



SELINUS UNIVERSITY
OF SCIENCES AND LITERATURE

QUALITY OF LIFE OF ELDERLY INMATES IN CORRECTIONAL FACILITIES

By GULSHAN ALIASKER ALIYEVA

A DISSERTATION

Presented to the Department of
Psychology
program at Selinus University

Faculty of Psychology
in fulfillment of the requirements
for the degree of Doctor of Philosophy
in Geriatric Psychology

2024

STATEMENT OF AUTHENTICITY

I have read university's policy on plagiarism and certify that, to the best of my knowledge, the content of this thesis, entitled (Quality of life of elderly inmates in correctional facilities), is all my own work and does not contain any unacknowledged work.

Hereby I declare that this PhD thesis, my original investigation, and achievement, submitted for the philosophy doctor's degree at Selinus University has not been submitted for any degree or examination.

Signature: Gulshan Aliyeva Aliasker

Date: 05.03.2024

Student ID UNISE2786IT

Acknowledgment

I would like to express my very great appreciation to my family who supported and encouraged me throughout my study journey. I want to extend my sincere gratitude to my supervisor, and professors for their continuous support and valuable feedbacks during my study. Besides that, I am deeply grateful to faculty and unit members for their enthusiastic encouragement and significant feedbacks, and also the participants who accepted to take part in this research and survey process.

TABLE OF CONTENTS

Statement of authenticity.....	2
Acknowledgment.....	3
Table of contents.....	4
List of tables and figures.....	6

CHAPTER 1. INTRODUCTION

Introduction and aim of the study.....	7
Actuality of the problem.....	7
Purpose of the Study.....	9
Research Question and hypotheses	11
Structure of the thesis.....	12

CHAPTER 2. THEORETICAL CONTEXT

Literature Review.....	14
------------------------	----

CHAPTER 3. RESEARCH METHODOLOGY AND QUATITIES FINDINGS

The study material.....	49
Research Methodology.....	49
Data Collection and results.....	50
Results.....	50
Age and QOL.....	58
Regime conditions and QOL.....	59
Interpersonal relationship and QOL.....	60
Social emotional support program.....	62
Conclusion.....	66
Recommendation for further research.....	69

REFERENCES..... 70

APPENDIX 1..... 90

APPENDIX 2..... 91

APPENDIX 3..... 92

APPENDIX 4..... 93

APPENDIX 5..... 97

LIST OF TABLES AND FIGURES

Table 1. Proportion of prisoners over 60 with most prominent chronic physical health disorders.

Table 2. People and groups at higher risk of suicide and suicidal behavior

Table 3. Survey results

Table 4. PHQ-9 result and prison conditions

Table 5. Satisfaction with relationships

Table 6. Correlation between personal satisfaction and QoL

Table 7: Social-emotional skills of COs

Table 8: Stress management skills of COs

Figure 1. Development trajectory of suicide

Figure 2. Correction occupation stressors

Figure 3. Forms of care

Figure 4. Distribution of depression rates in older prisoners

Figure 5. Distribution of depression rates by percentage

Figure 6. Question 2, 16 (How satisfied are you with your health and sleep patterns?)

Figure 7. Question 3, 10 (Does your physical pain separate you from other activities? Are you satisfied with your energy for life activities?)

Figure 8. Question 4 (Do you feel the need for medical treatment in your daily life?)

Figure 9. Questions 17 and 18 (describe satisfaction daily activity and work capacities)

Figure 10. The first question- how would you rate your QoL (quality of life)?

Figure 11. Question 5,6 (how you enjoy your life, and feel meaningful your life?)

Figure 12. Question 11,19 (accept your bodily appearance and are you satisfied yourself)

Figure 13. Question 26 (negative feelings)

Figure 14. Question(20,21,22) interpersonal relationship

Figure 15. Question (8,9)environmental factors

Figure 16. Question (12, 13, 14)

CHAPTER 1. INTRODUCTION

Introduction and aim of the study

Actually of the problem. Ageing process, the proportion of the elderly population is increasing gradually compared to previous years. This growth is reflected in the statistical indicators of the world's population according to the annual report of the United Nations (UN), as well as the annual report of the Statistical Committee of the Republic of Azerbaijan.

The UN's 2019 World Population Report notes and forecasts that by 2100, the number and percentage of people under the age of 15 per 1,000 people will decrease, while those over 65 will increase. In the early 2000s, the population group aged 60-64 in Azerbaijan was 3.3% of the total population, 65-69 years old 2.4%, 70-74 years old 1.5%, 75-79 years old 0.7%, over 80 years old while in the statistics of 2021 it was 5.4%, 3.1%, 1.9%, 0.8% and 1.6%, respectively. At the same time, in 2000, newborns and children under the age of 4 was 9.1% of the total population, but in 20 years it has decreased to 6.9%. The World Health Organization describes the aging process as 61-74 years for men, 55-74 years for women, 75-89 years of old age, and longevity over 90 years.

Malta first raised the issue of old age with the United Nations in 1968. In 1982, a UN meeting on aging was held. On October 9, 1987, the United Nations Institute on Aging was established. Madrid International Plan of Action on Ageing (MIPAA) and Political declaration was accepted Second World Assembly on Ageing in Madrid on the 8-12nd April of 2002¹. The center of this organization in Azerbaijan has been the Institute of Physiology of the Academy of Sciences since 2018. The institute covers a number of activities, such as the study of health, psychological, legal, social and other problems of the elderly population, the development of programs, policy paper for these group members in developing and low-income countries. Moreover a number of short-term program services, long-term programs such as gerontology and geriatrics at higher education are being implemented in Malta at the initiative of the institute, which aims to help organize the process of active aging². The

¹ Madrid International Plan of Action on Ageing (MIPAA)//Political declaration//Second World Assembly on Ageing, //Madrid, Spain-8-12 April, 2002

² Formosa, M. Active and Healthy Ageing in Malta: Gerontological and Geriatric Inquires.//International Journal on Ageing in Developing countries. 3(2)-2018

cities of Sydney, Melbourne and Canberra in Australia, as well as Japan, Thailand, China and Singapore have been cited as successful examples in solving this problem³.

On December 14, 1990, the UN General Assembly, in Resolution 45/106, decided to recognize October 1 as the International Day of Older Persons. In 1991, the UN General Assembly adopted five basic principles for the treatment of older people: ensuring their independence; ensuring participation in public life; care and protection for them by their families and society; realization of their internal potential; ensuring the protection of their dignity.

The situation of the elderly population in pre-trial detention facilities and penitentiaries is also reflected in the analysis of the situation among the convicts, the concept of elderly prisoners, the physical and mental health of older prisoners by the World Health Organization (WHO) and the International Committee of the Red Cross (ICRC). The elderly inmates in the correctional facilities were assigned to vulnerable groups that required a special approach. Based on international publications, 55-year-old accepted as the beginning of the ageing in the correctional facilities^{4,5,6}. This is due to environmental factors, events, recorded diseases, premature recording of geriatric symptoms, role changes in interpersonal relationships and role conflicts. From this point of view, it was considered expedient to study the psychological determinants of the quality of life of older prisoners in penitentiaries, how to assess their quality of life factor, to analyze the impact of demographic, environmental and interpersonal factors on the quality of life of older prisoners^{7,8,9,10}.

³ Brown, A. L. Identity work and organizational identification. //International Journal of Management Reviews-2017, 19(3), p.296-317

⁴ Fazel, S. Hawton, K. and Ramesh, T. Suicide in prisons: an international study of prevalence and contributory factors. //Lancet Psychiatry (4)- 2017

⁵ Maschi T., Morgen, K., Zgoba, K., and Ristow J. Age, cumulative trauma and stressful life events, and post-traumatic stress symptoms among older adult in prison: do subjective impression matter? // The Gerontologist 51(5)- August, 2011

⁶ Wahidin, A., and Cain, M. (Eds.). Ageing, Crime and Society (1st ed.). London, Willan.Press-2006

⁷ Abner, C., Graying Prisons: States face challenges of an ageing inmate population.//State News. November-December, 2006.

⁸ Active ageing and quality of life in old age. United Nations Economic Commission for Europe//New York, and Geneva, 2012

⁹ Aday, R. H. and Krabill, J. J. Older and geriatric offenders: Critical issues for the 21st century. //Special needs offenders in correctional institutions-2012, 1- p.203-233.

¹⁰ Ageing Prison Population. 5th report of session 2019-2021//House of Commons Justice Committee-July 2020

In the analysis of foreign literature on the psychological characteristics of the criminal personality in the XIX-XX centuries, studies of Ch. Lombroso, H. Gross, F. Wolfe, K. Marbe, Klapared, R. Luvaja, E. Krasnushkin, H. Tox, P. Gannushkin, A. Rappoport, O. Abraxamson, S. Poznishev, M. Gernet and others , in the XX-XXI century, F. Adler, J.Krabill, W.Bretschneider, C.Motte, R.Aday, S. Boyd, K. Faytz, T. Briking, L. Crites, G. Hamilton, E. Crowley, M. Davoren, S. Fazel, S.Haesen, N.Kadet, A.Wahidin, J.Turner, I.Holmerova, P.Senior, C.Hayes, C.Olvey were registered.

The World Health Organization, the International Committee of the Red Cross, the United States, the United Kingdom and England, and other developed countries have addressed the issue of older prisoners in their annual reports on prisoners.

It should be noted that the quality of life and mental health problems of elderly prisoners in our country are not analyzed, so there is a need to study the issue in accordance with modern requirements and develop recommendations.

The object of research is elderly inmates in penitentiaries of the Republic of Azerbaijan;

The subject of the study is the psychological determinants of the quality of life of older inmates.

The aim of the study to identify the psychological determinants of the quality of life of older inmates, to identify the influencing factors, to develop a program of socio-psychological support that will help improve the quality of life of the older inmates.

The study objectives: In order to achieve this goal, the following tasks are identified:

1. preparation of survey samples and assessment to measure the quality of life of older prisoners;

2. distinguish the factors that affect the assessment of quality of life and subjective perception;

3. to evaluating the impact of independent variables: increasing age factor, previous conviction experience, environmental factors - the regime of the penitentiary institution,

support of family members and relatives, friends and acquaintances, attendance at short and long meetings, interpersonal relations of the penitentiary staff and other prisoners, on quality of life and daily mood of the elderly inmates;

4. to measure of the relation between independent and dependent variables, the existing correlation and the cause-and-effect relationship;

5. in addition, to develop a program to support the improvement of the quality of life of older prisoners and develop relevant recommendations.

Research methodology and techniques: the research is based on a constructivist-interpretive paradigm. Based on the constructivist paradigm, subjectivist epistemology, rationalist ontology, naturalist methodology, and balanced axiology were referred to.

The system used a systematic structural approach to the analysis of the quality of life of elderly prisoners and referred to the WHO (World Health Organization) quality of life explanation mechanism and measurement samples. Surveys were conducted among 200 elderly men prisoners over 55 years old, in different regime of Penitentiary Service of Azerbaijan.

The statements for discussion:

- Geriatric symptoms in the physical and mental health of older prisoners make them members of vulnerable groups in need of special care;

- The increasing age factor of the convict affects his quality of life and underestimation of its components; Also, the increasing age factor leads to an increase in the mood of older prisoners, such as depression, hopelessness, frustration, anxiety, tension during the day;

- The nature of the crime committed affects the quality of life of older prisoners, and this impact is reflected in the subjective assessment of the quality of life of these persons;

- The reduction of the period remaining until the end of the sentence has a positive effect on their daily mood and subjective assessment of quality of life;

- There is a connection between the conditions of the regime of the penitentiary institution and the subjective assessment of the quality of life;

- The dynamics of the development of interpersonal relations influence the subjective assessment of the quality of life; the presence of short-term and long-term meetings of relatives, family members and friends is related (not only to the frequency and also the content and conditioning) to the daily mood of older prisoners;

- There is a need to develop and implement social and emotional support programs to improve the quality of life of older prisoners; the participation of staff and young officers in social and emotional support programs can increase the effectiveness of work with older prisoners.

