually defines empowerment (Laverack, 2019).

Initial empowerment theory was proposed by Rappaport (1981), where he claims that the “aim should be to enhance the possibilities of people to control their own lives”, as a counter measure of advocacy or prevention for solving social and community issues. Later on, he would define it as “a process, a mechanism by which people, organizations, and communities gain mastery over their affairs” (Rappaport, 1987) and further proceed to correct himself that empowerment is a theory, a value, a concept that can be applied at a personal, social and organizational level and describes the process where a person gains control over their life (Rappaport, 1981, 1987).

Taking all the above, one may reach the conclusion that empowerment can be defined in several ways, but the one element that all of the above definitions have in common is the participation of the individual and their willingness to change coupled with the environment that needs to enhance, support, and provide the necessary structural and organisational changes in order to provide equal opportunities.

For the purpose of this paper, **empowerment is defined as the process where a person increases control over the decisions concerning their life, while in parallel it can be described as the state that this person reaches.** One can never reach a state of absolute empowerment, but it will always follow a process and an outcome that will continue to support the process, for the individual and their environment.

## **EMPOWERMENT AND HEALTH**

Poverty has been historically correlated with poor health but it’s not until recently that powerlessness was discussed as a causal factor, beyond poor hygiene and lack of resources. (Wallerstein, 1992). Low socioeconomic status (SES) increases the risk of morbidity and mortality, not only due to lack of basic physical needs but also because of the psychological impact associated with low societal resources as well as depression linked with individuals’ lack of decision power affecting their everyday life (Kabeer, 1999; Kar et al., 1999; Laverack, 2019). Being in a situation that one has low control, either perceived or actual, and being in a position with limited decision power results in chronic stress (Karasek et al., 1981), which in combination with lack of resources and social support leads to powerlessness. (Wallerstein, 1992). Further to the studies of Karasek, the Whitehall study II, that extended the cohort to include issues relating to women’s health, concluded that low income is not the only factor responsible for health inequalities. Organisation ranking and the performance of repetitive and low decision-making operations at one’s job can adversely affect their health (Marmot et al., 1991)

The direct connection of health to SES has been extensively discussed in literature driving the WHO commission to declare their intention to close the gap in health (2008) by working towards elimination of factors affecting these inequalities. Health inequality relating to SES

are therefore expected, since social inequalities will evidently result in limited access to high quality healthcare and also, as already discussed, to a decreased ability to take decisions towards improving their health, including adopting healthier habits.

On the other hand, the gender gap in health has been extensively discussed in the last years, leading to health inequalities relating to the general oppression of women by patriarchy, the trajectory of which spreads from lack of research on women's health to a gender bias from healthcare professionals and surroundings (Jackson, 2019). Specifically, the social positioning of women in patriarchal societies further to the health inequalities that they may experience from low SES, may also exert health inequities due to patriarchal beliefs that are embedded in the healthcare system or in the community in general, since Medicine together with Religion and Politics have been used to control women (Jackson, 2019) Therefore even in a context of high SES status, women experience more morbidities than men, while at the same time they are expected to live longer with a more compromised quality of life, rendering the mortality advantage useless. In the context of European Economic Area, this is more evident in southern countries (Serrano-Alarcón & Perelman, 2017) that share more common social environment with Cyprus, than with Northern or Central Europe. The above-mentioned inequalities result from men wishing to exert power over other people, including women; and by the desire to control other people, which produce effects on them. A power that result in oppression. In parallel, the extent that women feel disempowered is a factor strongly related to the patriarchal beliefs in local society and culture.

## **EMPOWERMENT OF WOMEN IN CYPRUS**

Examining the situation of women's empowerment in Cyprus, the research data are limited. Family has a dominant role for the women of Cyprus, and usually the extended family is also considered close. In a similar way, religion is embedded in the Cyprus culture identity although, in general, people are not always strong believers in religious practices (Evanson, 2018). Both family and religion have an influence on women in Cyprus, an influence that is intensified with age.

Utilising independent data on gender equality, the Global Gender Gap Index (GGGI) annually benchmarks the current situation on a global level. From the 146 countries included in 2022 report Cyprus has a 0.696 (69.6%) score on the general GGGI and a ranking of 93 that dropped by 0.011 and 10 positions respectively from the 2021 report (World Economic Forum, 2022). Compared to data solely from EU countries, the Gender Equality Index for Cyprus is 57.3 paralleled to an average of 68.6 for the EU-27 (European Institute for Gender Equality, 2022). The numbers alone do not indicate a major gender gap. It is worth identifying though that this gap is predominantly in the fields of politics and economy for GGGI and very low in the section of power and all its three subsections of political, economic, and social. Especially in the political empowerment subsection, Cyprus scores extremely low in the gender gap (World Economic Forum, 2022).

Political empowerment relates to women having decision-making positions and the above data do indicate a major gender gap opening. Looking closer at the reasons behind, one can see a deeply rooted patriarchal culture supported by essentialism that limits women in gender stereotypes. No feminist movements occurred in Cyprus, mainly due to the national issues the island faced following the independence in 1960. Gender roles, paired with the preservation of family are forming the values for women, at least for the generation who grew up and experienced the so called Cyprus problem (Kamenou, 2020). In the context of the Cyprus occupation, the only women's political activist movements that took place was "the Women

Walk Home” that empowered women to participate in demonstrations against the Turkish occupation and demanded to return to their homeland. These may be one of a few examples of women’s empowerment through an organisation, where it aimed to change the status quo (Kamenou, 2020). Cyprus has had a long history of national struggles, which have been one of the reasons for the absence of any feminism movement. Patriarchy as well as nationalism are well embedded in Cyprus society, and although powerlessness is not necessarily forced upon women, the actual social constructs that have this culture and mentality interwoven, are enforcing and continuing the situation (Kieffer, 1984).

Empowerment in Cyprus took place in a very specific political aspect, while the main community features emerge from family and religion, therefore exploring women’s empowerment will contribute to the existing knowledge gap in this field.

As discussed earlier, powerlessness resulting from low SES is evidently a risk factor for disease and the same can be assumed for powerlessness resulting from being a woman, within a specific societal frame. Health inequalities relating to gender have been observed, described also as gender gap, and these needs to be better explored.

Health is a *fundamental human right*, that should go beyond the absence of physical and mental morbidities to a state of general well-being (World Health Organisation, 2022) and even though there is significant evidence that powerlessness can result in disease (Wallerstein, 1992) and that power may lead to better health, there was lack of evidence that the actual process of empowerment can result in better health outcomes (Rissel, 1994). Since then, the aspect has been explored, as in the case of a study from Minya Egypt, that women being able to make their own decisions was associated with improved mental health and in particular, with reduced anxiety (Yount et al., 2014). Nevertheless, both women’s empowerment and how it relates to health, has not been investigated in Cyprus.

