



RESEARCH ARTICLE

Health Behavior and Self-Assessed Health Among Some Long-Term Unemployed Living in Turku, Finland

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Received: June 4, 2017

Revised: September 21, 2017

Accepted: September 26, 2017

Abstract:

Background:

A number of previous studies have concluded that long-term unemployment is destructive to health.

Objective:

This study examined health behavior and self-assessed health of some long-term unemployed persons living in the city of Turku, in Southwestern Finland.

Methodology:

The qualitative data were collected from February to March 2016 from 40 long-term unemployed men and women, aged between 31 to 63 years.

Results:

Of the participants 85% (n=34) reported that their long-term unemployment situation had had a negative impact on their health. There were 95% (n=36) who needed medical care because of their health condition. There were 59% (n=24) who were not satisfied with the healthcare and social services compared to 49% (n=16) who were satisfied with the services.

Conclusion:

There were more single men than single women among the participants. Half of the participants had a profession of which the women constituted the majority. Several participants were suffering from a chronic disease. The participants were not satisfied of their lives and attributed their health behavior and poor health conditions to their long-term unemployment situation. They were not satisfied also with the healthcare and social services provided to them.

Keywords: Health behavior , Self-assessed health , Long-term unemployment , Finland, Medical care, Social services.

1. INTRODUCTION

The effects of the worldwide economic decline and the increase in mass unemployment have been examined in many studies [1]. Several of those studies ranging from social, medical and economic have reported that unemployment condition is associated with social problems but also to physical, mental or psychological health consequences [2, 3]. The adverse health outcomes include aspects of perceived health [4], as well as somatic health comprising of cardiovascular disease, hypertension, and other such as respiratory disease. In addition, mental problems can also occur, including depression and anxiety [5]. Other studies on the effects of unemployment on health have also shown that poor

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health is associated with the risk of the continuation of unemployment [6]. The effects of unemployment also include financial and mental stress, anxiety, and risk of suicide, loss of self-esteem, of social status [7] and poor health condition [8].

Since the 1990s, the interest that has arisen regarding the effects of long-term unemployment is for many reasons relevant in the Finnish context. The national unemployment rate surged very rapidly from 3% to 17% in the early 1990s and continued the following years [9]. Moreover, there is some evidence that the relationship between unemployment and well-being has been rather weak in Finland [10].

According to Statistics Finland's Labor Force Survey of 2016, the unemployment rate has been similar for the last two years. It was 9.3% in January 2016 (254000 unemployed) compared to 9.2% in the previous year 2015. According to an administrative official from the Pellervo Economic Research Institute in Helsinki, who wanted to remain anonymous, in 2014 Finland had a great number of people seeking work who are not in the registers of the official statistics. According to him, unemployment is a serious problem in Finland and the real unemployment rate is around 12%. The OECD surveys conducted in 2014 revealed that in Finland, the unemployment rate was 8, 4% [11].

According to Statistics Finland's National Population Census of February 2016, there were 186 191 inhabitants in Turku. Of the total of 172 383 native populations, 13 808 were unemployed, out of them, 7 932 were men and 5 876 were women. At the time of this study, among the *The Turku City Functional and Work Ability* –project job-seekers, 115 persons, aged between 20 to 65 years of age, were registered as more than 36 months (long-term unemployed) job-seekers.

The Turku City Functional and Work Ability –project has multi-functional social aims including the free access to healthcare and social assistance services. According to one of the project's nurses, the services start from the health checking consultations and the evaluation of the patient's working and functional capacities. If necessary, the patient is followed up or giving advices to avoid deterioration of his or her health. The healthcare checkup is carried out by the project's public health or occupational nurse. If the checkup reveals need of rehabilitation, mental health or serious health problems, the patient is sent to the physician for further medical consultation. If necessary, the project's physician can also send the patient to a public or private specialist who can deliver a certificate whether the patient is fit or unfit for working life.

Long-term unemployment is generally high in some countries where unemployment benefits are relatively generous and available for long period [12]. In Finland, unemployed persons receive unemployment benefits which include labor market subsidies and income support covering health care expenses and other living costs. Nevertheless, it is important to say that prolonged periods of unemployment are often associated with social and health problems.

2. METHODS

2.1. Study Design

To our understanding, a research design is as a framework for carrying out research activities in different fields of study. From several fields, exploratory research is conducted for a problem that has not been clearly defined; while a conclusive research is to provide information that is useful in reaching conclusion or decision-making as it has defined the final solution to the existing problem [13]. In the vein of those two definitions, this present study is explorative in which by the investigation questions we could determine the nature of the studied problems. From this design method, we were able to underline the range of causes and alternative options for a solution of problem under study. This present study should give a better understanding of the unemployment impact on health conditions, health behavior, social and financial conditions but also health self-assessment of the long-term unemployed men and women studied. To our knowledge, while studies published on unemployed populations have been limited to health consequences, very few have investigated health self-assessment during the long-time unemployment period. The aim of this study is to explore health behavior and self-assessed health during a long-term unemployment period. Additionally, it suggests that future studies on healthcare and social policies directed at unemployed population should focus on health behavior, the quality of healthcare and social services of this group that needs particular attention.