Research hypothesis. The assessment of quality of life is related criminal act that convicted by elder inmates, also regime and condition of the correctional facilities.

In addition to the main hypothesis, the following additional hypotheses were put forward in the study:

- There is a negative relationship between the subjective assessment of the quality of life of older prisoners and the increasing age factor;

- There is a negative correlation between PHQ-9 (depression) test result and quality of life;

- There is a positive correlation between maintaining relationships with family members and assessing quality of life.

Theoretical significance of the research: Samples of literature collected during the research, as well as the results obtained, form the basis for future research in the science of geriatric psychology, especially in the psychology of older prisoners.

Practical significance of the study: The collected data and final results on the psychological determinants of the quality of life of older prisoners, as well as the developed socio-emotional support program can be used in the activities of non-governmental and community-based organizations in penitentiary institutions, correctional facilities.

Structure of the Thesis

The dissertation begins with the introduction and background to the thesis followed by the thesis statement and the aims and objectives of the thesis. The primary objective is to examine psychological aspects of quality of life elderly inmates, and to identify the influencing factors in correctional facilities. The thesis will examine survey samples and assessment to measure the quality of life of older prisoners; distinguish the factors that affect the assessment of quality of life and subjective perception; and evaluate the impact of independent variables: increasing age factor, previous conviction experience, environmental factors - the regime of the penitentiary institution, support of family members and relatives, friends and acquaintances, attendance at short and long meetings, interpersonal relations of the penitentiary staff and other prisoners, on quality of life and daily mood of the elderly inmates; in addition, develop a program to support the improvement of the quality of life of older prisoners and develop relevant recommendations. The first part of literature review begins with legal issues of the problem. Special articles of Criminal code of Azerbaijan, Code of Execution of Sentences and also International experience were analyzed in this chapter.

The second part of this chapter covers geriatric symptoms and mental health problems of civil elder population and especially elderly offenders. The chapter will then move on to examine a number of recent studies on the medical and mental health issues, conditions of the specific prison environment, stress, depression, anxiety and suicide facts among older inmates in prison conditions. The chapter will conclude with examining the importance of education, early diagnosis, individual approach, psychological support, development and implementation of appropriate programs in prisons.

The second chapter named The quality of life, reviews the main determinants of the quality of life. World Health Organization explanation of this problem, also various researchers' published materials were examined. The interpersonal relationship among offenders, and prison staff, officers were discussed, too. The literature reports that prisoners' mental health affect the mental health of prison staff. Role conflicts, environmental conditions, lack of family and relatives support, stressful events put elderly inmates' mental health at risk, meanwhile the officers are faced with these difficulties in their daily lives. Corrections Fatigue can be understood as the cumulative toll upon the health and functioning of the corrections workforce that follows from traumatic, organizational, and operational stressors. Meanwhile workplace problems and stress can be

reasons of negative changes in personality characteristics, and in declined health and functioning of workers.

The third subchapter is about theoretical review Support program to improve quality of life elderly inmates. This program modules were realized with officers, to improve their social –emotional skills, and self-regulation abilities in correctional facilities.

The theoretical part of the dissertation was completed some of the recommendation according to literature review analyzing, and also the possibilities and open questions for further research were also mentioned.

The experimental part of the research consists of methods, results, and conclusion. The first subchapter describes information about participants, methods, survey materials, data collection and interpretation. The study was conducted in 2019-2020 with 200 inmates over the age of 60, serving sentences in different institutions under 3 different regimes (common, severe, strict) in the Penitentiary Service of the Ministry of Justice of the Republic of Azerbaijan.

Statistical analysis was investigated by using IBM SPSS for Windows, 23.0 (Armonk, NY: IBM Corp.). The level of statistical significance was defined as $p < 0.05$; Cronbach's alpha > 0.7 . χ^2 criterion, Person's coefficient, Spearman coefficient, Student t-test, Mann –Whitney U and ANOVA test were used to check the possible relationship, and correlation between nominal and ordinal, dependent and independent variables.

The next subchapter of this chapter is related to social-emotional support program. A program was developed to improve social and emotional skills among the study participants and applied to both staff and inmates. The seminar-training on "Development of social and emotional skills, creation of a supportive environment" was organized with 35 young male officers who started their new service in the Penitentiary Service.

CHAPTER 2. THEORETICAL CONTEXT

Literature review

The introduction outlines the relevance, degree of elaboration of the problem, defines the object and subject, goals and objectives, methodology and theoretical foundations, scientific innovations, theoretical and practical significance, the importance of applying the results, and, finally, the structure of the thesis.

Problem statement in the scientific literature and research facilities.

The legal status of convicts is reflected in the Code of Execution of Sentences of the Republic of Azerbaijan. This Code is based on the Constitution of the Republic of Azerbaijan, relevant laws, in accordance with the principles and norms of international law, the prohibition of torture, other inhuman acts and humiliation in the treatment of prisoners. The legal status of prisoners in the Republic of Azerbaijan is regulated not only by the laws of our country, but also by the normative rules and acts of international organizations of which we are a member, in the field of justice and especially penitentiary.

The Republic of Azerbaijan acceded to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, adopted by UN General Assembly Resolution 39/46 of 10 December 1984 and entered into force on 26 June 1987. The relations are guided by the relevant clauses of the Convention. The Republic of Azerbaijan acceded to the Convention by a law dated May 31, 1996. Another international document governed by the Republic of Azerbaijan is the Minimum standard rules of conduct for prisoners. It was adopted at the First Congress of the United Nations in Geneva in 1955 on the prevention of crime and the treatment of offenders, and was approved by resolutions 1957 and 1997.

The European Penitentiary Rules were adopted at a meeting of the Committee of Ministers of the Council of Europe on 11 January 2006 and recommended to Member States by Resolution R2006. The Republic of Azerbaijan has adopted these rules and is guided by these principles in the activities of penitentiaries and pre-trial detention facilities, based on race, skin color, sex, language, religion, political and other beliefs, national or social origin, place of birth, economic status applied without discrimination and impartially.

The second subchapter is about **geriatric symptoms and mental health problems in older prisoners**. The number of old people is growing around the world because of the post-World War II baby boom and increases in the provision and standards of health care. By 2050, 33% of the developed countries population and almost 20% of the less developed world's population will be over 60 years old. The boundary between middle age and old age cannot be defined exactly because it does not have the same meaning in all societies. The U.N. has agreed that 65+ years may be usually denoted as old age and at the time WHO recognized that developing world often defines old age, not by years, but new roles, loss of previous roles, or inability to make active contributions to society. Older adults are those who exceed the life expectancy of their own countries¹¹.

The demographic difference among the population also affects the prison population. Some evidence suggests that prisoners aged 50 and over typically suffer from "accelerated" ageing: a typical prisoner in their fifties has the physical health status of someone at least ten years older in the community, and this difference is due to health and /or lifestyle factors (e.g. prolonged drug use) which arise both before, and during imprisonment^{12,13,14}.

Studies identify three main categories of older prisoners:

_ The first group consists of those who were sentenced to long prison terms while young and have grown old in prison. However, due to their long period of institutionalization and loss of community links and limited work history, this group experiences the most difficulties in social reintegration following release.

_ The second group is made up of habitual offenders, who have been in and out of prison throughout their lives.

_ The third group consists of those who have been convicted of a crime in later life. Their crimes are usually serious¹⁵.

¹¹ WHO, Guidelines on Integrated Care for Older People, 2017

¹² Aday, R.H. Aging prisoners' concerns toward dying in prison. //OMEGA-Journal of Death and Dying 52(3)// May, 2006

¹³ Ageing and imprisonment. Workshop on ageing and imprisonment: identifying and meeting the needs of older prisoners. Summary report.//International Committee of the Red Cross-2018.

¹⁴ Fazel, S. Hawton, K. and Ramesh, T. Suicide in prisons: an international study of prevalence and contributory factors. //Lancet Psychiatry (4)- 2017

¹⁵ Handbook on Prisoners with special needs. Criminal justice handbook series. United Nations. New York-2009

All these groups have different needs and individuals in each group have varying health problems, addictions and disabilities. In prison condition different factors influence their mental health: accommodation, health care, family links, prisoner programs, and others.

Rowe and Kahn (1997) appropriately described healthy aging as absence of disease and good physical function, unaffected cognition process, and active engagement with life¹⁶.

This model is hierarchical in that good physical health is considered to good cognitive and maintenance of activities of daily living (ADLs), using a similar definition, Vaillant (2003) mentioned lifelong predictors of successful aging¹⁷. On another hand, Lawton (1999) argued that these definitions of successful aging rely too heavily on maintenance of typical functioning in midlife and ignore what may be qualitative shifts in older ages. Using data from the Nun Study, Snowdon (2001) noted that successful, optimal agers were observed by positive psychological characteristics, despite sometimes being physically disabled¹⁸. These psychological features included happiness, intellectual curiosity, deep spirituality, and communication skills.

Levenson and co-authors (2005) found correlations of self-transcendence with emotional stability and spirituality, that associated with better health in later life stages¹⁹.

Baltes (1996) suggested that the term “optimal aging” may be more appropriate than “successful aging”, because of a definition of the second term focuses on one model only, and may be too limited²⁰. However explaining optimal aging, people may choose to optimize different facets of their lives, depending on their goal and target structures²¹.

Answering the first question, image of optimal aging and suggests the new ways of investigating this phenomenon, which focus on individual differences and flexibility in the aging process.

What factors influence aging process?

¹⁶ Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *The gerontologist*, 37(4), 433-440.

¹⁷ Isaacowitz, D. M., Vaillant, G. E., & Seligman, M. E. (2003). Strengths and satisfaction across the adult lifespan. *The International Journal of Aging and Human Development*, 57(2), 181-201.

¹⁸ Danner, D. D., Snowdon, D. A., & Friesen, W. V. (2001). Positive emotions in early life and longevity: findings from the nun study. *Journal of personality and social psychology*, 80(5), 804.

¹⁹ Levenson, M. R., Jennings, P. A., Aldwin, C. M., & Shiraishi, R. W. (2005). Self-transcendence: Conceptualization and measurement. *The International Journal of Aging and Human Development*, 60(2), 127-143.

²⁰ Baltes, M. M., & Carstensen, L. L. (1996). The process of successful ageing. *Ageing & Society*, 16(4), 397-422.

²¹ Rothermund, K., & Brandstädter, J. (2003). Coping with deficits and losses in later life: from compensatory action to accommodation. *Psychology and aging*, 18(4), 896.

Spiro (2001) explained life span perspective on health by axioms:

- Health is a lifelong process;
- Health is characterized by multidimensionality;
- Study of health is inherently multidisciplinary;
- There are always gains and losses in development. The authors highlighted wisdom that increases with age, as a gain of aging;
- Health occurs in and is constrained by its socio historical context²².

Mokdad and colleagues (2004) estimate the importance of factors that influence aging such: smoking, poor diet, and limited physical activity²³. 3 broad types of factors affecting the rate of aging are:

- Personality;
- Religiousness/ spirituality;
- Stress and coping process.

When the authors estimate personality factors, they explain hostility that; individuals high in hostility have higher rate of both cardiovascular morbidity and mortality than less hostile individuals. Wilson and colleagues (2004) mentioned that neuroticism predict mortality of hostility and have an important role in later life²⁴. In other resources Friedman (2000) suggest anxiety and neurotic behaviors may be problematic under conditions of environmental stress²⁵. Anxiety is related to CHD (coronary heart disease) and death sudden cardiac attack, Gorman and Sloan (2000) reviewed evidence that person with high anxiety have poorer heart rate regulation, and this fact due to overreaction to stressors^{26,27}.

²² Aldwin, C. M., Spiro III, A., Levenson, M. R., & Cupertino, A. P. (2001). Longitudinal findings from the Normative Aging Study: III. Personality, individual health trajectories, and mortality. *Psychology and Aging, 16*(3), 450.

²³ Brown, D. W., Brown, D. R., Heath, G. W., Balluz, L., Giles, W. H., Ford, E. S., & Mokdad, A. H. (2004). Associations between physical activity dose and health-related quality of life. *Medicine & Science in Sports & Exercise, 36*(5), 890-896.