## **THE GENDER GAP IN HEALTH**

Women are expected to live longer than men however this does not necessarily translate to an advantage with respect to their health and well-being. The advantageous gender gap in longevity for women is coupled with negative gender gap in morbidity primarily due to musculoskeletal conditions and mental health issues (World Health Organization, 2016). Data from many health surveys in Europe and other Western countries confirm that women’s longevity is significantly more burdened than their male counterparts, mainly regarding non-fatal conditions such as pain and depressive symptoms coupled with a generally lower self-perceived health, resulting in a gender morbidity disadvantage that has also been described as a “health paradox of women” (Gómez-Costilla et al., 2022). More specifically, when comparing these gender health differences across several European countries and the United States, women are consistently more likely to experience disabling conditions such as arthritis and depression (Crimmins et al., 2011). The aforementioned conditions will not necessarily prove to be fatal but will significantly compromise their quality of life.

According to the Global Burden of Diseases report of 2013, in developed countries, the women with more than 10 sequelae outnumber the men by 1.4 times, in the age group 80+, coupled with a significant increase in the specific group since 1996. (Vos et al., 2015) Health is expected to deteriorate with ageing and the results from the Survey on Health Ageing and Retirement in Europe (SHARE) indicate that the relationship is either linear or exponential. Specifically, for mobility limitations and other aspects relating to physical functioning, the

increase is notably sharp with a higher prevalence rating up to 50% for women compared to men. (Börsch-Supan et al., 2005)

#### PAIN

Pain is a symptom, that has been included in the current version of WHO International Classification of diseases (ICD-11) under ‘Symptoms, signs or clinical findings, not elsewhere classified’ (WHO, 2019a). Based on the analysis provided of the SHARE data, pain was the symptom reported more frequently, almost by one out of two participants and as indicated in below table, the percentage is increasing with age. Besides the fact that pain is more prevalent in women of all ages, the increase is higher for women (Börsch-Supan et al., 2005).

*Table 1: The Prevalence of Pain Symptoms among Men and Women Aged 50 Years and Above in 10 European Countries (Börsch-Supan et al., 2005)*

Age group	50-59	60-69	70-79	80-89	Total
Men	41.8	43.2	45.3	49.7	46.3
Women	48.6	54.3	59.0	60.9	56.9

Similar results were observed in the ATHLOS project (Ageing Trajectories of Health – Longitudinal Opportunities and Synergies), cohort of 17 studies including SHARE, HRS and ELSA (Sanchez-Niubo et al., 2019), where it was confirmed that pain is increasing with age, with higher prevalence as well as higher increasing rate in women. (Guido et al., 2020). The Tromsø study explored the musculoskeletal (MSK) pain risk factors in both men and women, concluding that gender is indeed a predictor of higher pain prevalence (Andersen et al., 2017) whereas being a woman is considered a risk factor for experiencing symptoms of pain with an odds ratio of 1.34 (Raggi et al., 2020).

When investigating the prevalence of musculoskeletal (MSK) pain, many factors may increase the risk and these can be categorised as physical and mental. Factors include age (Cimmino et al., 2011; Guido et al., 2020), obesity (Raggi et al., 2020), smoking, sedentary lifestyle and self-perceived health (Andersen et al., 2017; Cimmino et al., 2011) as well as depression, anxiety and sleep disorders (Cimmino et al., 2011). A reciprocal association exists between pain and depressive symptoms, with the prevalence of pain in populations with depression and depressive symptoms in populations experiencing pain, being greater than the respective ones where only one of the two situations exists (Bair et al., 2003).

#### DEPRESSION AND DEPRESSIVE SYMPTOMS

Depression is a common mental disorder that is responsible for a compromised health due to impairment of daily activities, affecting approximately 5% of the adult population (WHO, n.d.). Women are consistently and more frequently faced with depression, based on global epidemiological data (Angst et al., 2002; Börsch-Supan et al., 2013; Kiely et al., 2019; Piccinelli & Wilkinson, 2000; Van de Velde et al., 2010; Vos et al., 2015) and the onset age can be as early as puberty (Piccinelli & Wilkinson, 2000). Older women experience worse health, particularly in Southern Europe, possibly relating to their SES, social isolation and depressive symptoms (Gómez-Costilla et al., 2022). Women in southern Europe that experience some of the highest longevity rates in Europe are also experiencing higher rates of depression (Börsch-Supan et al., 2005) a fact that may also be associated with experiencing more loss of loved ones (Angst et al., 2002; Crimmins et al., 2011; Van de Velde et al.,

2010). Higher risk of experiencing depressive symptoms coupled with the increased longevity, is resulting in more years of compromised mental health for women (Kiely et al., 2019). Despite that evidence from certain studies suggests that the gender gap in depression is decreasing with age, the risk continues to be increased for women (Kiely et al., 2019), since the closing in the gap is possibly due to the increased rates of depression among men as well. SHARE data from southern European countries, including Greece, show a steady escalation of depression with ageing; men rising from 10-20% at age 50 to 30-40% by 75 years while for women the increase is from 30-40% at 50, reaching 50-70% by 75 (Börsch-Supan et al., 2005).

Expanding with data from English Longitudinal Study of Ageing (ELSA) and the Health and Retirement Study (HRS) from the US, it is verified that the odds ratio of women experiencing depressive symptoms are 1.45 to 3.35, again with higher prevalence in Spain and Greece. (Crimmins et al., 2011). Thus, the mortality advantage of women becomes a risk factor for depression given that they have more chances of spending years as widows, in conditions of poverty and social isolation and these are factors that can aggravate symptoms of depression. In parallel women seem to be affected more by the illness and loss of loved ones, something that adds up to their tendency of experiencing depression more often (Angst et al., 2002).

#### SELF – PERCEIVED HEALTH

In Southern European countries, the odds of reporting fair / poor health for females aged 80 and above are more than six times higher than that of men between 50 and 59 years (odds-ratio, 6.56), as presented in a more explicit way in Figure 1 below (Gómez-Costilla et al., 2022)

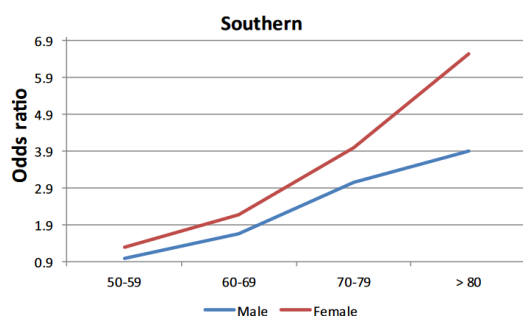


Figure 1: Odds ratio for self-reported health in Southern European countries (Gómez-Costilla et al., 2022)

Women's increased morbidity is being discussed (Verbrugge, 1989), attempting a qualitative insight of the factors that may cause this imbalance and whether it relates to a perceived increased morbidity, in other words whether women tend to feel ill-health more often. Sole Auro (2018) claims that this may also be part of the female perception on health and well-being, implying that women tend to be more pessimistic with regards to their health condition (Solé-Auró et al., 2018). Women tend to report worse than men at self-perceived health. However, when data were corrected taking into consideration age, co-morbidity and impairment in functioning, then there were more chances of men to report worse health (Crimmins et al., 2011). As opposed to the general belief that women tend to over report illnesses or report insignificant conditions, no evidence was found to support this assumption (Macintyre et al., 1999).