2.2. Data Collection

The data were collected between February and March 2016. The study was approved by Turku city's Health and Social research committee. Systematic sampling method was used to collect the data. Before the interviews, the second

co-author contacted by phone the 115 long-term unemployed and asked them, if they could to take part of the study investigation. They were informed about the study objectives and the ethical guideline such as the confidentiality and the anonymity to avoid identifying them. After all, only 40 individuals were (20 men and 20 women) accepted to be interviewed.

The study questions comprised of participants' demographic characteristics, health behavior and self-assessed health. The questions about work ability comprised of a visual analog scale ranging from 0 to 10 where higher scores indicated better work ability. Participants were also asked three open questions, (1) concerning their experiences of health care and social welfare services, (2) their opinions about the service providers and how to improve the healthcare and social services of the long-term unemployed and (3) which kind of help they think unemployed persons might need to improve their lives.

The interview questions consisted of several key questions that helped to define the areas to be explored [14] and what the participants considered to affect their life. This method has been used in order to allow the participants to express themselves and to describe freely the social factors influencing their life. One of the advantages of using a qualitative method in this explorative research was that, it enables to illuminate broadly the participants' unemployment experiences of their present life and the meaning they gave to their lives relating to their health [15, 16].

The study is in English but the interviews were done in Finnish by one co-author. To avoid biases in data, we took the greatest of care that the participants who were taking part of the investigation would provide accurate information. The interview with each participant was carried out in her office at the presence of the principal investigator who took notes. The interviews were taped-recorded and they lasted from 15 minutes to 45 minutes. Some participants were not talkative then the interview lasted only about 15 minutes. The fact that some of them were not talkative did not mean that their answers were biased. Instead, we accepted their way to communicate with us; compared to those who were enthusiastic and talkative to explain in-depth their social situation and health conditions and with whom the interviews lasted from 30 to 45 minutes. At the end of the interview, each participant got two tickets for the local buses.

2.3. Data Analysis

The participants were asked about their (1) demographic characteristics, (2) the quality of their life, (3) their health behavior and self-assessed health and (4) their perceptions of healthcare, social services and service providers.

To make the data analysis easy, the interview questions were formulated in a way that we could in advance decide which key statements we could expand for the analysis. To be familiar with the participants' stories, the notes taken during the interviews were read several times and the recorded tapes were listened over and over to be sure that the interviewees' words were correctly translated in English and nothing was added or omitted. All the data were transcribed and translated from Finnish into English on paper. Each respondent was identified by the letter *F* or *M*, (female or male), followed by her or his age (*e.g.* F20 or M45). The data were then organized into four themes: (1) demographic characteristics, (2) quality of life, (3) health behavior and self-assessed health, (4) perceptions of social and healthcare services. The interview transcripts and notes about the participants' perceptions, attitudes and behavior during the interviews were organized under each theme. The way the data were organized helped to look at each participant's responses to each question, in order to identify concepts [17]. The coding was done manually; process by which categories were created to facilitate the comparison of participants' answers. The similarities and differences of participants' responses were grouped under corresponding themes, in order to generate reliable findings.

2.4. Statistical Analysis

IBM SPSS Statistics 23.0 was used for the statistical analyses. Frequencies and percentages were used to describe the variables presented in the tables. Fisher's exact test was used to test the association between categorical variables. P-values less than 0.05 were considered statistically significant.

3. RESULTS

The 40 unemployed (20 men and 20 women) studied were between 31 to 63 years old. The 41 to 63 years old participants were more than those 31 to 40 years old. They experienced the same effects of unemployment, even though the 41 to 63 years old group was more affected by the unemployment than the 31 to 40 years old group. The interpretation of our findings was that, gender did not make any difference among both cohorts; instead the high rate of unemployment among the 41 to 62 years old was probably associated with their age (Table 1).

Table 1. Age group and age distribution by gender of the participants.

Age groups	Number	Percentage	Age distribution by gender	Men	Women
31-40	n=8	20%	31-41 years	n=5 25%	n=3 15%
41-50	n=16	40%	41-50 years	n=7 35%	n=9 45%
51-63	n=16	40%	51-63 years	n=8 40%	n=8 40%
Total	N=40	100%		100%	100%

The unmarried men were 65% (n=13), married ones were 15% (n=3) and the divorced ones were 20% (n=4). Among women, 45% (n=9) were single, 20% (n=4) were married, 10% (n=2) were engaged, 10% (n=2) were living in an open relationship and 15% (n=3) were divorced. There were more single men than women. More women were in some relationships (married, engaged or lived in an open relationship) compared to the men.

Out of the 40 unemployed persons studied, 55% (n=22) had a profession. Among them, the men were 45% (n=10) and the women were 55% (n=12). Those without any profession were 45% (n=18). Among them, the men were 55% (n=10) and the women were 45% (n=8). Those with profession, 50% (n=11) said they could still work in their profession or change of profession, the other 50% (n=11) said they could not any more work in the profession. Those who could not work anymore were 40% (n=4) of the men and 60% (n=7) of the women. One participant did not answer this question.

Even though the number of men and women who have been long-term unemployed from 11 to 15 years and more were the same, there were more men who have been unemployed between 6 to 10 years than the women. More women have been unemployed between 3 to 5 years compared to those who been unemployed between 6 to 10 years (Table 2).