²⁴ Wilson, R. S., Barnes, L. L., Krueger, K. R., Hoganson, G., Bienias, J. L., & Bennett, D. A. (2005). Early and late life cognitive activity and cognitive systems in old age. *Journal of the International Neuropsychological Society, 11*(4), 400-407.

²⁵ Friedman, D. (2000). Event-related brain potential investigations of memory and aging. *Biological Psychology, 54*(1-3), 175-206.

²⁶ Kawachi, I., Colditz, G. A., Ascherio, A., Rimm, E. B., Giovannucci, E., Stampfer, M. J., & Willett, W. C. (1994). Prospective study of phobic anxiety and risk of coronary heart disease in men. *Circulation, 89*(5), 1992-1997.

²⁷ Gorman, J. M., & Sloan, R. P. (2000). Heart rate variability in depressive and anxiety disorders. *American heart journal, 140*(4), S77-S83.

House of Common Justice Committee's V report of session 2013-2014 considered older prisoners. Based on that material, and authors' examines the following table (Table 1) was used:

Table 1. Proportion of prisoners over 60 with most prominent chronic physical health disorders.

Disorders	Fazel, et al: 2001	Hayes, et al: 2012	
		60-64	65-69
cardiovascular	35%	51%	55%
musculoskeletal	24%	51%	66%
respiratory	15%	27%	36%
Psychiatric disorders	45%	54%	39%

Data source: Older prisoner, V report of session 2013-2014, House of Common Justice Committee, 2013²⁸.

Older adults experience psychological trauma directly related to their imprisonment. Crawley E. mentioned elderly prisoners' anxious, depressed or psychologically traumatized emotional state by incarceration. Lack of social support, family members' and relatives fewer visits and poor communication increase their depressed mood, fatigue, worrying and uncertainty about future.

Considering crime, previous life style, social relationship, lack of family support and visits, role conflicts, prisons environment, officers' attitude, interpersonal relationships with inmates, and other factors, aging prisoners population have high risk of depression. The most common cause for elderly suicide, as for all suicides is untreated depression. The treatment of depressive disorder and other psychiatric disorders in late life, counseling in crisis situations and prevention of social isolation in elderly people are the major points for the prevention of suicide in old age²⁹

According to American Psychiatric Association (APA) depression (major depressive disorder) defined as a common and serious medical illness that negatively affects how a

²⁸ Older Prisoners. 5th report of session 2013-2014//House of Commons Justice Committee-July 2013.

²⁹ Aslan M. , Hocaoglu Ç. Yaşlılarda İntihar Davranışı. Psikiyatride Güncel Yaklaşımlar - Current Approaches in Psychiatry, 2014

person feels, thinks and acts. Depression causes feelings of sadness and/or a loss of interest in activities person once enjoyed. It can lead to a variety of emotional and physical problems and can decrease ability to function at work and at home.

Depression symptoms can vary from mild to severe and can include (APA, DSM-5, 2013)³⁰:

- Feeling sad or having a depressed mood;
 - Loss of interest or pleasure in activities once enjoyed;
 - Changes in appetite — weight loss or gain unrelated to dieting;
 - Trouble sleeping or sleeping too much;
 - Loss of energy or increased fatigue;
 - Increase in purposeless physical activity (e.g., inability to sit still, pacing, handwringing) or slowed movements or speech (these actions must be severe enough to be observable by others);
 - Feeling worthless or guilty;
 - Difficulty thinking, concentrating or making decisions;
 - Thoughts of death or suicide.

These symptoms must last at least two week, and influence different aspects of person's life. Depression can affect anyone—even a person who appears to live in relatively ideal circumstances.

The main causes of depression are biological, psychological, and social factors. Several factors can play a role in depression:

- **Biochemistry:** Differences in certain chemicals in the brain may contribute to symptoms of depression.
- **Genetics:** Depression can run in families. For example, if one identical twin has depression, the other has a 70 percent chance of having the illness sometime in life.
- **Personality:** People with low self-esteem, who are easily overwhelmed by stress, or who are generally pessimistic appear to be more likely to experience depression.
- **Environmental factors:** Continuous exposure to violence, neglect, abuse or poverty may make some people more vulnerable to depression (APA, 2020).

³⁰ Roehr, B. (2013). American psychiatric association explains DSM-5. *Bmj*, 346.

Considering crime, previous life style, social relationship, lack of family support and visits, role conflicts, prisons environment, officers' attitude, interpersonal relationships with inmates, and other factors, aging prisoners population have high risk of depression.

Darrick Jolliffe and Dr Zubaida Haque present their view about basic human conditions of prison, have brought together the findings about mental health of inmates in the article "Have prisons become a dangerous place? Disproportionality, safety and mental health in British Prisons". Authors find significant links between a facility's population size, the presence of mental disorders, prisoners' distress, time in cell, lack of contact with family, lack of staff support and death from suicide. Research suggest combination of cognitive behavior therapy and dialectical behavior therapy, access to educational courses and jobs, special trainings for prison officers in mental health literacy and benefits of these programs for preventing self harm and suicide³¹.

Authors Anju Gupta, N.K.Girdhar (Department of Psychiatry, Central Jail Hospital, Tihar, New Delhi) express a view that jails and prisons are repositories for vulnerable groups risk for suicide in article "Risk factors of suicide in prisoners". Authors make a connection between suicide rate and ongoing stress related to court proceeding. Moreover they suggest drug abuse, unemployment, interpersonal conflicts, and mental illness as risk factors, too. In clinical factors A.Gupta and N.K.Girdhar are describing prevalence of psychiatric disorders ranging from 33 to 95 percent. Depressive disorders are more often linked to suicide than any other psychiatric illness. In conclusion authors confirm that the most important risk factors of suicide consist of mental illness-particularly depressive disorder, hopelessness, substance abuse and other factors, and show that there is not any studies that link Hepatitis C factor and suicide, although interferon treatment is associated with depression and possible suicidal behavior³².

Linda Peckel stressed lack of purposeful activity, medical and mental health issues, conditions of the specific prison environment, stress of adjusting to incarceration as a risk factors of suicide in prisons³³.

³¹ Jolliffe, D. and Haque, Z. Have prisons become a dangerous place? Disproportionality, safety and mental health in British Prisons.//Runnymede and University of Greenwich-2016

³² Gupta, A., Girdhar, N.K. Risk factors of suicide in prison.//Delhi psychiatry journal 15(1)-April, 2012

³³ Peckel, L. preventing suicide in Prison Inmates.//Psychiatry Advisor, December, 2017

The authors of British Psychiatrists Council Report (2004) identified consensus standards for assessment following self-harm, and highlighted the specific risks associated with older adults. It is estimated that about 150000 cases present to accident and emergency departments in the UK annually³⁴. It is one of the five most frequent causes of acute medical admission for both men and women in the UK (University of York NHS Centre for Reviews and Dissemination, 1998). In the decade since the publication of Council Report CR32, *The General Hospital Management of Adult Deliberate Self-Harm*³⁵, there have been a number of significant changes in the delivery of services for people who harm themselves. The average annual suicide rate for England and Wales is 10 per 100 000, with less than a quarter of those dying having been in contact with mental health services in the year prior to their death. Self-harm is a high risk factor for future suicide. Individuals who have deliberately harmed themselves have a 100-fold greater risk of suicide than the general population.

The College is concerned about the high rates of self-harm and suicide in the prison population. This population is particularly vulnerable because of high rates of mental illness, substance misuse and personality disorder. Prisoners are further disadvantaged by the setting in which they live and the paucity of good health and psychological provision for them.

Mental Health Commission of New South Wales (NWS Government) focused suicide problem in Australia and highlighted that the largest number of suicides occurred in the 24–35 year age group. In 2017, 161 people lost their lives to suicide in NSW in this age group – 135 of these were men. Men aged 85 years and over also had the highest rate of suicide in Australia at 32.8 per 100,000 populations. They published strategic framework for suicide prevention in NSW 2018-2023.

While concentrating risk factors for suicide and suicidal behaviors (2004), we can determine demographic factors, groups at higher risk and current personal risk factors. The authors believe that people in prison or police custody are in groups who have higher suicidal risk, too. While suicide and self-harm are not exclusive to specific populations or

³⁴ Hawton, K., & Fagg, J. (1992). Deliberate self-poisoning and self-injury in adolescents: A study of characteristics and trends in Oxford, 1976–89. *The British Journal of Psychiatry*, 161, 816–823

³⁵ Royal College of Psychiatrists, 1994

groups, it is important to note that some groups of people are particularly vulnerable to suicide and self-harm. Many individuals fall into more than one of these groups.

Table 2. People and groups at higher risk of suicide and suicidal behavior

Individuals	Groups
Children in out of home care	Aboriginal and Torres Strait Islander people
Care leavers (people who spent time in care as a child)	Lesbian, gay, bisexual, transgender, and intersex people
Children and young people in the youth justice system	Young people
People who have experienced bullying and victimization	People with severe mental health conditions
Survivors of abuse or violence including sexual abuse and domestic violence	Certain occupational groups with increased knowledge of and ready access to the means to attempt suicide (e.g. doctors, nurses, farmers and other agricultural workers)
People who use or experience domestic violence	Some male-dominated industries (e.g. construction and mining)
People living with long-term physical health conditions	Some culturally and linguistically diverse (CALD) communities
People with untreated depression	Asylum seekers and refugees
People who are socioeconomically disadvantaged	<u>Prisoners and others in contact with the criminal justice system</u>
People who misuse drugs or alcohol	Rough sleepers, the homeless and those at risk of homelessness
People bereaved or affected by suicide	<u>Older people, especially men</u>
People who do not have strong connections to their culture or identity	Residents of aged care facilities

In this framework authors are describing protective factors for suicidal behaviours: feelings of hopefulness, positive personal relations, strong and safe connection to family,

community and culture, effective problem solving skills, ability to recognize and manage stressful or traumatic events, ability to adapt to change as possible, a sense of purpose, good physical and mental health and wellbeing and others.

Juvenile Justice NSW is working closely with the Justice Health and Forensic Mental Health Network to prevent suicidal behavior and self-harm among Juvenile Justice clients. Services include early screening for young people at risk of self-harm, trauma counseling for detainees who have been victims of crime, specialist assessment and referral, therapeutic care for clients with mental health issues and monitoring as required. However there is not special program for elderly inmates in prisons for preventing their future self-harm attempt.

In conclusion the NSW Government identify that sustained effort is required for a more localized, bottom-up approach that embeds improvement science principles and motivates future innovation and customization.

In the study “Suicide Risk Assessment” author Keith Hawton (Director of center for suicide research, professor of psychiatry in University of Oxford) focuses suicide and self-harm, studying their causes, and finding out what treatments and prevention measures are effective. He provides an excellent scale about assessment of suicide risk. A scale developed in 1983 by Patterson et al in

Canada for teaching medical students about assessment of d suicide risk and it’s called SADPERSONS Scale. Based on the 10 major risk factors for suicide:

- Sex (male)
- Age (<19 or >45)
- Depression
- Previous attempts
- Ethanol abuse
- Rational thinking loss
- Social support lacking
- Organized plan
- No spouse
- Sickness

The author attempted to answer a question “What is the best alternative to risk prediction?” and claims prediction model (a typical risk formulation approach) in this study. In conclusion, research has resulted in specific treatments and prevention initiatives, some

of which we have shown to have major benefits in reducing risk of further self-harm and preventing suicides³⁶.

In the research “Suicide Assessment in the Elderly” published Geriatric Psychiatry for the Primary care provider 2008, Aging and Mental Health University of South Florida, author Lisa M. Brown, concentrates on suicide facts in the USA, compares variables of younger adults and elderly population’s suicidal behavior, presents implications for practice. Compared to younger suicidal adults, researcher notes that suicidal elderly individuals demonstrate significant differences in risk factors, precipitating events, and predisposing variables. In addressing different diagnoses of suicidal behavior, L.Brown stressed depression as one of the diagnoses. Author successfully presents that 83% of elderly suicides is associated with clinically depressed mood³⁷.