An attempt to empirically explain the morbidity disadvantage of women, stressing the social roles of men and women and how the latter may be influenced by less employment coupled with unfulfilling lives predominated by stress and vulnerability (Verbrugge, 1989).

Pain may result in feelings of depression and vice versa depression may aggravate the perception of pain, both contributing to a perceived state of compromised health, as presented in figure 2.

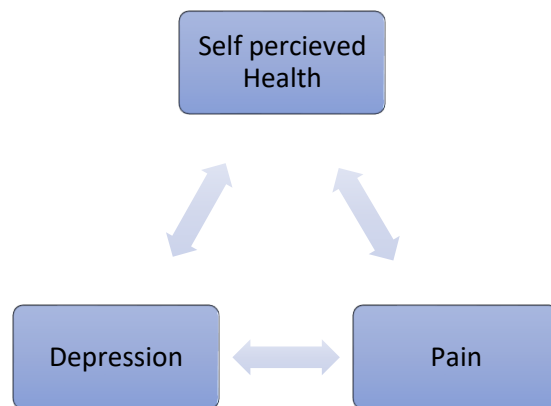


Figure 2: the relationship between depression, pain and self-perceived health

Pain symptoms were correlated with arthritis and other conditions including depression (Zimmer et al., 2020), whereas, losing a close person is a predictor for experiencing pain symptoms with an odds ratio of 1.88 (Raggi et al., 2020) thus supporting the reciprocal relationships between pain and depressive symptoms.

As discussed earlier, another factor responsible for health inequalities is the socio-economic status as defined by education, occupation and income, resulting not only in poorer health for the poor but also in greater prevalence of impairment of daily activities. (Börsch-Supan et al., 2005) At the same time, the SHARE survey displayed a lower level of health perception for countries of Southern Europe. In Cyprus, the respective study indicated results that were consistent with the above conclusions. (*European Health Survey 2019 (CY)*, 2020) Lower SES is associated with higher levels of reported depression whereas specifically for women, lower levels of education are correlated with compromised mental health. Poverty is also positively correlated with depression, with women being more negatively affected (Van de Velde et al., 2010). There is small differentiation on the level of disability experienced between women of all social classes, as opposed to men of similar age as defined by (Arber & Ginn, 1993), possibly due to men of lower classed being more involved in labour-intensive activities. SES is considered the most important determinant of gender differences in health (Ahrenfeldt & Möller, 2021). Also it is pointed out that although there is evidently a strong correlation, causation remains under consideration (Börsch-Supan et al., 2005)

The relationships between SES and health have been extensively discussed and how this is interconnected with education and empowerment. Gender constructed roles contribute to actual as well as perceived gender disadvantages in health and the aim of this study will be to explore how empowerment contributes to the well-being of women in Cyprus, by measuring their symptoms of MSK pain, depression, and perceived general health above and beyond the influence of SES.



## **CONCLUSION**

Women have been historically oppressed through patriarchal societies and the relevant practices that were developed from the specific beliefs in many areas including medicine. Actual or perceived oppression has been in place for so long and without anyone questioning this status, which was considered the norm.

Empowerment, a construct that continues to challenge researchers aiming to define and measure, provided it is used in the appropriate context, it may serve as a valuable tool for health promotion and women's equity. It is therefore important to keep the concept alive, in its clear and solid context towards helping people in general and women in particular in gaining power and decision-making skills within the analogous social and political context. Hopefully, a well-defined construct of women's empowerment could significantly contribute to closing the gender health gap, including symptoms of pain and depression.

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*Exploration of Burnout Among  
Primary Care Physicians in  
Cyprus; a multimethod study*

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**Abstract:** This multimethod study explores burnout among primary care physicians (PCPs) in Cyprus, using a mixed methods approach consisting of a cross-sectional survey and focus groups. The survey measures burnout rates and associations with demographic, behavioral, occupational factors, and attitudes towards the General Healthcare System. The study seeks to determine the prevalence of burnout and identify significant risk factors for Cypriot PCPs. Focus groups were conducted online to assess the perceived needs of physicians to design an intervention for burnout.

**Keywords:** Burnout; Physicians; Cyprus; PCP

## Literature Review

### *What is burnout?*

Burnout is a phenomenon characterized by a state of chronic physical and emotional exhaustion, reduced personal accomplishment, and feelings of cynicism or detachment from work, often resulting from prolonged exposure to work-related stress (Bianchi *et al.* 2015). The concept of burnout was first introduced by Freudenberger in the early 1970s, who described it as a response to excessive demands or prolonged exposure to occupational stressors (Freudenberger 1974). Since then, burnout has been extensively studied and recognized as a significant issue affecting various professions, including healthcare, education, and corporate sectors (Maslach and Leiter 2016).

The Maslach Burnout Inventory (MBI), developed by Maslach and Jackson, is the most widely used instrument to assess burnout and its three core dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach and Jackson 1981). Emotional exhaustion refers to feelings of being drained and overwhelmed by work-related demands, while depersonalization represents a detached or cynical attitude towards work and the individuals served. Reduced personal accomplishment is characterized by a decline in one's perception of competence and productivity at work (Maslach *et al.* 2001).

Burnout has been linked to a variety of negative consequences for both individuals and organizations, such as increased absenteeism, reduced job satisfaction, and lower productivity (Ahola and Hakanen 2007). Furthermore, burnout has been associated with a range of physical and mental health issues, including sleep disturbances, cardiovascular disease, and depression (Melamed *et al.* 2006). Given the potential impact on individual and organizational well-being, it is essential to better understand the risk factors, consequences, and interventions related to burnout in different occupational settings.

### *Burnout in healthcare*

Burnout in healthcare and allied health professions is a significant issue, impacting both patient care and professional well-being (Maslach *et al.* 2001). Healthcare providers, including physicians, nurses, and other allied health professionals, often face long working hours, emotional stress, and high levels of responsibility, which contribute to burnout (Wallace *et al.* 2009). This phenomenon has garnered increased attention in recent years, with studies estimating that up to 50% of healthcare workers experience burnout (Shanafelt *et al.* 2015).

The emotional toll of patient care is a significant factor contributing to burnout in healthcare and allied health professions. Empathy, the ability to understand and share the feelings of others, is crucial for effective patient care (Decety and Fotopoulo 2015). However, prolonged exposure to patients' suffering and distress can lead to compassion fatigue, a state of physical and emotional depletion due to empathic engagement (Joinson 1992). Vicarious traumatization, the negative transformation of a caregiver's inner experience after continuous exposure to patients' traumatic experiences, can have detrimental effects on mental health (Pearlman and Saakvitne 1995). High levels of empathy and compassion are required in the field of healthcare, making professionals especially vulnerable to emotional exhaustion, compassion fatigue, and vicarious traumatization (Figley 2013). Moreover, professionals often

face moral distress, which arises when they are unable to act in accordance with their ethical values due to external constraints (Jameton 1984). This can result in moral injury, a lasting psychological harm that occurs when professionals perceive they have acted, or failed to act, in ways that violate their moral beliefs (Shay 2014).