Table 2. Length of the unemployment period among the participants.

Gender	Years of unemployment			Total	p.value
	3-5 years	6-10 years	11- 15+ years		
Men	3 15%	12 60%	5 25%	20 100%	0.180
Women	8 40%	7 35%	5 25%	20 100%	
Total	11 27.5%	19 47.5%	10 25%	40 100%	

4. QUALITY OF LIFE

4.1. Source of Income

In Finland, individuals who have worked before becoming unemployed are entitled to 500 days of basic income as unemployment benefits, if they have been the members of Trade Union of their profession or other Trade Union affiliated to their profession. At the time of this investigation, the 500 days of all the participants were finished and they were eligible only for basic unemployment benefits that include the minimum social assistances and the medical care. According to the situation, the participants graded their financial conditions as it is shown in the (Table 3) below, from good, bad to very bad.

Table 3. The participants' own evaluation of their financial situation.

	Financial situation			Total	p.value
	good	bad very bad			
Men	1 5%	8 40%	11 55%	20 100%	0.153
Women	5 25%	9 45%	6 30%	20 100%	
Total	6 15%	17 42.5%	17 42.5%	40 100%	

Out of the 40 participants interviewed, 85% (n=34) described their financial situation to be bad or very bad. Despite this situation, 45% (n= 9) of the men and 50% (n=10) of the women said they have never borrowed money from friends

or relatives for their basic needs, compared to 55% (n= 11) of the men and 50% (n= 10) of the women who reported to have borrowed money from friends or relatives for their basic needs.

Overall, there were more men and women whose financial situation was bad or very bad compared to those whose conditions were good, despite their unemployment condition. More men were in very bad financial situation compare to women. More women found their financial situation to be good compare to the men.

4.2. The Participants' Life Satisfaction, Social Networks with Peers and Support from the Family

They were 65% (n=26) of all participants who were not satisfied with their life because of their social, health and poor financial conditions compared to 35% (n=14) who despite their poor social, health and economic conditions were satisfied with their life. They were 22.5% (n=9) who said they were feeling lonely compared to 77.5% (n=31) who said they were not feeling lonely. By gender 85% (n=17) of the men and 70% (n=14) of the women were not feeling lonely. They were 10% (n=4) of the total participants who had social activities with friends and 90% (n=36) of them did not. They were 75.5% (n=31) of the participants who got social support from family members compared to 22.5% (n=9) who never got social support from their family members.

5. HEALTH BEHAVIOR AND SELF-ASSESSED HEALTH

According to the participants, alcohol drinking, poor eating habits, lack of social life and lack of money and physical activities, were factors associated with their lifestyle and health condition.

5.1. Cigarettes, Intoxicants and Alcohol

They were 65% (n= 26) of the participants who were not smoking cigarettes compared to 35% (n= 14) who were smoking. Among the smokers, the men were 60% (n=12) and the women were 70% (n=14). Out of all the participants of this study, 90% (n=36) were not using any intoxicants compared to 10% (n=4) who were using some kind of intoxicants. Those who were using some kind of intoxicants were three men and one woman. They were 65% (n=26) who were drinking alcohol every day, out of them, four were addicted also to some intoxicants. Those who were not drinking alcohol were 30% (n=14).

5.2. Eating Habits, Body Weight and Physical Exercise

From the 40 participants, 90% (n=36) said they could not afford to eat twice a day. Those who could do so, were only 10% (n=4). According to all participants, they could not afford to eat healthy food because they did not have enough money. 50% (n=20) of them said they could only afford cheap fast food (burger, kebab, pizza). Those who said they have got weight during the period of unemployment were 52% (n =22) compared to 45% (n=18) who could not say whether they have gained weight or not. Out of the 20 men, 45% (n=9) had gained excessive weight, and out of the 20 women, 65% (n=13) have gained weight. 90% (n=36) of participants were not interested in any physical exercises. They preferred staying at home, watching the television, surfing the internet or sleeping. Those who went occasionally for walking or for swimming were only 10% (n=4).

5.3. The Impact of Unemployment on Health and Illness

Out of the 40 participants, 85% (n=34) said the long-term unemployment situation is worsening their health. While 7.5% (n=3) said they could not say whether unemployment has had any impact on their health, the other 7.5% (n=3) said unemployment has not affected their health. On the portrait of their illness, among the 40 participants, 90% of them (n=36) revealed that they were suffering from some chronic diseases, such as musculoskeletal diseases, hypertension, diabetes and migraine. Among them, 28% (n=10) were suffering from musculoskeletal disease, those from hypertension were 17% (n=6), those from diabetes were 11% (n=4), and those from migraine and coronary disease were 17% (n=6). Those suffering from musculoskeletal and hypertension were 41 to 63 years old older than those 31 to 40 years old ones who reported to be suffering from diabetes and migraine. Overall, 52, 5% (n=21) of the participants went often to medical checking.