In sum, Lisa M. Brown effectively presents development trajectory of suicide:

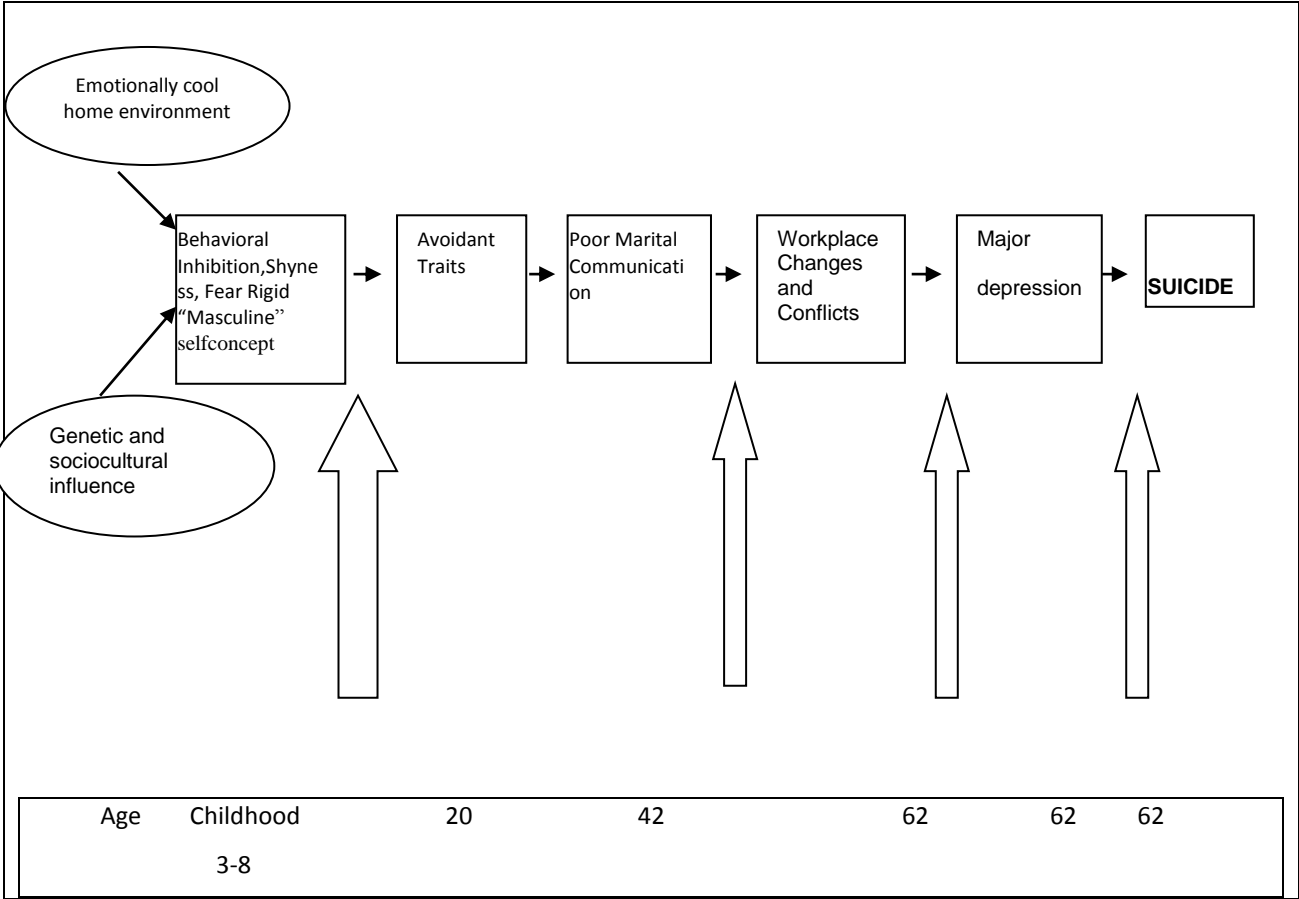


Figure 1. Development trajectory of suicide (according Lisa M. Brown, 2008).

³⁶ Fazel, S., Ramesh, T., & Hawton, K. (2017). Suicide in prisons: an international study of prevalence and contributory factors. *The Lancet Psychiatry*, 4(12), 946-952.

³⁷ Hyer, K., & Brown, L. M. (2008). The Impact of Event Scale–Revised: A quick measure of a patient's response to trauma. *AJN The American Journal of Nursing*, 108(11), 60-68.

The next problem in correctional facilities is education as a part of rehabilitation. People in prison systems worldwide are less educated in general population. So education in prisons is one of the disputable and debatable areas in modern life. Studies show that education in prison is an effective way of reducing the rates of future crimes³⁸. Authors mentioned that ex-prisoners often face difficulty obtaining employment after their release, and this is associated with recidivism. So prison education programs are intended to reduce re-offending by increasing prisoners' basic knowledge skills and abilities. If they participate vocational trainings in setting, they will have chance of being employed post-release. Another hand researchers highlighted prison education's therapeutic advantages in psychological health and well-being, such as improving self-esteem, stimulating, and motivation. The importance of prison education program and its future advantages were described in other countries policy papers, too. May 2016, Unlocking potential – A review of education in prison, by Dame Sally Coates was published (Ministry of Justice UK).

Scurrah A.M. searched formal and informal learning process in Risdon Prison³⁹. Author noted that prisoners were often absent from school, didn't enjoy school and spent a larger proportion of their time on non academic activities till the imprisonment. According other research (Golding, 2002) highlighted that majority of the inmates' previous educational experiences were boring and they had negative attitudes to learning continue later in life⁴⁰.

However opponents argue that prison education is a waste of money and that prisoners do not deserve it. Giving imprisoned people education chance is "rewarding" them for committing crimes, and that is unfair that inmates receive free education when people with low income must pay for it in freedom⁴¹.

Sweden is considered one of the first countries where prison education was applied and Norway opened its first prison where they focused on education in 19th century (Nordic Prison Education; 2005). In Finland, legislation that ensured all prisoners would receive primary education was adopted in 1866. Of course each of them faced practical difficulties.

³⁸ Erisman, W., & Contardo, J. B. Learning to Reduce Recidivism: A 50-State Analysis of Postsecondary Correctional Education Policy. //Institute for Higher Education Policy -2005

³⁹ Scurrah, A. M. (2008). *LEARNING ON THE INSIDE IN RISDON PRISON* (Doctoral dissertation, University of Tasmania).

⁴⁰ Golding, N. (2002). Prisoner perception: learning experience in correctional centre literacy programs. *Australian vocational education review*, 9(1), 38-48.

⁴¹ Quan-Baffour, K. P., & Zawada, B. E. (2012). Education programmes for prison inmates: reward for offences or hope for a better life?. *Journal of Sociology and Social Anthropology*, 3(2), 73-81.

The Parliamentary Goal Act in England, which called for reading and writing classes in all prisons was adopted in 1823⁴².

It was applied to eradicate illiteracy in the Soviet Union in 1918 and recommended education alongside punishment⁴³. Prison education policy was realized in Azerbaijan from 1920's, when it became the part of Soviets Union.

Official prison brochure in China highlighted that the cause of committing crime is the lack of moral and intellectual education⁴⁴. Limited educational opportunities was described as a major factor, and inmates are described less educated than general population in other studies⁴⁵. Author believes that education programs in prisons play an important role in future lives of incarcerated individuals and their rehabilitation programs. Rehabilitation can be realized by learning to read, write, compute, and effectively communicate for future upon release⁴⁶. Author claims that inmates leaving prison with basic skills and a diploma could be more qualified for employment, and to be far from criminal behavior again. According to Department of Justice's Bureau of Justice Assistance, reporter suggests that receiving correctional education reduces an individual's risk of recidivating after release. In the article Angela K. achieved positive association between prison education and employment, and examples this claim with the Texas, California and RAND study models. To clarify this point author demonstrate the rate of recidivism from prison where was lack of education programs.

Lori L. stressed major role of education in the rehabilitation of prisoners⁴⁷. According to Steurer et al. (2010), author explained three goals of education: to provide security, safety and rehabilitation⁴⁸.

⁴² Forster, W., & Forster, B. (1996). England and Wales: the state of prison education. *Journal of Correctional Education*, 101-105.

⁴³ Morris, N., & Rothman, D. J. (Eds.). (1998). *The Oxford history of the prison: The practice of punishment in Western society*. Oxford University Press, USA.

⁴⁴ Di Tella, R., & Schargrofsky, E. (2013). Criminal recidivism after prison and electronic monitoring. *Journal of political Economy*, 121(1), 28-73.

⁴⁵ Koo, A. (2015). Correctional education can make a greater impact on recidivism by supporting adult inmates with learning disabilities. *J. Crim. L. & Criminology*, 105, 233.

⁴⁶ Koo, A. (2015). Correctional education can make a greater impact on recidivism by supporting adult inmates with learning disabilities. *J. Crim. L. & Criminology*, 105, 233.

⁴⁷ Delale-O'Connor, L. A., Alvarez, A. J., Murray, I. E., & Milner, IV, H. R. (2017). Self-efficacy beliefs, classroom management, and the cradle-to-prison pipeline. *Theory Into Practice*, 56(3), 178-186.

⁴⁸ Steurer, R. (2010). The role of governments in corporate social responsibility: Characterising public policies on CSR in Europe. *Policy sciences*, 43, 49-72.

Research described risk factors of recidivism, specifically race, age, gender, marital status, socioeconomic status (SES), educational attainment, and employment status. At the same time authors supported their argument clearly by using results of meta-analysis of 15 studies by Chappell (2004), it was shown that prisoners who graduated a secondary education in prison had lower rates of returning to prison than others⁴⁹. Moreover Lori L. analyzed 10 different researches about this issue which published last 15 years, from 1995 to 2010. The results were analogues; educational process in prison is one of the main reasons for reduction of recidivism. After the discussion of correctional education's impact on recidivism, researchers wondered: where we go? Answering this question they made a connection between correctional employment programs and recidivism, and future research on correctional programs, education and employment, and their impact on recidivism.

November 2005, Learning to Reduce Recidivism (a 50 state analysis of postsecondary correctional education policy) was published by Wendy Erisman, Jeanne Bayer Contardo⁵⁰. Prison programming was suggested to help inmates successfully re-enter society after release from prison. Substance abuse treatment, life skills training, vocational training, employment in prison industries, and educational programs from basic level to secondary level were included prison programs. These programs have advantages as improving the mental, physical, and social well-being of prisoners, providing them job training and reduce future crime rates. In this document authors explained future benefits of educational program for prisoners, for states, for taxpayers and for society, although stressed limitations as security, overcrowding, transfers as challenges of prison education system. In a conclusion they raised access of inmates to high education as a future issue and research topic.

The importance of prison education program and its future advantages were described in other countries policy papers, too. May 2016, Unlocking potential – A review of education in prison, by Dame Sally Coates was published (Ministry of Justice UK).

In sum, according to the literature, correctional education significantly reduces inmates' likelihood of returning to prison (recidivism). Prison education also has other psychological aspects benefits, such as improving self-esteem, and stimulating creativity.

Each of the studies repeatedly emphasizes the importance of education, psychological support, development and implementation of appropriate programs in prisons, measures to

⁴⁹ Hall, R. S., & Killackey, J. (2008). Correctional education from the perspective of the prisoner student. *Journal of Correctional Education*, 59(4), 301-320.

⁵⁰ Erisman, W., & Contardo, J. B. (2005). Learning to Reduce Recidivism: A 50-State Analysis of Postsecondary Correctional Education Policy. *Institute for Higher Education Policy*.

improve interaction with family members, early diagnosis, individual approach, and only then can different mental problems, and self-harm incidents among older prisoners be prevented.

The quality of life

Quality of life (QoL) is a concept which aims to capture the well-being, whether of a population or individual, regarding both positive and negative elements within the entirety of their existence at a specific point in time. The World Health Organization explains QoL as a subjective evaluation of one's perception of their reality relative to their goals as observed through the lens of their culture and value system.