Organizational factors play a significant role in the development of burnout among healthcare and allied health professionals (Maslach *et al.*, 2001). One major contributing factor is excessive workload, which often leads to long working hours, increased job demands, and a lack of time for self-care or recovery (Aiken *et al.* 2002). High workload may also result in an imbalance between job demands and available resources, leading to feelings of inadequacy and reduced job satisfaction (Demerouti *et al.* 2001).

Poor organizational culture can further exacerbate burnout, particularly when there is a lack of support from supervisors or colleagues (Leiter and Maslach 2004). A low level of autonomy and limited decision-making opportunities can also contribute to burnout, as professionals may feel powerless in their roles (Spector 1986). Additionally, the emotional nature of healthcare work can lead to emotional exhaustion, particularly when professionals lack the necessary resources to manage work-related stress (Figley 2013).

Inadequate communication within healthcare organizations may further contribute to burnout. Lack of transparency and a hierarchical structure can create an environment in which professionals feel unsupported and undervalued (Adams and Walls 2020). Moreover, organizational change and uncertainty can exacerbate feelings of stress and burnout, as professionals struggle to adapt to new systems or policies (Khamisa *et al.* 2013).

The nature of the healthcare profession necessitates continuous learning and adaptation to keep pace with the rapidly evolving body of medical knowledge. This is due to the constant emergence of new diseases, advancements in technology, and innovative treatment methods that healthcare professionals must stay abreast of in order to provide optimal patient care (Moore *et al.* 2009). This relentless need to remain current, coupled with the inherently demanding nature of the profession, can contribute to burnout among healthcare professionals (Shanafelt *et al.* 2017). In addition to keeping up with new developments in medicine, healthcare providers must also adapt to changing regulatory requirements and guidelines. For instance, recent updates to diagnostic criteria and treatment guidelines may necessitate re-evaluating the way care is provided, leading to further demands on practitioners' time and cognitive resources (Topol 2019). Moreover, the increased utilization of health information technology, such as electronic health records and telemedicine, has introduced new challenges for healthcare professionals as they strive to maintain proficiency in these systems (Babbott *et al.* 2014).

As a consequence of these factors, healthcare professionals often find themselves in a perpetual cycle of learning, unlearning, and relearning as they strive to stay current with best practices and deliver quality care (Epstein 1999). This can be particularly challenging for those in allied health professions, who are frequently required to maintain certifications or licensure in addition to their ongoing professional development (Sandelowski and Barroso 2006).

#### *Interventions to address burnout*

The continuous need for adaptation and learning in the healthcare profession can contribute to burnout by exacerbating feelings of exhaustion, cynicism, and reduced professional efficacy

(Maslach *et al.* 1996). Addressing burnout in healthcare and allied health professions is crucial for maintaining high-quality patient care and ensuring the well-being of healthcare professionals. Implementing strategies to reduce burnout is essential to preserving the mental health of healthcare professionals and the quality of patient care. Some effective interventions include fostering a healthy work environment, offering organizational support, and promoting work-life balance. In addition, providing opportunities for professional development and mentoring can help in reducing burnout (Sood *et al.* 2011).

Strategies aimed at mitigating burnout must therefore recognize and address the unique challenges posed by the ever-changing landscape of medical knowledge and practice. Furthermore, the emotional demands of patient care can lead to burnout, affecting not only the individual but also the quality of care provided (Shanafelt *et al.* 2015). To address these challenges, interventions at the individual, team, and organizational levels are necessary. Individual strategies include mindfulness practices, self-care, and building emotional resilience (Kabat-Zinn 2013). Moreover, the implementation of mindfulness and stress reduction programs can be beneficial in mitigating burnout among healthcare professionals (Fortney *et al.* 2013). Evidence suggests that interventions targeting individual resilience and coping skills, such as mindfulness-based stress reduction, can significantly reduce burnout symptoms and improve overall well-being (Gilmartin *et al.* 2017).

Team approaches involve creating a supportive work environment, promoting open communication, and providing opportunities for debriefing. At the organizational level, interventions should focus on reducing workload, fostering a healthy work-life balance, and providing access to mental health support (West *et al.* 2016). Addressing these organizational factors is essential for reducing burnout among healthcare and allied health professionals. Implementing strategies such as workload management, fostering supportive work environments, and promoting autonomy can help alleviate burnout symptoms. Furthermore, improving communication and transparency within organizations may lead to increased job satisfaction and reduced stress among professionals (Panagioti *et al.* 2017). Lastly, healthcare organizations should prioritize regular monitoring and assessment of burnout levels among their staff, as early identification of burnout can facilitate the implementation of tailored interventions (West *et al.* 2009). This, in turn, can lead to more efficient use of resources and better support systems for healthcare professionals.

#### *A global look at burnout among physicians*

Burnout among doctors is a global concern, with varying rates across countries. A systematic review and meta-analysis of 182 studies from 45 countries found the overall prevalence of burnout to be 51% among physicians (Rotenstein *et al.* 2018). In the United States, a national study reported that 44% of physicians experienced at least one symptom of burnout (Shanafelt *et al.* 2012). Comparatively, a European study found burnout rates to range from 17% in the Netherlands to 54% in Germany, highlighting the regional differences (Weigl *et al.* 2012).

Factors contributing to burnout are multifaceted and may vary among countries. For instance, doctors in low- and middle-income countries may face resource constraints and overwhelming patient loads, which can exacerbate stress and burnout (Peltzer *et al.* 2003). In high-income countries, administrative burdens, long working hours, and the increasing complexity of medical practice contribute to physician burnout (West *et al.* 2018). Despite these varying

factors, emotional exhaustion, depersonalization, and reduced personal accomplishment are consistent hallmarks of burnout across different regions (Maslach *et al.* 2001).

Efforts to address burnout among doctors are critical to ensure the provision of quality healthcare services worldwide. Recognizing the global impact of burnout, the World Medical Association has adopted a policy to prevent and manage physician burnout and promote their well-being (World Medical Association 2017). Addressing burnout among doctors necessitates the consideration of unique regional challenges while also adopting effective strategies from countries with lower rates of burnout.

Burnout in doctors is a concerning issue across Europe, with rates exhibiting both similarities and variations among countries. Research suggests that high workload, long working hours, and emotional stress contribute significantly to burnout in the medical profession (Shanafelt *et al.* 2012). A study encompassing 22 European countries reported a range of burnout rates from 10% to more than 40% among physicians (Soler *et al.* 2008). In some countries, such as Germany and Italy, burnout prevalence is relatively high, affecting 43% and 49% of doctors, respectively (Vltmer *et al.* 2010; Rotenstein *et al.* 2018). On the other hand, countries like Norway and Denmark display lower rates of burnout, with prevalence rates of 20% and 22%, respectively (Rosta 2013; Pedersen *et al.* 2016).

Despite the varying rates, common factors contributing to burnout can be identified across Europe. Work-related stressors, such as high patient load and long working hours, have been reported to contribute significantly to burnout (Wallace *et al.* 2009). Additionally, younger physicians and those in the early stages of their career are particularly vulnerable to burnout due to their struggle to balance work-life responsibilities (West *et al.* 2018). Furthermore, a lack of social support from colleagues and the hierarchical culture within hospitals also play a crucial role in aggravating burnout (Dewa *et al.* 2017).