5.4. Health Conditions Before and During the Unemployment

Those who admitted that, they had been in poor health conditions already before they became unemployed, were 72.5% (n=29). Those in fair health were 20% (n=8) and those in good health were 7.5% (n=3). Totally 60% (n=24) of the participants graded themselves with 0 points, saying they were not able to go to work anymore in their life. They

were 25% (n=10) who graded themselves from 1 to 4 saying they might be able to work. They were 7.5% (n=3) who graded themselves from 5 to 9 points, considering themselves as being able to go to work. The other 7.5% (n=3) graded themselves with the 10 points, saying they are in good health to work. Many of the participants said they are depressed and have lack of motivations to do anything. Among them, 72% (n= 29) were using sleeping pills and 28% (n=11) were using medication for depression symptoms.

5.5. Perceptions of Social and Healthcare Services

5.5.1. The Social and Healthcare Services

They were 41% (n=16) of all the participants who had positive attitude of the healthcare and social services; while 59% (n= 24) did not. Two men criticized the services by saying this: *the current healthcare and social services this project is offering are inadequate for long-term unemployed individuals* (M. 47 years-old). The other male added:

I think the health care services should be improved to meet the needs of unemployed. They should be planned so that unemployed individuals could very often pay a visit to the physicians for their health problems (M.34 years-old).

Four female participants said they did not have any particular opinion about the healthcare and social services: The first one said this: *Nothing to complain about, I just need to strengthen my self-esteem* (F, 30 years-old). The other three comments were: *As the health care services are available, they should be accessible, when the patients need them.* (F.47, 50 & 36 years-old).

Three other female respondents who made the similar observations said: *We need faster and easier health care services and more physicians in the clinics to provide medical services to unemployed* (F. 34, 31 & 41 years-old).

Some participants pointed out that they could need more support from health care and social workers in order to cope with their life, instead being blamed for the situation.

One female who commented the situation said this: *I always feel that I am under the pressure of the labor office workers who make me feel guilty of my unemployment situation. I think there should be more financial and health care supports for unemployed individuals to have the feeling that they have been seriously taken care of* (F. 48 years-old).

One older male commented: *The authorities should make the unemployed people's financial situation better than it is now* (M. 63 years-old).

Two women who felt humiliated by social and healthcare providers said: *There should be more social services for unemployed and they should be treated with dignity by the social and health care workers.* (F. 34 & 32 years-old).

Two other women said this: (1) *I think all punishments of unemployed people should be removed from the service practice and instead there should be some kind of meaningful action,* (2) *There should be more services for unemployed people* (F. 48 & 39 years-old).

Some participants felt that health care and social workers were not doing enough for the unemployed. According to them, health care and social welfare services that motivate unemployed persons would be needed. Health care and social services should be easy to access and the service providers should give more information about different opportunities to unemployed persons.

Two other females who have commented the situation, said: (1). *There should be a place where unemployed could meet and share their experiences. I need cure for my mental health problems and the alcoholism.* (2) *"Improved work ability" project has helped me to acquire health care services, but I would like to get into a rehabilitation program to learn how to keep myself on track* (F. 35 & 40 years-old).

Two male who were not satisfied with the labor office in finding jobs for long-term unemployed, expressed the similar view said this: The first one said: *In my opinion, there should be more opportunities through the labor policy system for unemployed people to find work and take care of themselves* (M. 40 years-old).

The second one said: *I really need help from the labor office's workers in job seeking. I think, the public and private sectors should collaborate to find jobs for people* (M. 44 years-old).

6. DISCUSSION

6.1. Limitations

This study has few limitations that limit its finding interpretations. Firstly, the sample is relatively small to be representative to all long-term unemployed persons in Finland or elsewhere, although it has been said that the aim of a qualitative study is not the number of the individuals studied but the validity and the richness of the information that it generates [16]. Secondly, the participants' perceptions of the healthcare and social welfare services should also be taken with caution. Thirdly, we did not study in-depth the factors affecting health, since our aim was to report the health behavior and self-assessed health of the long-term unemployed persons.

6.2. Strengths

This study contributes additional knowledge of the existing literature about the impact of long-term unemployment on health behavior and self-assessed health. While study identified inadequate service delivered to long-term unemployed persons, it provides a basis for conceptualizing framework for the provision of adequate social and healthcare services to long-term unemployed persons. It has also identified service delivery gaps within the current social and healthcare system for unemployed and makes recommendations which policy-makers can address in order to provide acceptable social and healthcare services for unemployed persons.

In the Scandinavian countries and in other Western countries, the consequence of long-term unemployment on health has been the focus of contemporary research [18]. The relations between unemployment and ill-health have been discussed since the Second World War [19]. The impact of unemployment on individual's psychological, physical health and well-being has been studied for the past decades [20]. All those studies have revealed that unemployment influences individuals' mental, physical health, life satisfaction, and economic situation, marital and family life. Most studies concerning unemployment and its consequences have been traditionally carried out on adult unemployed for several reasons including their age, their level of education, professional skills or experiences and health conditions [21]. In many cases, in our modern time, despite their level of education, professional skills or experiences, unemployed adults and older people are experiencing more long-term unemployment than younger and healthier unemployed. The longer the duration of unemployment of the older person is, less his or her chance is to get a work, a situation that generally generates health and social problems. Gender is also one factor associated with individuals' health status and long-term unemployment [22]. Several studies have shown that unemployment affects people differently depending on their age, education level, profession, income, marital status, geographic location, race, ethnicity, health condition and other social-economic factors [23]. Studies and reports have always revealed that women are more vulnerable to unemployment than men [24]. In countries, like Finland and Sweden [25], women are more in working life than women in some other countries [26] so, we can argue that, in this present study, women's gender was not the cause of their unemployment.