Issues of quality of life and well-being in the elderly convict were studied at the University of Nottingham Trent and some of the following points were identified⁵¹. The author, who first looked at previous researchers' papers, noted that less research had been done in this area, including Azrini Wahid's (2000-2005) study on older women prisoners, and Ronald Aday's 1978-2006 study on the health of older prisoners in the United States. He noted his researches and published articles in It should be noted that both authors worked together in 2005-2012 to study the needs of older prisoners. Elaine Crawley and Richard Sparks conducted research on how older inmates "survive" in prisons⁵². At the same time, he touched upon the issues of treatment of prisoners, conditions of detention in the penitentiary institution, supply issues, and staff shortages in the institutions.

Another study was conducted in the community and treated by Luciana Magalhaes Vitorino (doctoral student), Lisiane Manganelli Girardi Pasculin (PhD, adjunct professor), Lucila Amaral Carneiro Vianna (PhD, full professor) from the Universities of Sao Paulo and Rio Grande in Brazil Escola Paulista de Enfermagem, was carried out on the basis of a comparative analysis of the quality of life of elderly people in rehabilitation centers. The authors analyzed based on the statistical results of the previous two studies. The study involved 288 elderly people living in communities and 76 in the centers. The authors provide several definitions of the concept of quality of life, as cultural, ethnic, religious and personal aspects each affect the quality of life separately. Quality of life is based on objective and

⁵¹ De Motte. C. Understanding older male prisoners' satisfaction with Quality of life and wellbeing. PhD thesis/Nottingham Trent University, 2015

⁵² Crawley, E., and Sparks, R. Is there life after imprisonment?: How elderly men talk about imprisonment and release.// Criminology and criminal justice 6(63)- 2006

subjective parameters. Subjective parameters include well-being, happiness, personal achievements; the objective parameters are related to the satisfaction of the needs arising from the social structure. Once again, the authors refer to the WHO's definition of quality of life, linking quality of life to an individual's attitude to his or her position and how he or she perceives it.

WHO has developed and standardized the WHO QOL-100 survey on quality of life measurement.

QOL measurement scale is Likert scale, and consists of 26 questions related to 4 domains: physical health, psychological, social relationships, and environment. In first group- "Physical health", the data on inmates' activities of daily living, dependence on medicinal substances and medical aids, energy and fatigue, mobility, pain and discomfort, sleep and rest, work capacity features were collected. Second group- "Psychological features". This group contains inmates' answer about bodily image and appearance, negative feelings, positive feelings, self-esteem, personal beliefs and psychological process thinking, learning, memory and concentration.

Third group includes data on social relationship domain (Personal relationships, Social support and Sexual activity). Forth group - Environment domain covered person's financial resources, freedom, physical safety and security, opportunities for acquiring new information and skills, participation in and opportunities for leisure activities, physical environment (pollution / noise / traffic / climate), and transport notes (WHO,1996).

Then the WHO QOL-OLD model of the survey was developed. In a comparative analysis, the authors used statistical results from surveys conducted in Brazil in 2004 and 2010. Comparing 4 items of the WHO QOL survey - physical, psychological, social relations and environmental items, the previous 3 items had higher rates in the community, only the last item had relatively high results in care centers, but $p > 0.001$ was not statistically significant. There is an association between the level of education and quality of life, as adults with a certain level of education are engaged in leisure activities, fight diseases; however, those with no education are more likely to suffer from disease, are less likely to engage in leisure activities, and have lower quality of life. The authors (Parmelee PA, Harralson TL, Smith LA, Schumacher HR., 2007) did not find a statistically significant association between the fact that older people live with their families in the community or

are in any social care centers, and the quality of life indicators, and thus this factor is insignificant. It is in the research of previous authors that leisure activities play an important role in the socialization, physical and mental health of older people⁵³.

The quality of life of elderly prisoners was studied by researchers from Tehran University of Medical Sciences, Amirkabir University, Masjed Solaiman Free University, Ahvaz Jundishapur University and published in the American Journal of Applied Sciences (2012). During the study, 349-year-olds (65 years and older) were trained for 4 months (40 minutes) in 11 medical centers in Masjed Solaiman, Iran. A short health questionnaire (SF-36) was used to determine the differences in quality of life (QOL) before and after training (D.Orem self-care training) (via t-test). After the trainings, the health survey indicators changed significantly ($p < 0.001$, the mean increased from 49.2 to 59). Physical role scores of the survey 48.7-57.4; physical functions 55.3-66.3; mental health 52.1-62.2; social functions 57.4-68.5; pain tolerance 47.4-53.3; strength, endurance 47-57.6; emotional roles ranged from 47.2 to 61.9. The authors conclude that Orem self-care training improves quality of life in older people⁵⁴.

Robert B.Greifinger mentioned a comprehensive look at factors that impact correctional health care in his book "Public health behind bars". The author highlighted that depression and depressive symptoms are common in the geriatric population. The prevalence of major depression in the United States is approximately 1–2% of community-dwelling older adults and is up to 27% for those who have significant depressive symptoms. R.B.Greifinger contrast different studies and found that the prevalence of major depression was 50 times higher among incarcerated older men compared to community-dwelling men. Moreover using results of researchers marked that generalized anxiety disorders were prevalent and that, overall, 54% of the older inmates met criteria for psychiatric disorders⁵⁵. In prison, 15% of inmates of all ages have serious mental illness, such as schizophrenia.

As the person grow older and live without a spouse, it in turn leads to poor quality of life. Only the relationship between the level of education and quality of life indicators was not found. The authors note that depression and loss of spouse have a negative impact on quality of life with beta, while the important effect of family on quality of life, preventing

⁵³ Parmelee, P. A., Harralson, T. L., Smith, L. A., & Schumacher, H. R. (2007). Necessary and discretionary activities in knee osteoarthritis: Do they mediate the pain–depression relationship?. *Pain Medicine*, 8(5), 449-461.

⁵⁴ Aliyeva, G. (2020). THE DETERMINANTS OF QUALITY OF LIFE IN OLDER ADULTS OF CORRECTIONAL FACILITIES. *PEARSON JOURNAL*, 5(9), 316-325.

⁵⁵ Greifinger, R.B., Public health behind bars, from prisons to communities./October, 2021

loneliness and social isolation in the elderly⁵⁶. The relationship between socioeconomic status, income level and quality of life has also been identified by Irish researchers⁵⁷. The relationship between the health factor, the incidence of long-term chronic diseases and quality of life has been noted by other previous authors⁵⁸. In a long-term study in the UK, a decrease in the independence factor in the elderly also led to a decline in quality of life⁵⁹. Similar results were found in another study conducted in Spain⁶⁰.

R. Veenhoven identified the following factors that are important for quality of life⁶¹.

- that the environment will be lived, that the environment is suitable for social relations;
- self-esteem, seeing one's own strengths and weaknesses;
- external benefits, goals;

Subjective comparison and approach of each person based on their own experience and expectations.

Quality of life also depends on external factors. Conditions, work, income, material well-being, spiritual relationships, family and personal life, social support, stress and crises, medical care, care, working conditions, educational opportunities, eco-factor, etc.

Quality of life includes the following areas:

1. physical condition - health
2. financial situation (welfare, living conditions, average income, working and leisure conditions, etc.)
3. psychological situation (emotions, attitudes, values, self-esteem, job satisfaction, stress, psychological climate in the family, organization and society, the psychological environment of the people in general)
4. education and self-development (learning, quality of education, skills)

⁵⁶ Dahlberg L, McKee KJ. Correlates of social and emotional loneliness in older people: evidence from an English community study. //Aging Ment Health. 2014 May;18(4)

⁵⁷ Layte R, Sexton E, Savva G. Quality of life in older age: evidence from an Irish cohort study. //J Am Geriatr Soc. 2013

⁵⁸ Lee C. A systematic integrative review of programs addressing the social care needs of older prisoners. //Carolina Lee, Samantha Treacy, Anna Haggith [et al.]// Health and Justice 7(9)-2019

⁵⁹ Zaninotto P, Falaschetti E, Sacker A. Age trajectories of quality of life among older adults: results from the English Longitudinal Study of Ageing. //Qual Life Res. 2009

⁶⁰ Fernández-Mayoralas G, et al. //Spanish Research Group on Quality of Life and Ageing//. Active ageing and quality of life: factors associated with participation in leisure activities among institutionalized older adults, with and without dementia. //Aging Ment Health. 2015;19(11):1031-41

⁶¹ Veenhoven, R. The Four Qualities of Life. //Journal of Happiness Studies 1, p.1–39 –March.2000

5. social relations (family members, relationships with other people, society, support)
6. opportunities for self-expression and forms of activity (creativity, hobbies, entertainment)
7. defense and environment (personal physical protection - legal, social, work environment, economic, political and legal environment)⁶².

The quality of life and well-being of the elderly convicts were studied at the University of Nottingham Trent and the following points were identified⁶³. According to the various literatures, the author came to the general conclusion that special medical, social care and support should be provided to older prisoners in prisons, an approach reflected in the World Health Organization's notes (World Health Organization, 2005). The author also noted that according to the records of the British Ministry of Justice, the cost of elderly prisoners is 3 times higher than in other age groups.

The second subchapter of this chapter is about **interpersonal relationship between prison staffs and elderly inmates**. Prison staffs- officers, civil workers, inspectors, and psychologist, social workers' activities were regulated based on Codex, Rules of Ethical Conduct, Instruction "On the conduct of educational and psychological work with persons sentenced to a certain period and life imprisonment", as other international codex.

The concept of social support proposed by Cullen (1994) was used in this research. Cullen identified three main dimensions in the social support definition: the community, the social network and intimate and confiding associations⁶⁴. The author (Aday R., 2012) differentiated instrumental and expressive support. Instrumental support refers food, money, housing, and services; while expressive support means sharing sentiments, discussing concerns and problems, or giving attention.

Different researches on inmates lend insight to the importance of social support in prisons. Inmates report the need for safety, structure, support, emotional feedback, social

⁶² Ruzevicius J. Quality of Life and its Components' Measurement.//17th Toulon-Verona International Conference/Liverpool John Moores University, August 28-29, 2014

⁶³ De Motte. C. Understanding older male prisoners' satisfaction with Quality of life and wellbeing. PhD thesis/Nottingham Trent University, 2015

⁶⁴ Aday, R. H., & Krabill, J. J. (2012). Older and geriatric offenders: Critical issues for the 21st century. *Special needs offenders in correctional institutions*, 1, 203-233.

stimulation, activity and other issues⁶⁵. They (Williams.B.A, 2012) often desire “support and structure” (instrumental support), “emotional feedback” (expressive support) within the correctional facilities, too.

Since Cullen (1994) mentioned an importance of social support for criminal justice, some researchers have begun to investigate interpersonal relationships in the prisons⁶⁶. Meanwhile relationship between family ties and inmate behavior has long been overlooked by researchers. Visits, furloughs, receiving calls, and letters by family members and relatives can be differed as an expressive support tool. Bales and colleagues (2008) mentioned that more frequent visitation while incarcerated is related to the reduction of recidivism upon release⁶⁷.

Cognitive component of attitudes means beliefs, stereotypes, and perceptions about older adults and the aging process. Some beliefs regarding aging and cognition are negative, when some of them are positive. For example, while old age might be associated with growth or maintenance some aspects of functioning, such as those associated with expressive behavior or wisdom⁶⁸. Attitudes are also reflected in behaviors toward older adults. Finding from literature analyzing mentioned stereotypes, also younger adults’ patronizing talk with older individuals. Such patronizing talk is characterized by demeaning emotional tone, clarification strategies, controlling or disapproving messages⁶⁹. Aging related attitudes also influence in other important social contexts. Behavioral components can be different due to cultural moments. Aging attitudes shape dependence-related behaviors in older adults; such behaviors may not always be reactions to the external environment. They may reflect selective processes designed to foster control and conserve resources.