Burnout among doctors is a global phenomenon, with the Middle East and North Africa (MENA) region experiencing varying and similar rates of burnout. Studies conducted in different countries within the region have reported a wide range of prevalence rates for burnout. In Saudi Arabia, for instance, a study found that around 70% of medical residents experienced burnout (Al-Dubai and Rampal 2010). In comparison, research conducted in Egypt showed a slightly lower prevalence, with 63.6% of physicians reporting burnout (Fawzy and Hamed 2017). However, a study conducted in Jordan found a much lower rate of 45.9% among doctors (Khader and Al Quds 2016).

Despite these varying prevalence rates, certain similarities can be observed in the factors contributing to burnout among doctors in the MENA region. Workload and long working hours have been identified as common factors across the region, with physicians in Egypt and Saudi Arabia often working more than 60 hours per week (Saleh *et al.* 2017). Furthermore, a lack of social support and inadequate coping mechanisms were also reported as contributing factors in several countries, including Jordan (Khader and Al Quds 2016) and the United Arab Emirates (Abdulrahman *et al.* 2018).

It is important to note that gender differences in burnout rates have also been identified in the MENA region. In general, female doctors have reported higher rates of burnout compared to their male counterparts, with this trend being observed in countries such as Egypt (Fawzy and Hamed 2017) and Saudi Arabia (Al-Dubai and Rampal 2010). This could be attributed to the

additional stressors that women face in the workplace, including gender bias and work-family conflicts (Dyrbye and Shanafelt 2016).

Cyprus shares many cultural traits with Greece and Turkey and is in close geographic proximity to both. It would, therefore, be pertinent to look at burnout rates among physicians in these countries. Burnout rates among doctors in Greece and Turkey vary significantly. In Greece, the prevalence of burnout among doctors is relatively high. According to a study conducted in a primary healthcare setting in Greece (Anagnostopoulos *et al.* 2012), approximately 65.2% of Greek physicians reported experiencing at least one dimension of burnout, with 23.9% meeting the criteria for high burnout in all three dimensions (emotional exhaustion, depersonalization, and reduced personal accomplishment). In contrast, the rates of burnout among doctors in Turkey appear to be lower. A study in Turkey (Dikmetas *et al.* 2011) found that the prevalence of burnout was 52.3% among Turkish physicians. Similar to Greece, the highest reported dimension of burnout was emotional exhaustion, followed by depersonalization and reduced personal accomplishment. The difference in burnout rates between these two countries may be attributed to factors such as workload, job demands, work-life balance, and organizational culture.

Despite the varying rates of burnout, some similarities can be observed between doctors in Greece and Turkey. For instance, both countries have shown that age, gender, and specialty are significant factors affecting burnout levels. In Greece, younger doctors and female physicians are more susceptible to experiencing burnout, while in Turkey, burnout is more prevalent among male doctors, particularly those working in surgical specialties (Anagnostopoulos *et al.* 2012; Dikmetas *et al.* 2011). The difference in burnout rates among doctors in Greece and Turkey is notable, with higher rates reported in Greece. However, both countries share common factors that influence burnout levels, such as age, gender, and specialty. Identifying and addressing these factors is crucial to effectively combat burnout and improve the well-being of physicians in both countries.

#### *Burnout among primary care physicians*

Increased burnout among primary care physicians (PCPs) can be attributed to the unique and demanding nature of primary care practice. One of the primary factors contributing to burnout in PCPs is the diverse range of health conditions they are required to manage. As frontline healthcare providers, PCPs are often the first point of contact for patients with a wide array of illnesses, from acute to chronic, as well as complex comorbidities (Starfield *et al.* 2005). This diversity of health issues can lead to increased workload, longer working hours, and increased stress, which are all contributing factors to burnout. As the first point of contact for patients, PCPs are responsible for coordinating patient care and addressing a wide range of health issues, resulting in a demanding workload (West *et al.* 2018). Studies have shown that the average number of patients seen by PCPs daily is notably higher than that of specialists, with the former attending to approximately 20 patients per day (Landon *et al.* 2006). This workload is exacerbated by the current shortage of primary care physicians, which further increases the patient volume each doctor must manage (Pettersen *et al.* 2012)

Another challenge faced by PCPs is navigating the complex healthcare systems in which they operate (Bodenheimer and Sinsky 2014). The need for PCPs to be knowledgeable about different healthcare delivery models, insurance systems, and billing practices can contribute to the growing sense of frustration and burnout among these professionals (Friedberg *et al.* 2014).

In addition, the administrative burden associated with documentation, coding, and reporting can take a toll on PCPs' well-being and job satisfaction (Sinsky *et al.* 2016).

Furthermore, coordinating care with other medical professionals is a key aspect of primary care practice (O'Malley and Reschovsky 2011). PCPs often need to collaborate with specialists, pharmacists, nurses, and other healthcare providers to ensure comprehensive and effective patient care (Davis *et al.* 2005). This collaborative approach, while essential, can result in increased workload, communication challenges, and potential conflicts, further exacerbating burnout among PCPs (Dyrbye and Shanafelt 2011).

High patient volume not only strains PCPs' time and resources but also negatively impacts their ability to maintain quality patient care. One study found that higher patient volume was significantly associated with lower patient satisfaction and reduced quality of care (An *et al.* 2009). Furthermore, the limited time available for each patient visit can hinder PCPs' ability to establish strong doctor-patient relationships, which are essential for effective care (Ratanawongsa *et al.* 2008). In addition to affecting patient care, high patient volume has been linked to increased stress and emotional exhaustion among PCPs (Shanafelt *et al.* 2019). This persistent stress may lead to depersonalization, a key component of burnout that entails detachment from one's patients and work. Additionally, PCPs managing large patient volumes may feel overwhelmed and unsupported, contributing to a sense of decreased personal accomplishment and heightened burnout (Maslach *et al.* 2001). Potential solutions may include increasing the number of primary care physicians, adopting team-based care models to distribute workload, and incorporating technological advancements to streamline patient care (Linzer *et al.* 2009). These interventions can help reduce burnout rates among PCPs and improve the overall quality of healthcare delivery.

The emotional nature of a PCP's work is often demanding and intense, as they not only diagnose and treat patients but also establish long-term relationships with them. These strong connections can result in an increased emotional burden, as they frequently encounter chronic illnesses, end-of-life care, and challenging socioeconomic circumstances (West *et al.* 2018). Dealing with chronic illnesses can be emotionally draining for PCPs, as they witness the physical and psychological suffering of their patients over extended periods (Jackson *et al.* 2018). The ongoing management of these conditions requires constant communication, empathy, and reassurance, which can contribute to emotional exhaustion in physicians (Thirioux *et al.* 2016).

End-of-life care poses additional challenges to PCPs, as they are often required to make complex decisions about treatments, pain management, and palliative care while providing emotional support to both patients and their families. The process of losing a patient, particularly one they have developed a close relationship with, can lead to feelings of grief and sadness, further contributing to burnout among PCPs (Meier *et al.* 2001).