In the context of marriage status, our results show that the large majority of the participants were unmarried and like it has said in previous studies, unmarried individuals experienced more unemployment than the married ones [27] and are generally unhealthier than married persons because of their bachelor life and poor socio-economic conditions [28, 29]. The authors of those studies went on saying that employed and healthier persons are viewed as desirable partners based on their physical and mental health, ability-to-work and self-sufficiency, compared to unemployed, unmarried and unhealthier persons. Marriage status provides an emotionally fulfilling, intimate relationship, satisfying the need for social connection, which have implications for both physical and mental health [30, 31]. In conclusion, health condition of the partner is determinant to the other partner's health in the marriage relationship [31, 32]. In this present study, the common denominator between the participants with a profession and those without any profession was that because of some of their demographic characteristics and health conditions, they were all unfitted to any work. The available literature suggests that social and demographic backgrounds and health conditions are determinant factors influencing individuals' recruitment to the labor market [23].

6.3. Quality of Life (QoL)

It has been revealed in previous study that, quality of life can be defined in many ways, making its measurement and incorporation into scientific studies sometimes difficult [33]. Despite this revelation, quality of life is an ambiguous concept that has different definitions including health-related quality of life (HRQoL) that refers to the physical, functional, social, economic and emotional well-being of an individual. The author argued that, illness and its treatment

affect the psychological, social and economical well-being, as well as the biological integrity of individuals. Our interest in the participants' quality of life was to establish the relation between unemployment conditions and their present life experiences and expectations [34] but also to establish relationship between unemployment and health-related behavior. Unemployment has a negative effect on life satisfaction, because it causes a drop in well-being and decreases satisfaction within other life spheres [35]. Our study suggests that the longer unemployment period lower life satisfaction. Life satisfaction or well-being can also depends on how one is accommodated into the social group or how is interacting with it [36].

According to a German Socio-Economic Panel and comparable surveys, some people have reported weak life satisfaction just after been unemployed one day, while others with the same level of life satisfaction have been unemployed for 12 months or longer. According to other studies, adaptation to the situation could be reflected as an improved life satisfaction and unemployment can become less painful [37]. Our study showed that some of the participants were used to the situation so that the duration of the unemployment period did not appear to have an impact on their life satisfaction anymore.

In recent years, psychologists have emphasized the emotional destructive consequences of unemployment on health arguing that psychological factors moderate the effects of unemployment [38]. Even though our findings did not suggest gender differences in psychological stress, unemployment had a clear effect on the participants' income and life satisfaction. The negative influence of unemployment has been found in several other studies concerning social support as a potentially important moderator of the effects of stressful life events and health [39]. According to another study, social support and norms of the social groups are associated with mental health and well-being [36]. Among the social costs of unemployment, poverty, family life, crime, alcohol, drugs and other social costs are included [40]. The association to these costs can be strengthened by lack of social support and social networks which again are negatively associated with health [41, 42], particularly support from networks including family members and friends providing emotional and psychological support or economic help [43, 44]. According to the WHO, social support contributes considerably to individuals' health and well-being [45]. In this present study, even though only 40 individuals were studied, 77, 5% reported to be socially and emotionally supported by their family members and friends, they did not show life satisfaction or health promoting behavior.

6.4. Unemployment and Its Impact on Health and Health Behavior

Unemployment have heavy financial and health burden on people's life. A common belief is that, unemployment implies health effects as physical, emotional, psychological and somatic stress-related illness [44]. Other studies have also demonstrated that unemployment is associated with smoking, obesity, less physical activity, frequent medical checking and poor nutrition [46, 47]. Other studies have also concluded that in contrary, unemployment can empower persons to have more healthy behavior, *i.e.* smoke less and drink less and exercise and sleep more [48, 49]. Other study on the effects of unemployment on health and health behavior have used European data to show that unemployment raises the probability of smoking or using intoxicants or other drugs [50], while other studies have also shown reverse results. For example, Ásgeirsdóttir et al have found that the recent Icelandic financial crisis decreased the number of cigarette smokers [51].

Finnish alcohol culture has remained unchanged for decades and some of its aspects can also be found in other Nordic, Baltic and Russian Federation countries as well as in Eastern and Western European countries [51]. Drinking in the purpose of getting drunk used to be rarer among women than men, but in recent years a relative increase has been observed specifically among young women and pensioners. Becoming intoxicated has remained as one central characteristic of Finnish drinking habits [52]. Finnish social and health policy makers are concerned about the health problems associated to the population's excessive alcohol use [53, 54]. Those studies revealed that risky or hazardous drinking is most common among city dwellers living alone. They indicated that in 2002, altogether 33 211 periods of hospitalization care were related to alcohol abuse health problems such as cardiovascular disease, high blood pressure, nerve damage, pancreatitis, cancer, dementia and so on.