⁶⁵ Williams, B. A., Ahalt, C., Stijacic-Cenzer, I., Smith, A. K., Goldenson, J., & Ritchie, C. S. (2014). Pain behind bars: the epidemiology of pain in older jail inmates in a county jail. *Journal of Palliative Medicine*, 17(12), 1336-1343.

⁶⁶ Cullen, F. T., Van Voorhis, P., & Sundt, J. L. (1996). Prisons in crisis: The American experience. In *Prisons 2000: An international perspective on the current state and future of imprisonment* (pp. 21-52). London: Palgrave Macmillan UK.

⁶⁷ Cochran, J. C., Mears, D. P., & Bales, W. D. (2017). Who gets visited in prison? Individual-and community-level disparities in inmate visitation experiences. *Crime & Delinquency*, 63(5), 545-568.

⁶⁸ Aldwin, C. M., & Levenson, M. R. (2001). Stress, coping, and health at mid-life. *The handbook of midlife development*, 188-214.

⁶⁹ Aldwin, C. M., & Levenson, M. R. (2001). Stress, coping, and health at mid-life. *The handbook of midlife development*, 188-214.

The concept of stereotype threat was invoked by Steele and colleagues (2002) that explain the effects of negative stereotypes on performance⁷⁰. Authors mentioned that situational cues activate these thoughts, which may negatively impact performance due to some issues, including anxiety, arousal, and decreased effort.

By exploring the subjective experiences of prison officers when interacting with prisoners, I aim to better understand how these interactions may interact with the health and wellbeing of prison officers. As such the current study will examine interactions between prison officers and prisoners as reported in the existing literature. Owen (1983) in the USA explored prison culture and relationship with 35 prison officers, Liebling and colleagues (1999) in England studied this problem with 17 prison officers using semi structured interviews⁷¹, Cianchi in Australia explored investigated the same problem in 2009⁷², Lemmergard and Muhr (2012) focused on emotional labour and professional identity problem of correctional officers in Denmark, Ibsen (2013) chose an ethnography to get information about informal favours as social control by prison officers in Norway, Worley (2016) used auto- ethnography in the two prisons of the USA, Ricciardelli and Perry (2016) used semi-structured interviews with 42 officers in Canada, Halsey and Deegan (2017) explored this problem in Australia⁷³.

As the prison staff is a part of the interpersonal relations with the older convicts, the officers are expected to be involved in the implementation of the social emotional support program during the study.

An exploratory research that realized in Italy, differentiated factors that negatively affect the psychological well-being of correctional officers by Viotti S. in 2016. The author stressed that managing relationships with prisoners was the most stressful part of a prison officer's job. That research brought to light an interesting aspects little considered until 2016: for the interviewees, the closeness with the inmates means, most of all, being in contact with their suffering and their desperation caused by their state as detainees and

⁷⁰ Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. In *Advances in experimental social psychology* (Vol. 34, pp. 379-440). Academic Press.

⁷¹ Ross, M. W., Diamond, P. M., Liebling, A., & Saylor, W. G. (2008). Measurement of prison social climate: A comparison of an inmate measure in England and the USA. *Punishment & Society*, 10(4), 447-474.

⁷² Koudstaal, D., Cianchi, J., Knott, M., Koudstaal, M., & Australia, P. W. (2009). Creating cooperatively with all stakeholders an advanced and highly secure ICT learning network for all inmates within existing cultural prison practices. *ACEA/Reintegration Puzzle*, 1-21.

⁷³ Aliyeva, G. (2022). Attitudes toward elderly inmates in correctional facilities. *Prizren Social Science Journal*, 6(1), 30-39.

worsened by the inability of the Italian penitentiary system to guarantee conditions of dignity in the detention experience⁷⁴. Moreover, feelings of guilt and powerlessness, due to the impossibility of helping the inmates are also highlighted as part of the COs' stress experience in previous works of literature.

Prison officers' wellbeing, therefore, can be understood as a dynamic balance between an individual's available resources and the challenges they face. In accordance with the literature concerning social factors, two categories were observed which describe elements of stress related to relationships between COs (correctional officers) and their peers and superiors.

Organizational and operational stressors contribute to "burnout". The term "burnout" is frequently used to describe a state of emotional exhaustion that workers experience, which may be accompanied by a reduced sense of job role effectiveness and/or an attitude of indifference or callousness toward justice-involved individuals or other staff members⁷⁵.

Denhof explained corrections Fatigue as capture the range of stressors and types of exposure that can and do operate in corrections settings. The three major types of stressors in the Corrections Fatigue Process Model have been described as Organizational, Operational, and Traumatic. Organizational stressors specifically include such facets as dual role conflict, difficult/demanding social interactions, low organizational support, and insufficient education and training on coping strategies.

Denhof and colleagues mentioned corrections occupation stressors and described the following figure⁷⁶.

⁷⁴ Viotti S.. Work-related stress among correctional officers: A qualitative study. Reading, Mass.- 2016, 53(4), p.871–884

⁷⁵ Denhof, M.D., Spinaris, C.G., Mortan G.R. Occupational stressors in corrections organizations: types, effects and solutions. //U.S. Department of Justice, National Institute of corrections.- Jule, 2014

⁷⁶ Denhoff et al.2014 (<https://info.nicic.gov/nicrp/system/files/028299.pdf>)

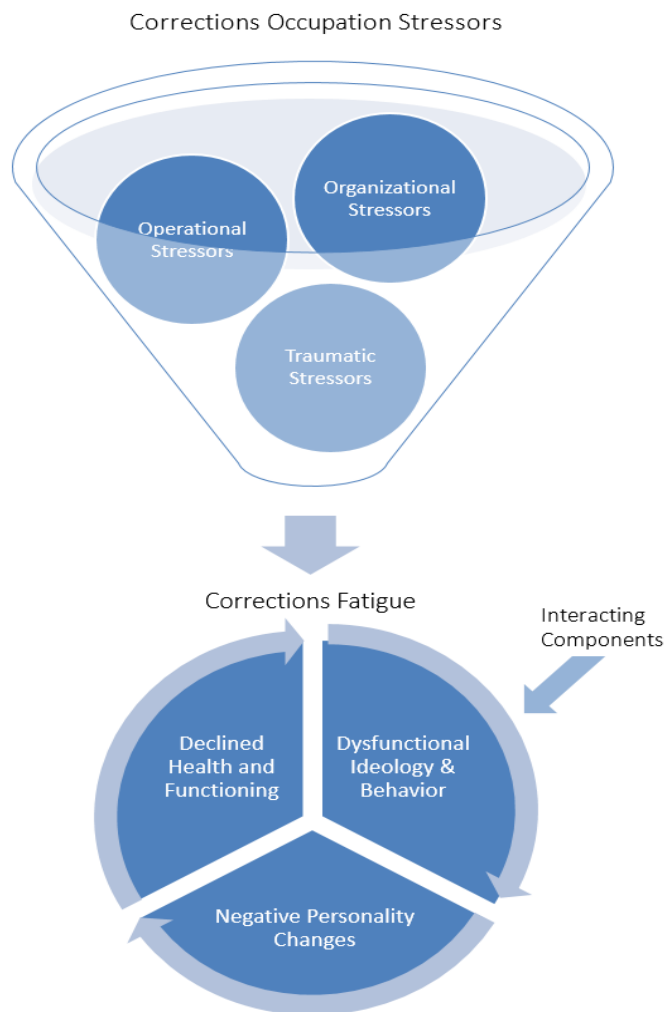


Figure 2. Correction occupation stressors

(<https://info.nicic.gov/nicrp/system/files/028299.pdf>)

Burhanullah H.M., Galecki J., and colleagues explored the COVID-19 pandemic in correctional facilities, and its results in officers' mental health⁷⁷. In this cross-sectional survey of 589 correctional workers in the United States of America, they found a high prevalence of psychological symptoms. Approximately 48% of healthcare workers and 32% of correctional officers reported mild to severe depressive symptoms, 37% reported mild to severe anxiety symptoms, 47% of healthcare workers and 57% of correctional officers reported symptoms of burnout, and 50% of healthcare workers and 45 of correctional officers reported post-traumatic stress symptoms. Although there are no previous studies for a direct comparison, specially related to COVID-19 pandemic situation, these rates are higher than those reported in most of the studies on frontline hospital health care workers.

⁷⁷ Burhanullah, M. H., Rollings-Mazza, P., Galecki, J., Van Wert, M., Weber, T., & Malik, M. (2022). Mental health of staff at correctional facilities in the United States during the COVID-19 pandemic. *Frontiers in Psychiatry*, 12, 767385.

The authors found a negative correlation with age and symptoms of depression, anxiety, and burnout. This may reflect the older workers being more likely to be in higher positions with more job security and less stressful work environments within correctional facilities. Previous studies have shown that lower work-related position is associated with a higher level of psychological symptoms. It is also possible that younger workers are spending more time on social media, thus being exposed to misinformation about COVID-19, which may increase anxiety. Increased workload and workplace conflict were associated with all mental health domains except sleep disturbance and resilience. This is not surprising in the prison environment where teamwork and work force cohesion can literally be a matter of life and death. Lack of coworker support has been linked to increased burnout in correctional settings⁷⁸. Correctional workers work in closed confined environments for long shifts, often without any cell phones, internet, or other forms of contact with the outside world and may rely even more on each other for support as compared to general hospital workers. It was noted that depression, anxiety, burnout, and post-traumatic stress scores were higher when workers believed that institutional isolation practices were sufficient at protecting them from COVID-19⁷⁹.

One of the latest research material that was about correctional officers' mental health problem was published in 2024, in "Criminal Justice Behavior"⁸⁰. Authors Miller O., Shakespeare F.J., and Bruenig D. mentioned that workplace stressors are thought to be the strongest predictors of correctional officer burnout. According to Forman-Dolan and colleagues the authors noted that the stress related to workplace relationships, and those related to the organizational climate (Miller, O. et al., 2024). Stressors intrinsic to the job include work overload, lack of autonomy, and perceived danger. Correctional officers' burnout, distress and PTSD have been linked a perception of danger, including exposure to critical incidents.

According to Cavallari and other researchers it can highlighted that workplace social support, particularly from supervisors and peers, can protect correctional officers from

⁷⁸ Lambert EG, Altheimer I, Hogan NL. Exploring the relationship between social support and job burnout among correctional staff. *Crim Justice Behav.* (2010) 37:1217–36. doi: 10.1177/0093854810379552

⁷⁹ Burhanullah, M. H., Rollings-Mazza, P., Galecki, J., Van Wert, M., Weber, T., & Malik, M. (2022). Mental health of staff at correctional facilities in the United States during the COVID-19 pandemic. *Frontiers in Psychiatry*, 12, 767385.

⁸⁰ Miller, O., Shakespeare-Finch, J., & Bruenig, D. (2024). Predicting Burnout, Well-Being, and Posttraumatic Growth in Correctional Officers. *Criminal Justice and Behavior*, 00938548241233932.

developing burnout as can support from loved ones⁸¹. Similarly, variables related to a positive organizational climate are protective against correctional officer burnout. A sense of organizational support, cohesion among colleagues, and trust in supervisors and management can prevent correctional officer burnout. Shakespeare-Finch and Daley mentioned this issue in their previous publication that a sense of workplace belongingness appears protective against burnout in other high-risk occupations⁸².

According to the researches it can be emphasized that there are comparatively few studies exploring correctional officer well-being. Dodge explained this fact related to the lack of consensus regarding the operationalization of well-being⁸³. Despite this, most research exploring correctional officer well-being has measured markers of pathology, inferring health as the absence of pathology⁸⁴. Butler emphasized that where well-being has been recognized as more than the absence of pathology, it tends to have been narrowly defined by focusing on officer job satisfaction⁸⁵. According to previous literature materials it can be suggested that various resources like connection to culture, social support, and adaptive coping supports correctional officer well-being, while exposure to operational and organizational stressors like violence, a masculine organizational culture, and low managerial support reduces officer well-being.