Moreover, the socioeconomic circumstances of patients can exacerbate the emotional toll on physicians. PCPs often encounter patients from diverse backgrounds, some of whom face financial barriers, limited access to healthcare, or other social determinants that adversely impact their health outcomes (Garg *et al.* 2016). Addressing these disparities, advocating for equitable healthcare, and navigating the complexities of social determinants can heighten the emotional demands placed on PCPs (Gottlieb *et al.* 2015). In summary, the emotional nature of a PCP's work can be particularly taxing due to the strong relationships they forge with their

patients, and the inherent challenges associated with managing chronic illnesses, end-of-life care, and difficult socioeconomic circumstances. These factors contribute significantly to the risk of burnout among primary care physicians.

In contrast to primary care physicians, physicians in other specialties may experience comparatively lower rates of burnout due to several factors. One such factor is the more focused areas of practice, which can allow for a deeper understanding of specific medical issues and potentially reduce the stress associated with managing a wide range of conditions (Sinsky *et al.* 2016). Additionally, specialists may face less administrative burden, as their practices can be more streamlined, with fewer tasks unrelated to direct patient care (Shanafelt *et al.* 2019). Moreover, physicians in specialized fields may have fewer patient encounters per day, allowing for more time to manage and address each patient's needs, which can lead to increased job satisfaction and decreased risk of burnout (Landon *et al.* 2006). Despite these differences, it is important to recognize that burnout is not exclusive to primary care and remains a significant issue across all medical specialties.

A study conducted by Shanafelt *et al.* (Shanafelt *et al.* 2012) found that even though primary care physicians report higher burnout rates compared to other specialists, burnout remains a pervasive issue across all medical specialties. Furthermore, burnout among specialists may manifest differently, potentially leading to an underestimation of its prevalence (Dyrbye *et al.* 2014). For example, surgeons may experience burnout due to the high-stakes nature of their work and the long hours spent in the operating room, while emergency medicine physicians may face burnout due to the unpredictability and high acuity of their patient population (West *et al.* 2018).

In conclusion, while physicians in specialties other than primary care may experience comparatively lower rates of burnout, it is crucial to acknowledge that burnout is a significant problem across all medical specialties. Efforts to address and mitigate burnout should be targeted at all physicians, regardless of their area of practice, to promote overall wellbeing and improve patient care (Maslach and Leiter 2016).

#### *Interventions for PCPs*

Team-based interventions, including teamwork training and interprofessional collaboration, have been found to contribute positively to reducing burnout rates among physicians (Welp and Manser 2016). One notable example is the implementation of daily huddles, which provide an opportunity for team members to communicate, coordinate tasks, and discuss patient-related concerns (Tawfik *et al.* 2017).

Organizational interventions, such as modifying work schedules, reducing workload, and improving work-life balance, have demonstrated a positive impact on burnout prevention. Additionally, the development of mentoring programs, where experienced physicians provide support to their less experienced colleagues, has been linked to reduced burnout rates (Lemaire and Wallace 2017).

However, not all interventions have consistently demonstrated success. For example, the effectiveness of communication skills training in reducing burnout remains inconclusive. Furthermore, interventions focusing solely on individual physicians may not adequately address systemic factors contributing to burnout (Barth and Lannen 2011). In conclusion, a combination of cognitive-behavioral, team-based, and organizational interventions can



potentially alleviate physician burnout. However, future research should focus on identifying the most effective interventions, as well as considering systemic factors that contribute to burnout.

Targeted interventions for PCP burnout have shown promising results in mitigating the pervasive issue. These interventions are distinct from those designed for physician burnout in general because PCPs are exposed to unique stressors, including higher patient loads, increasing administrative responsibilities, and a focus on preventive care (Sinsky *et al.* 2013).

One notable intervention is the implementation of team-based care, which distributes clinical tasks among team members, reducing the burden on PCPs and improving work-life balance. A study demonstrated that team-based care led to a 45% reduction in PCP burnout rates (Willard-Grace *et al.* 2014).

Electronic health records (EHRs) have also been targeted to address burnout. Interventions focused on EHR optimization and training can improve PCP satisfaction and efficiency by decreasing time spent on documentation (Shanafelt *et al.* 2016). In one intervention, tailored EHR training reduced burnout by 38% in PCPs (Gregory *et al.* 2017).

Mindfulness-based interventions have demonstrated effectiveness in reducing PCP burnout. A systematic review found that mindfulness training reduced emotional exhaustion and increased personal accomplishment, with moderate effect sizes. Additionally, interventions promoting work-life balance and self-care, such as workshops and support groups, have shown promise in alleviating burnout (Gilmartin *et al.* 2017).

Organizational culture plays a significant role in burnout, and interventions aimed at fostering a supportive and collaborative environment have been effective in mitigating PCP burnout. Leadership training and mentoring programs have demonstrated improvements in burnout rates and job satisfaction (West *et al.* 2016). In conclusion, targeted interventions for PCP burnout, including team-based care, EHR optimization, mindfulness training, and fostering a supportive work environment, have shown promising results in reducing burnout rates. These interventions are unique from those designed for physician burnout in general, as they address the distinct stressors faced by PCPs.

### **Design of ‘An Exploration of Burnout Among Primary Care Physicians in Cyprus; a Multimethod Study’**

The study was designed with a mixed methods approach in mind. This means that there was a questionnaire used for collecting quantitative data such as physicians’ burnout rates, and that focus groups were used to collect qualitative data on topics such as physicians perceived needs in order to prevent and/or treat burn out. The proposal was approved by the Department Postgraduate Programme Committee (DPPS) of the University of Nicosia and by the Cyprus National Bioethics Committee (CNBC).

#### *Survey on burnout rates and associations*

Study Design – This is a cross-sectional study conducted through an online survey, made available by e-mail invitation and sometimes hand-delivered to PCPs.

Setting – Data was collected through Google Forms, a free, online survey administration software. All data is downloaded from the researcher’s password protected Google Forms account and downloaded directly to her password protected university issued computer. It is stored electronically and securely in password protected documents available only to the student and the student’s supervisors, upon request. The identity of participants will not be revealed at any time either in the thesis or in journal publications.

Participants – All physicians possibly practicing as PCPs registered with the Cyprus General Healthcare System (GESY) have been invited by e-mail to participate in the online survey (N=872, number obtained from GESY Provider Search Portal). This number has been nearly halved from the initial estimation of 1582. Initially, we were going to get contact information from the Cyprus Medical Association’s (CYMA) website, where every doctor who is or who has practiced medicine is registered. However, the CYMA physician directory was not functional for several months. Furthermore, when it went online again, much of the contact information was either lacking or outdated, not having ever been updated since the time that each physician registered with the organization.

The search for doctors possibly practicing as PCPs included physicians who classify themselves as practicing: Personal Doctors, Pediatricians, Outpatient Specialists specializing in “geriatrics”, “pediatrics”, “pediatric cardiology”, “internal medicine”, “specialized in pediatric neurology”, “specialized in neonatology”, “specialized in communicable diseases”, “specialized in intensive care” and Inpatient Services specializing in “doctor”, “general medicine”, “geriatrics”, “outpatient specialist”, “internal medicine”, “pediatric cardiology”, “pediatrics”, “PD adult geriatrics”, “PD adult internal medicine”, “PD child pediatrics” “specialized in communicable diseases”, “specialized in intensive care”, “specialized in neonatology”, and “specialized in pediatric neurology”.