Healthy eating habit is an important factor to prevent some diseases [55], this was not the case in this study as the participants ate unhealthy food (as burger, French fries, hot dogs, pizza, kebabs, potatoes chips) and consumed sugar drinks, because of having too little money. In other hand, obesity is reported to be one of the greatest public health challenges of the 21th century [56, 57]. Its health consequences are many including physical and psychological health problems. It also increases the risk of number of non-communicable diseases, such as diabetes, cardiovascular diseases, musculoskeletal disorders and cancer [58]. In gender comparison of obesity and unemployment, it has been found that

in Finland, women with excess body weight were more likely to experience long-term unemployment than men [58], we did not make that comparison in our study.

6.5. Unemployment, Medical Visits and Work Ability

During economic crisis, unemployment becomes frequent phenomenon and source of stress and can be one factor damaging individuals' mental and physical health [59]. When the population suffers from unemployment, health related problems are prevalent showing the need for medical attention. The unemployed persons are using more the medical services [60] and their mental health is deteriorating with the length of their unemployment period [61].

CONCLUSION

Drinking alcohol, eating unhealthy food, lack of social life, of money and physical activities were factors associated with the studied long-term unemployed persons' health behaviors and poor health. Several of them were suffering from a chronic disease. Some participants attributed their health behavior and conditions to their long-term unemployment situation. They were depressed and were not interested in physical exercises, were not satisfied with the healthcare and social services offered to them. We are suggesting policy-makers to provide more resources for health and social welfare services to promote good health behavior and to prevent social problems affecting mental health and social exclusion of long-term unemployed persons. Further qualitative studies are needed to improve healthcare and social welfare services for long-term unemployed persons.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study was approved by Turku city's Health and Social research committee. All the interviewees (long-term unemployed and the healthcare providers) were assured that after the publication of the results of the research, all the recorded-tapes will be burned after five years and this is according to the Finnish Academic Ethical Law.

HUMAN AND ANIMAL RIGHTS

No animals were used in this research. All research procedures followed were in accordance with the ethical standards of the committee responsible for human experimentation (institutional and national), and with the Helsinki Declaration of 1975, as revised in 2008 (<http://www.wma.net/en/20activities/10ethics/10helsinki/>).

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTEREST

The authors declare that this research has been conducted in the absence of any financial relationship that could be construed as conflict of interest. They also confirm that its content has no conflict of interest.

ACKNOWLEDGEMENTS

This study was part of the project titled "*Improved Work and Functional Ability*" funded by the European Union, the Finnish Ministry of Health and Social Welfare and the city of Turku.

We express our gratitude to all the men and women who have accepted to be interviewed. Our special thanks goes to the project's physician Markku Partanen, to the project coordinator Mrs. Sisko Lipponen, to the rehabilitation secretary Mrs. Satu Hakanen, to the occupational nurses Mrs Merja Uusitalo and Raija Nordman, to the social workers Mrs Jenni Kiviluoto and to Mr. Nedad Jakupovic for their help, comments and suggestions in designing the study. Our special thanks also go to Mrs Marjo Haapasaari, Infection Control Nurse, at the Infection Control Unit of the Communal Hospital of Turku City for reading and commenting the work.

REFERENCES

- [1] Böckerman P, Ilmakunnas P. Unemployment and self-assessed health: Evidence from panel data. *Health Econ* 2009; 18(2): 161-79. [<http://dx.doi.org/10.1002/hec.1361>] [PMID: 18536002]
- [2] Pohjola A. Health problems and long-term unemployment. *Journal of Social Work in Healthcare* 2010; 34(1-2): 101-12. [<http://dx.doi.org/10.1002/hec.1361>]