The next fact that observed in correctional officers' mental health is posttraumatic growth. Tedeschi explained that posttraumatic growth can also occur after exposure to highly stressful events that initially overwhelm a person's capacity to cope⁸⁶. The authors mentioned that posttraumatic growth refers to positive transformative changes over five broad domains:

- appreciation of life;
- personal strength;
- spiritual or existential beliefs;

⁸¹ Cavallari, J. M., Garza, J. L., Ferguson, J. M., Laguerre, R. A., Decker, R. E., Suleiman, A. O., & Dugan, A. G. (2021). Working time characteristics and mental health among corrections and transportation workers. *Annals of work exposures and health*, 65(4), 432-445.

⁸² Shakespeare-Finch, J., & Daley, E. (2017). Workplace belongingness, distress, and resilience in emergency service workers. *Psychological Trauma: Theory, Research, Practice, and Policy*, 9(1), 32.

⁸³ Michalos, A. C. (2012). *Global report on student well-being: Life satisfaction and happiness*. Springer Science & Business Media.

⁸⁴ Burhanullah, M. H., Rollings-Mazza, P., Galecki, J., Van Wert, M., Weber, T., & Malik, M. (2022). Mental health of staff at correctional facilities in the United States during the COVID-19 pandemic. *Frontiers in Psychiatry*, 12, 767385.

⁸⁵ Butler, H. D., Tasca, M., Zhang, Y., & Carpenter, C. (2019). A systematic and meta-analytic review of the literature on correctional officers: Identifying new avenues for research. *Journal of Criminal Justice*, 60, 84-92.

⁸⁶ Ramos, C., Leal, I., Costa, P. A., Tapadinhas, A. R., & Tedeschi, R. G. (2018). An item-level analysis of the posttraumatic stress disorder checklist and the posttraumatic growth inventory and its associations with challenge to core beliefs and rumination. *Frontiers in psychology*, 9, 2346.

- relationships with others;
- and identifying new possibilities⁸⁷.

Posttraumatic growth is yet to be comprehensively examined in correctional officers. American emergency responders, including a subsample of correctional officers, showed posttraumatic growth scores indicative of significant growth, and correctional officers had the highest level of growth across groups. While helpful in showing that correctional officers can experience posttraumatic growth, comprehensive analyses were not conducted to provide an understanding of the resistance resources that predict officer posttraumatic growth.

Konyk and Ricciardelli explored posttraumatic growth in Canadian correctional officer recruits who recognized growth in their compassion for others and sense of personal strength⁸⁸. In that research, as the participants were recruits the experiences that precipitated their posttraumatic growth did not occur in a correctional context. It can be observed in Miller and colleagues' study, too. They found that correctional officers experienced personal growth in domains consistent with posttraumatic growth including appreciation for life and freedom, personal strength, and ability to understand and relate to others⁸⁹. While this research provides preliminary evidence that posttraumatic growth is possible for correctional officers, the predictors of correctional officer posttraumatic growth remain unexplored.

Miller et al. investigated that problem with 142 Australian correctional officers working in a frontline capacity (i.e., had frequent direct contact with prison residents). The sample consisted of 89 men and 52 women, their age ranged in between 21 and 69 years ($M = 46.12$, $SD = 10.91$). Participants experience years had between 1 and 34 years ($M = 9.91$, $SD = 7.14$). The authors analyzed various of determinants, and majority of them were Caucasian (87.3%), married or in a relationship (63.4%), certificate/diploma educated (66.9%), had no prior work experience in correctional facilities(69%). The researchers highlighted witnessing/responding to prison resident self-harm or suicide attempt as the most commonly experienced critical incidents (55.6%).

⁸⁷ Tedeschi, R. G., Shakespeare-Finch, J., Taku, K., & Calhoun, L. G. (2018). *Posttraumatic growth: Theory, research, and applications*. Routledge.

⁸⁸ McKendy, L., Taillieu, T., Johnston, M. S., Ricciardelli, R., & Carleton, R. N. (2023). Understanding PTSD among correctional workers in Manitoba, Canada: Key considerations of social variables. *Mental Health Science*, 1(3), 136-146.

⁸⁹ Miller, W. T., Burton, A. L., Jonson, C. L., Burton Jr, V. S., & Adkins, P. A. (2023). A multi-state outcome evaluation of correctional officer training academies: A pretest-posttest design. *Justice Evaluation Journal*, 1-21.

This study by Miller and colleagues explored correctional officer health across the health continuum compared to prior research which has predominantly adopted a pathogenic lens. It provided insight into the health and well-being of correctional officers by showing that they exhibited higher levels of emotional exhaustion, moderate well-being, and lower posttraumatic growth in comparison other frontline groups. The data that collected in the study provide a more holistic understanding of correctional officer health which can then more effectively guide health promotion strategies⁹⁰.

To sum up, the literature reports that prisoners' mental health affect the mental health of prison staff. Role conflicts, environmental conditions, lack of family and relatives support, stressful events put elderly inmates' mental health at risk; meanwhile the officers are faced with these difficulties in their daily lives. Corrections Fatigue can be understood as the cumulative toll upon the health and functioning of the corrections workforce that follows from traumatic, organizational, and operational stressors. Meanwhile workplace problems and stress can be reasons of negative changes in personality characteristics, and in declined health and functioning of workers.

The third subchapter is about theoretical review **Support program to improve quality of life elderly inmates.**

Separate laws currently exist in different countries in one form or another to recognize the rights of care providers and the challenges they face. The "Care Act 2014" in Great Britain⁹¹, the "Care Recognition Bill 2010" in Australia⁹², as well as the Care Act (CARE - Caregiver Advise, Record, Enable Act) were adopted in several states of the USA⁹³. The general aspect of these laws is recognition of the needs and difficulties of citizens who are care providers by the community and local executive bodies, receiving support for the protection of their physical and mental well-being, teaching the necessary medical procedures at home and, in general, understanding the contribution of citizens who care for a family member to society, that it carries its purpose

On June 22, 2001, the Law of the Republic of Azerbaijan "Social Services for the Elderly" was adopted. The legislation of the Republic of Azerbaijan "Social services for the

⁹⁰ Miller, O., Shakespeare-Finch, J., & Bruenig, D. (2024). Predicting Burnout, Well-Being, and Posttraumatic Growth in Correctional Officers. *Criminal Justice and Behavior*, 00938548241233932.

⁹¹ <http://www.legislation.gov.uk/ukpga/2014/23/contents/enacted>

⁹² <https://www.legislation.gov.au/Details/C2010A00123>

⁹³ <https://justcareusa.org/care-act-assists-family-caregivers/>

elderly” refers of the Constitution of the Republic of Azerbaijan, this Law (on social services for the elderly), other normative legal acts and international agreements to which the Republic of Azerbaijan is a party.

In order to help solve the social problems of the elderly, the Public Union "Support to the Elderly and Lonely" was established in 2014. During the activity of the Public Union, with the help of the Council of State Support to Non-Governmental Organizations under the President of the Republic of Azerbaijan, it implemented a number of projects and assisted in solving the social problems of the elderly.

The project covering 2019-2021 is in close cooperation with the State Agency for Citizen Services and Social Innovations under the President of the Republic of Azerbaijan (ASAN Service), the State Statistics Committee, the Agency for Sustainable and Operational Social Security (DOST) and the "Third Spring" Public Union was executed.

The Social Research Center of the Republic of Azerbaijan conducted a study called "Elderly in Azerbaijan: care and well-being" and a report on the results of that study was published in 2020. The research was conducted among 1212 people covering 9 economic geographical regions. They have explained the concept of care as a stable recurring aggregate of its distribution among various social factors and institutions. The authors emphasized that the participation of various social factors in the provision of care for the elderly depends not only on the tradition and legislative framework, but also on the extent to which citizens believe in the care provider, and the level of compatibility of the services he can provide with the norms and ideals of care⁹⁴.

In the study "Elderly in Azerbaijan: care and well-being" carried out by the Social Research Center, the following question was addressed to the respondents in order to more accurately and comprehensively determine the social factors they want to see as care providers: "In the future, the number of elderly will be more. Who do you think bears the primary responsibility for meeting their needs?"

In the participants' answers, the importance of the role of the family and the state, and the role of social workers was mentioned more, and they did not agree with the idea that other people, relatives and friends are responsible. At the same time, the percentage of

⁹⁴ <https://stm.az/storage/common/1659363494.Qaygi.pdf>

respondents who agreed and disagreed with the role of the private sector, charitable organizations, and other organizations was close to each other. There was no significant difference between their indicators. This is explained by the fact that trust and confidence in those organizations and the private sector have not yet been fully formed and people are not completely sure in this aspect (STM, 2020).

According to this study it was mentioned that a person's wishes regarding who and how he will live his old age determine many of his life choices in his earlier years. Perceptions of normal and desirable aging affect the dynamics of the family institution in general, relationships between relatives, and determine subjective satisfaction. It also provides an opportunity to further refine the attitudes towards the actors the respondents trust as care providers. "If you need care in old age, what kind of living arrangement would you prefer?" the question consists of three subsections and five answer options. Here, it is studied whether a person wants to live with his child, other relatives and in a nursing home. The majority of respondents unequivocally prefer the family model of care (living with their own child) (92.3%). Only 7.5% are against it. The majority of those who do not agree with the possibility of living in a nursing home is also expected and indicates a negative attitude towards institutional care. An interesting point is also the negative attitude of the respondents to the prospect of living with other relatives as much as to the prospect of living in a nursing home. The figures were described in the following diagram according to Social Research Center statistics.

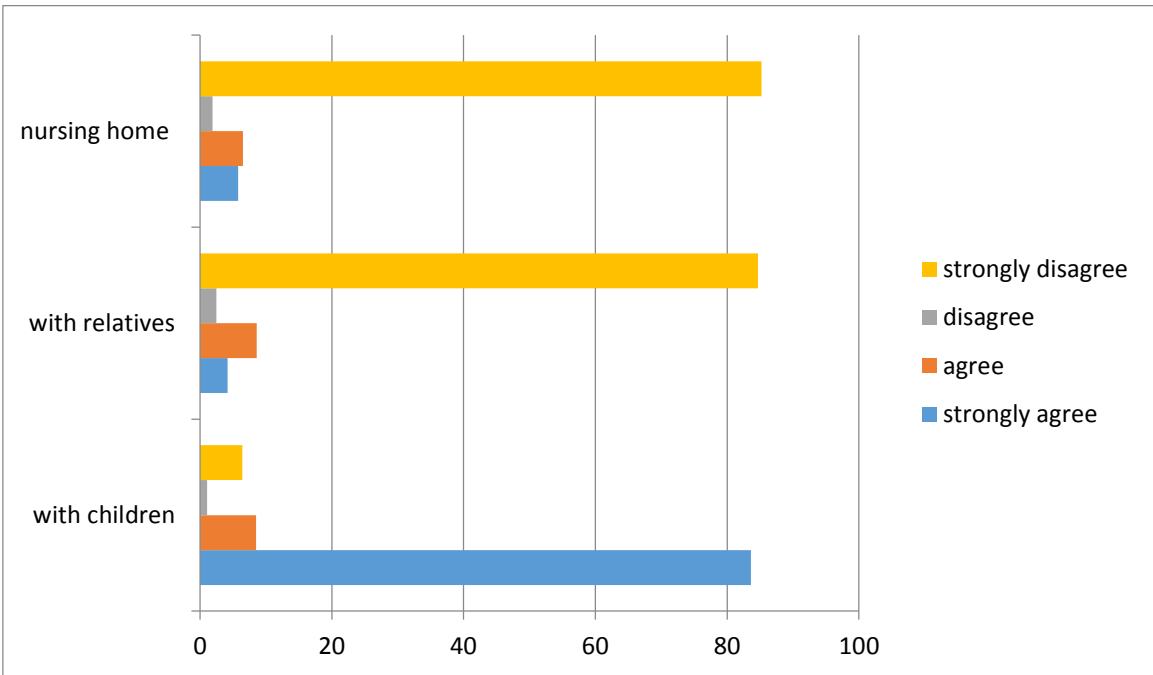


Figure 3. Forms of care

According to this study, most of the expectations are more related to the family institution and the state. 68.8% of the respondents fully agree with the opinion that the main responsibility for meeting the needs of the elderly rests with the family, and 62.1% with the state (social workers). This shows, on the one hand, the continuation of the tradition of family care, and on the other hand, high expectations for state care. That is, according to the respondents, the most ideal form of care for the elderly is care shared between the family and the state. It is important to note that the term family here means a nuclear family structure united in a household. Thus, with the responsibility of "other relatives" to take care of the elderly the number of those who do not agree is quite high - 67.1%. Expectation of care from friends and neighbors received the maximum negative selection percentage - 74.6%. These indicators allow us to assume that there is a danger that the potential of community resources in providing care for the elderly will not be realized in the future. The mobilization of these resources requires the implementation of targeted propaganda programs and sustainable projects. Effective use of community resources is a condition for more effective distribution of responsibility among social actors in this field, as well as reduction of social and socio-psychological problems such as loneliness and anomie in society.