Data Sources/Measurement – This study uses the English version of the Maslach Burnout Inventory for Medical Professionals (MBI:HSS) and the Areas of Worklife Survey (AWS) to measure burnout in a worklife context, together termed The Maslach Burnout Toolkit for Medical Personnel. We also ask questions assessing geographic variation, demographics, behaviors, occupational characteristics and attitudes towards the General Healthcare System that was implemented in mid-2019.

In the initial proposal, we only stated that we were going to use the MBI:HSS. We later decided to include the companion Areas of Worklife Survey (AWS) questionnaire to assess perceptions of the workplace that contribute to work engagement or burnout. The publisher of the MBI:HSS, Mindgarden, recommends using both questionnaires to assess burnout within the worklife context in order to aid burnout prevention. Proprietary licenses have been purchased directly from the publisher, allowing the researchers to use results from the survey.

Bias – To ensure that there is not any bias, PCPs were e-mailed detailed instructions ensuring anonymity and emphasizing voluntary participation as well as explaining the purpose of the study. We use an anonymous question bank and data repository (Google Forms). Data is password protected and kept securely within the Research Project database in a computer based at the University of Nicosia Medical School.

Study Size – In order to estimate prevalence of burnout among primary care physicians in Cyprus (n=872), with a confidence of +/-5%, at an  $\alpha$ -level of 0.05, the sample size of the

investigation should be at least 267 PCPs. This number has been lowered from the initial calculation of 309 since the sample population has also been lowered.

When investigating associations between exposure variables and burnout risk, the sample size above (n=267) would allow us to determine Odds Ratios of magnitude between 0.65-1.50, assuming equal proportions of exposed and non-exposed in the population and a total prevalence of burnout of around 40%, at an  $\alpha$ -level of 0.05 and with a power of 0.80. This means that when a potential determinant is equally distributed in the population (for example gender), only determinants with a relatively large impact on the risk of burn-out will be identified as significant in this investigation. However, when in the investigated population the prevalence of the potential determinant increases (proportion of individuals with the exposure is higher than the proportion of individuals without the exposure), even smaller Odds Ratios can be detected as significant.

**Quantitative Variables** – We are surveying the population using the MBI:HSS together with the AWS, collectively known as the Maslach Burnout Toolkit for Medical Personnel. The two surveys total 50 questions. The MBI:HSS assesses burnout by measuring: Emotional Exhaustion, Depersonalization, and Personal Accomplishment. The AWS is used to measure contributions to burnout in your work environment are measured by looking at: Workload, Control, Reward, Community, Fairness, and Values. Both surveys have been validated in English.

**Statistical Methods** – The proprietary manuals, which explain reliability, validity and scoring have been purchased. We intend to summarize the data from the MBI:HSS and any additional questions using standard descriptive statistics. Differences between physicians with and without burnout will be determined using Mann-Whitney U test (for continuous variables) or  $\chi^2$  test (for categorical variables). Risk factors for burnout will be assessed using first univariate and then multivariate binary logistic regression analysis. Cronbach's alpha will be used to estimate internal consistency of the MBI:HSS and AWS scales.

#### *Qualitative study on the perceived needs of physicians'*

**Study Design** – Focus group discussions were used to assess the perceived needs of physicians. The discussions were run by the researcher and her supervisor(s). Their purpose was to understand the perceived needs of physicians which need to be addressed when designing an intervention for burnout.

**Setting** – Focus Groups were carried out online, using Microsoft Teams.

**Participants** – PCPs who have already answered the MBI:HSS and AWS questionnaires, have volunteered their contact information and who have indicated willingness to partake in the second phase of the research were invited to participate in focus groups. There were two sessions held with attempts made to include a selection of participants of varied characteristics of gender, age and location. A third session should be held since the data has not yet reached saturation.

**Data Sources/Measurement** – The moderators will conducted the sessions and video recorded them for subsequent analysis, following written informed consent. Open ended questions were asked to encourage reflection, summarizing and clarification.

Bias – The participants do not represent the entire population of PCPs thus their views are not representative of the range of needs of PCPs. However, the research team explored all views and will carry out enough focus groups to reach saturation of the data. Furthermore, some participants may be apprehensive to express their views for fear of being judged; moderators have and will exercise every effort to welcome all views and emphasize confidentiality in order to encourage participants to express themselves freely and honestly. We have promoted a positive group dynamic in order to foster communication between the participants. At times, the groups have needed to be refocused as the intention of these groups is not to have a free-flowing discussion but a focused discussion with a defined scope and objectives.

Study Size – Our intention is to have 3 groups, depending on enrolment and data saturation. Each session has/will typically last 1.5 hours. We have an iterative approach to data collection, identifying when no new data is being revealed and when saturation is reached.

Data Analysis – The video recordings have/will be transcribed verbatim and cross-checked. Transcripts will be analyzed using thematic content analysis. All data collected will be anonymized and the identity of the participants will not be revealed at any time.

Intervention – Based upon the results obtained from the focus groups, an appropriate intervention to address physician burnout will be proposed. At this point, many aspects of the interventions remain unclear since the intervention will be based on the results of the focus groups. However, some aspects to consider are: If the intervention will be individual directed, organization-directed or a combination of both; If the intervention can be applied to some members or all members of the study population or if it can apply to a broader population and; How to evaluate barriers to implementation, effectiveness and sustainability of the intervention.

## **Preliminary Results of the Study**

### *Preliminary results of the survey*

Upon initial distribution of the questionnaire, 24 out of 872 email invitations yielded responses. Four months later, a second push was undertaken, commencing with emails and continuing with phone calls to physicians or their assistants to bolster participation. By the eighth month, the total number of respondents reached 62, with 52 expressing interest in the research's second phase, focusing on focus groups. Among these 52, 25 provided contact details.

The increase in respondents from 24 to 62 is attributed to the main researcher's proactive approach of directly engaging with physicians and/or their assistants, rather than relying solely on email correspondence. Although time-consuming, calling doctors' offices individually proved effective, as evidenced by the more than doubled survey responses. Due to its proven efficacy, the main researcher persisted with phone calls to maximize the respondent pool and enhance the accuracy of burnout prevalence estimates.

As of October 2022, a total of 140 surveys were collected, many hand-delivered and retrieved from doctors' offices in Nicosia. To further boost response rates, researchers will attend the "1st Primary Care Conference in Cyprus" on May 20th to disseminate the survey.

Sociodemographic characteristics of the respondents are shown in Table 1 (Appendix 1). Occupational characteristics of the respondents are shown in Table 2 (Appendix 2). Graph 1

(Appendix 3) displays doctors own (individual) feelings of burnout. More than 60% of doctors who responded feel burned out a few times a month or more with 35% feeling burned out at least once a week. Graph 2 (Appendix 3) displays doctors attitudes towards their organization. More than 45% agree that they are members of a supportive work group while 28% do not. This seems to be connected to the number of doctors working in private practice.