- [3] Gordo LR. Effects of short and long-term unemployment on health satisfaction: evidence from German Data. *Appl Econ* 2006; 38: 2335-50. [<http://dx.doi.org/10.1080/00036840500427692>]
- [4] Marmot M, Wilkinson R. *Social Determinants of Health* Oxford University Press. *Int J Epidemiol* 2006; 35: 1111-2.
- [5] Dean JA, Wilson K. 'Education? It is irrelevant to my job now. It makes me very depressed ...': exploring the health impacts of under/unemployment among highly skilled recent immigrants in Canada. *Ethn Health* 2009; 14(2): 185-204. [<http://dx.doi.org/10.1080/13557850802227049>] [PMID: 18949654]
- [6] Spermann A. *How to fight long-term unemployment: Lessons from Germany* 2015.
- [7] Comino EJ, Harris E, Chey T, *et al.* Relationship between mental health disorders and unemployment status in Australian adults. *Aust N Z J Psychiatry* 2003; 37(2): 230-5. [<http://dx.doi.org/10.1046/j.1440-1614.2003.01127.x>] [PMID: 12656965]
- [8] Bartley M, Ferrie J, Montgomery SM. Living in a high unemployment economy: Understanding the health consequences. In: Marmot M, Wilkinson RG, Eds. *Social Determinant of Health 2000* New York. Oxford University Press 2006.
- [9] Böckerman P, Ilmakunnas P. *Health and Unemployment in a Panel*. Helsinki, Finland: Labor Institute for Economic Research 1990.
- [10] Ervasti H, Venetoklis T. Unemployment and subjective well-being: Does money makes a difference? *Government Institute for Economic Research* 2006; 391
- [11] OECD Employment outlook published 2014.
- [12] OECD. Income support for the unemployment: How well has the safety net help up during the Great Recession? *OECD Employment Outlook* 2011; 15-38.
- [13] Sandhusen RL. *Marketing 2000* Barrons 2000.
- [14] Pope C, Mays N, Eds. *Qualitative Research in Healthcare*. 2nd Ed. London BMJ Book 1999.
- [15] Quinn MP. *How to use Qualitative Methods in Evaluation*. Sage Publications 1987. 4: 176.
- [16] Jerry RT, Jack KN, Stephen JS. *Explore four methods for collecting qualitative research data*. 6th ed. Champaign, IL: Human Kinetics Publishers 2011.
- [17] Lutz W. *Sample: How to select people, household, places to study community health*. 3rd ed. Edinburgh: International Epidemiological Association 1982.
- [18] Hultman B, Hemlin S. Self-rated quality of life among the young unemployed and the young in work in northern Sweden. *Work* 2008; 30(4): 461-72. [PMID: 18725709]
- [19] Eisenberg P, Lazarsfeld PF. The psychological effects of unemployment. *Psychol Bull* 1938; 35: 358-90. [<http://dx.doi.org/10.1037/h0063426>]
- [20] McKee-Ryan F, Song Z, Wanberg CR, Kinicki AJ. Psychological and physical well-being during unemployment: A meta-analytic study. *J Appl Psychol* 2005; 90(1): 53-76. [<http://dx.doi.org/10.1037/0021-9010.90.1.53>] [PMID: 15641890]
- [21] Valletta R, Hodges J. Age and Education Effects on the Unemployment Rate In: *FRBST Economic Letter*. 2005.
- [22] Gebeyaw T. Socio-Demographic Determinants of Urban Unemployment: The case of Addis Ababa. *Ethiop J Dev Res* 2011; 33(2): 79-124.
- [23] Norström F, Virtanen P, Hammarström A, Gustafsson PE, Janlert U. How does unemployment affect self-assessed health? A systematic review focusing on subgroup effects. *BMC Public Health* 2014; 14: 1310. [<http://dx.doi.org/10.1186/1471-2458-14-1310>] [PMID: 25535401]
- [24] Banerjee S, Galiani J, Levinsohn Z. Why has unemployment risen in the New South Africa?. *NBER* 2007. 13167
- [25] Statistics Finland - Labor Force Survey for. 2013.
- [26] Hammarström A, Gustafsson PE, Strandh M, Virtanen P, Janlert U. It's no surprise! Men are not hit more than women by the health consequences of unemployment in the Northern Swedish Cohort. *Scand J Public Health* 2011; 39(2): 187-93. [<http://dx.doi.org/10.1177/1403494810394906>] [PMID: 21382857]
- [27] Daouli J, Demoussis M, Giannakopoulos N, Lampropoulou. The incidence of long-term unemployment in Greece: Evidence before and during the recession. *Crete 14th Conference on Research on Economic Theory & Econometrics*. Chania. 2015; 12-16.;
- [28] Schoenborn CA. Marital status and health: United State. *Adv Data* 1999-2002; 2004(351): 1-32.
- [29] Robert G, Wood BG, Avellar S. The effects of marriage on health: A synthesis of recent research evidence. In: *Mathematica Policy Research*. 2007.
- [30] House JS, Umberson D, Landis KR. Structures and Processes of Social Support. *Annu Rev Sociol* 1988; 14: 293-318. [<http://dx.doi.org/10.1146/annurev.so.14.080188.001453>]
- [31] Waite LJ. Does marriage matter? *Demography* 1995; 32(4): 483-507. [<http://dx.doi.org/10.2307/2061670>] [PMID: 8925942]

- [32] Hanhijoki I, Katajisto J, Kimari M, Savioja H. Education, Training and Demand for Labor in Finland by 2025 Publication. Finnish National Board of Education 2012. 16
- [33] Fallowfield L. Quality of life: A new perspective for cancer patients. *Nat Rev Cancer* 2002; 2(11): 873-9. [<http://dx.doi.org/10.1038/nrc930>] [PMID: 12415257]
- [34] Fayers MP, Machin D. Quality of life: Assessment, analysis and interpretation. Chichester: Wiley 2000. [<http://dx.doi.org/10.1002/0470846283>]
- [35] Krause A, Mustard C, Walld R, Tate R. Unemployment and healthcare utilization. *Scand J Work Environ Health* 2010; 26: 169-77. [PubMed].
- [36] Winkelmann R. Unemployment and happiness: Successful policies for helping the unemployed need to confront the adverse effects of unemployment on feelings of life satisfaction. *IZA World of Labor* 2014; p. 94.
- [37] Winkelmann L, Winkelmann R. Why are the unemployed so unhappy? Evidence from panel data 1998. [<http://dx.doi.org/10.1111/1468-0335.00111>]
- [38] Boyce CJ, Wood A, Brown G. The dark side of conscientiousness: Conscientious people experience greater drops in life satisfaction following unemployment. *J Res Pers* 2010; 44(4): 535-9. [<http://dx.doi.org/10.1016/j.jrp.2010.05.001>]
- [39] . The dark side of conscientiousness: Conscientious people experience greater drops in life satisfaction following unemployment. *J Res Pers* 2010; 44(4): 535-9.
- [40] Bomar KJ. Kinship Networks among American Refugees. New York NY LFB Scholar Publishing 2004.
- [41] Cohen Philip N, Bianchi Suzanne M. Marriage, Children, and Women's Employment: What Do We Know? *Mon Labor Rev* 1999; 122: 22-31.
- [42] Chappell N. Care giving research: What good is it? *Gerontologist* 1991; 31(4): 567-9. [<http://dx.doi.org/10.1093/geront/31.4.567>]
- [43] Richard W, Michael M, Eds. Social Determinants of Health: The solid facts. 2nd Ed. 2003. International Centre for Health and Society.
- [44] Steven AH, Miller DL, Page M E, Filipski M. The Best of Times, the Worst of Times: Understanding Pro-Cyclical Mortality: NBER 2011. 17657.
- [45] Björklund A, Erikson T. Unemployment and mental health: Evidence from research in Nordic Countries. *Scand J Soc Welf* 1998; 7: 219-35. [<http://dx.doi.org/10.1111/j.1468-2397.1998.tb00286.x>]
- [46] Ruhm CJ. Good times make you sick. *J Health Econ* 2003; 22(4): 637-58. [[http://dx.doi.org/10.1016/S0167-6296\(03\)00041-9](http://dx.doi.org/10.1016/S0167-6296(03)00041-9)] [PMID: 12842319]
- [47] Bolton KL, Rodriguez E. Smoking, drinking and body weight after re-employment: Does unemployment experience and compensation make a difference? *Journal BMC Public Health* 2009; 6(9): 77.
- [48] Öhlander E, Vikström M, Lindström M, Sundquist K. Neighbourhood non-employment and daily smoking: A population-based study of women and men in Sweden. *Eur J Public Health* 2006; 16(1): 78-84. [<http://dx.doi.org/10.1093/eurpub/cki047>] [PMID: 16446302]
- [49] Ásgeirsdóttir TL, Corman H, Noonan K, Ólafsdóttir Þ, Reichman NE. Was the economic crisis of 2008 good for Icelanders? Impact on health behaviors. *Econ Hum Biol* 2014; 13: 1-19. [<http://dx.doi.org/10.1016/j.ehb.2013.03.005>] [PMID: 23659821]
- [50] Hirschovist-Gerz , *et al.* Is there something peculiar about Finnish views on alcohol addiction? A cross-cultural comparison between four northern populations *Research on Finnish Society* 2011; 4: 41-54.
- [51] Mäkelä P, Fonager K, Hibell B, Nordlund S, Sabroe S, Simpura J. Episodic heavy drinking in four Nordic countries: A comparative survey. *Addiction* 2001; 96(11): 1575-88. [<http://dx.doi.org/10.1046/j.1360-0443.2001.961115755.x>] [PMID: 11784455]
- [52] Mullahy J, Sindelar JL. Employment, unemployment and problem drinking. Massachusetts Avenue. Cambridge, MA.: Working Paper Series. NBER 1995. [<http://dx.doi.org/10.3386/w5123>]
- [53] Forcier MW. Labor force behavior of alcoholics: a review. *Int J Addict* 1985; 20(2): 253-68. [<http://dx.doi.org/10.3109/10826088509044909>] [PMID: 4008120]
- [54] Pirkola SP, Isometsä ET, Heikkinen ME, Lönnqvist JK. Suicides of alcohol misusers and non-misusers in a nationwide population. *Alcohol Alcohol* 2000; 35(1): 70-5. [<http://dx.doi.org/10.1093/alcalc/35.1.70>] [PMID: 10684781]
- [55] Treiman K, Freimuth V, Damron D, *et al.* Attitudes and behavior related to fruits and vegetables among low-income women in the WIC Program. *J Nutr Educ* 1996; 28: 149-56. [[http://dx.doi.org/10.1016/S0022-3182\(96\)70050-X](http://dx.doi.org/10.1016/S0022-3182(96)70050-X)]
- [56] James WP. WHO recognition of the global obesity epidemic. *Int J Obes* 2008; 32(Suppl. 7): S120-6. [<http://dx.doi.org/10.1038/ijo.2008.247>] [PMID: 19136980]

- [57] Colman R. Cost of obesity in British Columbia. from GPI Atlantic Website: <http://www.gpiatlantic.org/pdf/health/obesity/bc-obesity.pdf> 2001. Retrieved June 15, 2016
- [58] Sarlio-Lähteenkorva S, Lahti E. The association of body mass index with social and economic disadvantage in women and men. London, GB: International Epidemiological Association 1999; 28: pp. 445-9. [<http://dx.doi.org/10.1093/ije/28.3.445>]
- [59] Montgomery SM, Cook DG, Bartley MJ, Wadsworth ME. Unemployment, cigarette smoking, alcohol consumption and body weight in young British men. *Eur J Public Health* 1998; 8: 21-7. [<http://dx.doi.org/10.1093/eurpub/8.1.21>]
- [60] Collins J, Maple D, Dodds A, Powell J. The effects of unemployment on the utilization of the medical industry. Department of Economics, the University of Akron 2009.
- [61] Jin RL, Shah CP, Svoboda TJ. The impact of unemployment on health: a review of the evidence. *CMAJ* 1995; 153(5): 529-40. [PMID: 7641151]

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