#### *Preliminary results of the focus groups*

Although the survey results indicated a substantial interest among respondents to partake in the second phase of our study, we encountered significant challenges in recruiting participants for the focus groups. Consequently, the first group had four participants and the second, five. We experienced issues such as last-minute cancellations and no-shows from doctors, which led to rescheduling the focus groups twice. Additionally, gathering volunteers for a third focus group proved difficult, so we intend to expand our search beyond survey respondents and try to recruit random PCPs for this third group.

This section presents the preliminary results of the two focus groups conducted to explore the perspectives of PCPs in Cyprus. While we found mixed results for burnout symptoms, we did find some consistent themes when it came to issues of how the implementation of the General Healthcare Scheme affected doctors and their patients. The analysis revealed several consistent themes across both groups, which are discussed below.

**Initial challenges with technology adoption:** Participants expressed that the introduction of computer systems and digital tools in their workflow initially made their jobs more difficult due to inadequate preparation. However, they noted that over time, they have adapted to the changes and the situation has improved. “Using the computer has made my job more difficult at the beginning as we were not prepared properly for this.”

**Impact of the pandemic:** The COVID-19 pandemic added a layer of complexity to the healthcare system, exacerbating the challenges faced by healthcare professionals during the transition to GESY. “Now it’s ok even though the pandemic has made things very difficult.”

**Relief for the public sector:** Participants acknowledged that GESY has helped reduce the workload in the public sector, highlighting the lack of appreciation for the work done by public sector healthcare professionals in the past. “GESY has taken a great load of work off the public sector and has shown us that the public sector was not appreciated for all the work that has put in all these years until GESY started.”

**Undervaluation of general practice:** A recurring concern was the perception that specializing in General Practice is not appreciated or recognized by authorities in Cyprus. “What is really upsetting is that specializing in General Practice is not appreciated by any authority in Cyprus.”

**Shift in clinical medicine focus:** Some participants expressed concern that clinical medicine might become overshadowed by administrative tasks, such as computer work and managing accounts, as a result of the changes brought by GESY. “Clinical medicine is going to be replaced by accounts and computer work.”

**Changes in patient behavior:** Participants noted that patients have become more demanding under GESY, often instructing doctors on their care and expecting services to be free. This has led to some confusion and tension between healthcare professionals and patients. “Patients

have lost their orientation. Many times they think they wear a white coat and instruct the doctors who most of the times obey to their demands!”

In summary, the preliminary results from the focus groups suggest that while GESY has relieved some of the workload in the public sector, it has also introduced new challenges for healthcare professionals, such as adapting to new technologies, dealing with more demanding patients, and concerns about the undervaluation of general practice.

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## Appendix 1

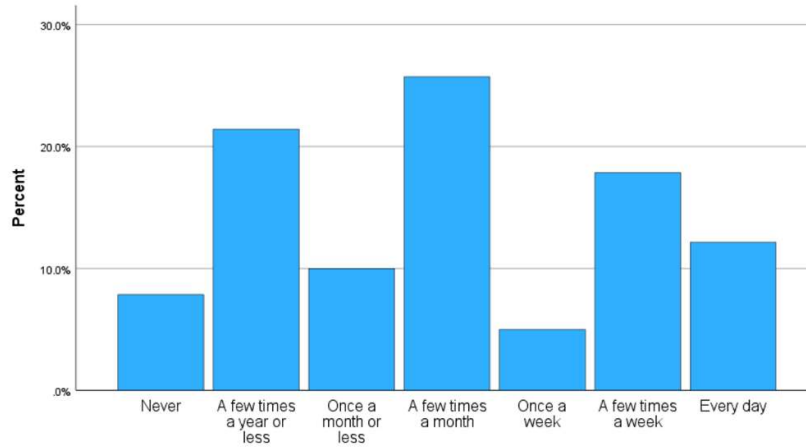
Table 1 Socio-demographic characteristics of the respondents (n=140)		
Characteristic	Number	Percent
<b>Gender</b>		
Female	64	45.7
Male	75	53.6
Prefer not to say	1	0.7
<b>Age</b>		
31-40	27	19.3
41-50	32	22.9
51-60	39	27.9
61-70	29	20.7
71-80	6	4.3
no response	7	5.0
<b>Married/Partnership</b>		
Yes	118	84.3
No	21	15.0
no response	1	0.7
<b>Number of children</b>		
0	19	13.6
1	17	12.1
2	43	30.7
3	51	36.4
4+	10	7.1
<b>Daily commute</b>		
10 minutes or less	35	25.0
11-30 minutes	45	32.1
31-59 minutes	15	10.7
1-2 hours	11	7.9
more than 2 hours	23	16.4
no response	11	7.9

## Appendix 2

Table 2 Occupational characteristics of the respondents (n=140)		
Characteristic	Number	Percent
<b>Employment status</b>		
full-time	135	96.4
part-time	5	3.6
<b>Time at organization</b>		
0-6 months	5	3.6
7-11 months	11	7.9
1-2 years	54	38.6
3-5 years	20	14.3
6-10 years	5	3.6
11-15 years	15	10.7
16-20 years	8	5.7
21+ years	22	15.7
<b>Time in position</b>		
0-6 months	10	7.1
7-11 months	11	7.9
1-2 years	49	35.0
3-5 years	21	15.0
6-10 years	6	4.3
11-15 years	15	10.7
16-20 years	7	5.0
21+ years	14	10.0
no response	7	5.0
<b>Level of position</b>		
front-line staff	76	54.3
supervisor	14	10.0
management (1st level)	4	2.9
management (intermediate)	6	4.3
management (senior)	26	18.6
no response	14	10.0
<b>Location of organization</b>		
city	124	88.6
suburb of a city	7	5.0
village	9	6.4
<b>Ownership of practice</b>		
public	59	42.1
private	81	57.9

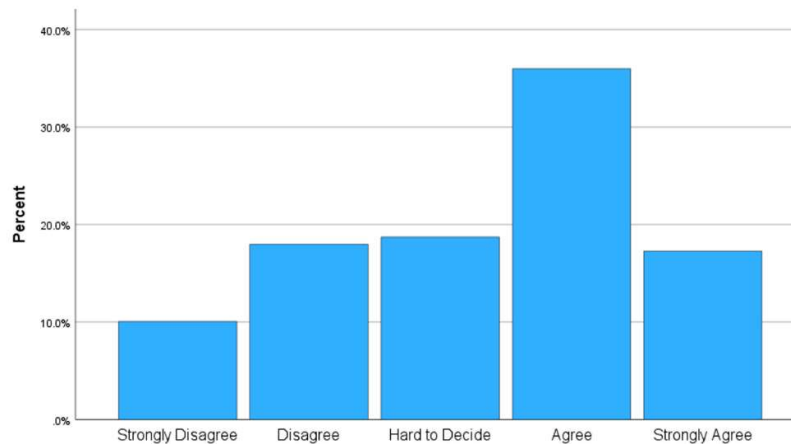
## Appendix 3

### I feel burned out from my work



More than 60% feel burned out a few times a month or more with 35% feeling burned out at least once a week.

### I am a member of a supportive work group



More than 45% agree while 28% do not. This seems to be connected to the number of doctors working in private practice.