The research made it possible to reach important conclusions related to the care of the elderly and their well-being in Azerbaijan. It is the family-centered care regime for the elderly that is most consistent with the existing values and ideas in the public consciousness. This mode of care is manifested in the ideas about filial duty, in the type of care desired by respondents of different ages in old age, and in relation to the distribution of responsibility of different social actors for the elderly. The moral responsibility of the younger generation of the family for the well-being of the elderly manifests itself as norms of coexistence, ideals of sacrifice for the sake of filial debt. Let us add that family care for the elderly is also supported within the framework of the legislation. The responses of the respondents regarding the distribution of family and state responsibilities in relation to the elderly indicated that direct care and help in various household chores are considered more the responsibility of the family, while issues of financial security are valued as a joint responsibility of the family and the state. In other words, the family, as a social institution,

does not avoid the duties of caring for the elderly, but relies on the support of the state in their implementation.

The majority of the elder respondents (92.3%) preferred the family model of care and chose the option of living with their child during the aging period. Those oriented to institutional care are quite small, accounting for 12.3%. An important result revealed here is that respondents do not want to live with other relatives (87.2%) to the same extent as they do not want to live in a nursing home (87.1%). These results reveal new research questions about the structure of the Azerbaijani family and the solidarity aspects of the family network. At the same time, it shows that family members living in a household are considered as care providers.

Literature analyses suggest that maintaining family relationships has a positive effect. However, long-term imprisonment is addictive and leads to the loss of family ties. The nature of the crime, in turn, affects the relationship with family members. Studies in the United States have shown that only 10% of older inmates are in contact with family members, 30% have not received any letters from family members in the last 3 months, and another study found that 42% of inmates are divorced and separated from family members. Studies in Japan have shown that stigmatization of family members has a negative effect on older prisoners. It should be noted that older prisoners are excluded from the programs in correctional facilities, as they are usually designed for young and middle-aged prisoners. Also, vocational and training courses are not considered effective for older prisoners, as their re-education and learning new professional skills are not relevant. Some programs are not compatible with their physical health capabilities, such as sports, outdoor competitions, etc.

Based on various literature, published articles, research papers, and survey samples collected to improve the quality of life of older prisoners, the following recommendations were made to address 6 key issues: programs, services, conditions, social services, preventive measures, participation in programs, and release and displacement.

The British Society of Psychologists noted the following problems related to psychological assistance and stressed the importance of solving them:

- In correctional facilities, the psychologists are few;
- These aren't specialists to work with older prisoners in facilities;

-There is weak links between psychologists, administration and social workers outside penitentiaries; and sometimes misunderstandings between penitentiary management and the Ministry of Health, too.

The ICRC analyzed these problems in correctional facilities of the countries and mentioned some of the issues related to older prisoners and support programs that can be helpful for their rehabilitation⁹⁵. One of these issues is socialization and leisure: The committee highlights:

“Barriers (physical, sensory, psychological, e.g., fear) to participation and socialization should be identified and removed. A range of activities should be provided to meet different capabilities as defined by older prisoners’ needs, aspirations and assessments of their capacity”.

According to the report relevant resources include: drop-in day centres, discussion groups, singing, board games, external speakers, theatre groups, memory training, life skills courses such as cooking and budgeting, gardening, adapted sports and gym exercise.

The next important aspect is peer care involvement of fellow prisoners in the care of and support for older prisoners, it seems natural and obvious as it can tap into friendships, common experience and understanding, but this must be carefully designed and monitored⁹⁶. Moreover, the prisoners providing support may also need support. In some situations and conditions the inmates also need to be supervised, trained (including in manual handling if they will be involved in lifting their fellow detainee) and risk assessed. The authors noted that, this care and support role should also be paid. In many contexts it will be inappropriate for a fellow prisoner to give intimate care. Appropriate support given by peers includes: assistance with activities of daily living, e.g., escorting the detainee to the dining area, acting as a companion, and leading exercise classes and other activities.

The next moment is related to contact with the family. As it was mentioned in the report, contact and communication with the family of older prisoners should be facilitated to the maximum degree possible. Family members age too and may need help for visits, while long-term prisoners and those sentenced for certain offences (e.g., people with convictions

⁹⁵ <https://www.icrc.org/en/publication/ageing-imprisonment-summary-report>

⁹⁶ <https://www.icrc.org/en/publication/ageing-imprisonment-summary-report>

for sexual offences) may lose touch with the family and need access to a community substitute (e.g., volunteer visitors, chaplaincy). The prisoner and their visitors may need help with communications technology (e.g., visit booking services) because of poor hearing, sight or understanding. Related to the conditions video/skype visits may need to be considered in cases where the visitor has severe mobility problems or live far away from the prison (e.g. family overseas).

The committee mentioned sentence management as one of the important aspects for older prisoners. Because of older detainees should have access to rehabilitation services, and have the right to hope and a plan for release. As it was noted closeness to death is not the only appropriate reason for early release/pardon. So should professional training, and all types of education, including higher education, even if the detainee will not be of employable age by the anticipated time of release.

The authors of the report highlighted that these policies and procedures should be designed with input from medical specialists in prognostication, geriatrics and end-of-life care. (The end-of-life course can be unpredictable, but severe dementia, coma, and end-stage organ disease should be acknowledged as just a sample of conditions that would seriously compromise dignity in detention, while not necessarily leading to a quick death; indeed the patient may linger for months or years.) Care should be taken to preserve the role of treating doctor, when medical personnel are asked to pronounce on the patient's "fitness" to remain in detention or be released. Consideration should be given to involving at least two doctors in such decisions, doctors with the necessary specialist knowledge. When considering how best to meet the prisoner's needs, care options explored should include those both in and outside prison⁹⁷.

The following recommendations were developed based on literature review:

- The age, mental and physical health of older prisoners should be taken into account in the treatment of prisoners;
- Replacement of imprisonment with alternative punishments for crimes that do not pose a major public threat;

⁹⁷ <https://www.icrc.org/en/publication/ageing-imprisonment-summary-report>

- Prisons should develop specific strategies for vulnerable groups;
- Enrich the team of staff in prisons, especially in the field of medical services;
- Training seminars with staff, placement of older prisoners in institutions, improvement of services, interaction with civil society, discussion of issues of early release;
- Provide legal counsel for older prisoners to receive legal assistance, as well as provide appropriate assistance to persons with physical and mental problems;
- Organize counseling programs to prevent depression, fear of death and other problems of older prisoners in penitentiaries;
- Facilitate family visits to better communicate with family members;
- Involve civil society in programs in this area;
- The opportunities of older prisoners should be taken into account when developing programs for the effective organization of leisure time and inculcation of additional skills;
- Early parole, rehabilitation programs may be applied before the end of the sentence, in which case their personal qualities, loss of contact with family members due to old age in the penitentiary institution, lack of a place to go, etc. problems must be taken into account;
- Joint work with non-governmental organizations on issues of social adaptation;
- Enlightenment about geriatric syndromes (frequent falls, cognitive impairment and dementia, incontinence, sensory impairment and polypharmacy) should be realized among prisoners and staff personnel. Persons ageing in prisons should receive periodic medical and psychological care to identify new geriatric syndromes as they arise. It was emphasized in International Review of the Red Cross in 2016;
 - Prison staff should be informed about risk factors and warning signs on risk of suicide, depression symptoms and future effects. This can be main topic of seminar with officers;
 - Psychologist should involve elderly inmates to group therapy to prevent social isolation, and make connection with relatives. Because of social isolation can lead to

diminished functional capacity or may be exacerbated by it, putting older adults at a risk for subsequent loneliness and other diseases⁹⁸;

- Prisons can be staffed in part by prisoners-volunteers, who may receive extensive training and mentored experience in hospice practices as other countries⁹⁹;

- Job satisfaction of the officers' need to be learnt more detailed and make special program consists of social-emotional skills.

⁹⁸ Bedard, R., Metzger, L., & Williams, B. (2016). Ageing prisoners: An introduction to geriatric health-care challenges in correctional facilities. *International Review of the Red Cross*, 98(903), 917-939.

⁹⁹ Hayes, A. J. (2017). Aging inside: Older adults in prison. *Emerging issues in prison health*, 1-12.

CHAPTER 3. RESEARCH METHODOLOGY AND QUATITIES FINDINGS

The study materials and methods

The study was conducted in 2019-2020 with 200 inmates over the age of 60, serving sentences in different institutions under 3 different regimes (common, severe, strict) in the Penitentiary Service of the Ministry of Justice of the Republic of Azerbaijan.

The criteria for inclusion in the study are: 1) first of all, 55, especially over 60 years of age; 2) the ability to provide informed consent to participate in the study.

The participation of 224 convicts over the age of 60 was important to ensure that the results were significant (confidence level 95%). (raosoft.com/samplesize.html) Sample questionnaires were distributed to 232 prisoners over the age of 55, and 200 questionnaire samples were completed and returned after being completed on a voluntary basis. Some of the 32 convicts refused, citing the fact that the study had no benefit to their legal status, while others were considered unsatisfactory because their answers were incomplete.

Statistical analysis used IBM SPSS for Windows, 23.0 (Armonk, NY: IBM Corp.). The level of statistical significance was defined as $p < 0.05$; Cronbach's alpha > 0.8 .

The following survey tools were used to study the quality of life of older prisoners:

- sample survey with demographic information;
- PHQ-9 (Patient Health Questionnaire-9) Patient depression survey;
- Quality of life survey (prepared on the basis of WHOQOL-BREF survey);

Examples of surveys used by prison staff:

- Self-assessment questionnaire of social and emotional skills;
- Stress is a person's reaction to psychological adaptation.

The survey, which includes demographic information, includes the prisoner's name, surname, date of birth, substance, term of imprisonment, start and end date of sentence, regime of the penitentiary institution, contact form with family members (telephone conversations, short and long meetings), any illness or health condition.

The patient's depression survey was based on the Clinical Protocol for the Diagnosis and Treatment of Depression (Ministry of Health of Azerbaijan Republic) and was used to measure depressive symptoms in older prisoners. The 9-question questionnaire analyzes how often these events have been observed in the last 2 weeks and how disturbing the patient is. During the analysis of the answers, 0-4 low, 5-9 light, 10-14 medium, 15-19 high, 20-27 points of severe depression were differentiated.

The quality of life survey was taken from the World Health Organization's proposed measurement tool and translated. The survey consists of 4 areas: Physical, psychological, social relations and environmental. The questions for each area are reflected in different numbers. The first block is physical health questions S2, S3, S4, S10, S16, S17, S18; second block - questions on mental health S1, S5, S6, S7, S11, S19, S26; third block - social relations S20, S21, S22; fourth block - questions containing environmental factors S8, S9, S12, S13, S14, S15, S23, S24, S25.

During the 26-question survey, individuals are asked to answer based on what has happened in the last two weeks. The answers are of a likert scale, as the attitude to the events is assessed more or less correctly and then adjusted by 5 points.

Data collection and results

Descriptive analysis

The distributions of convicts by demographic indicators are shown in the table (appendix 1):

The first surveys results were described following table.

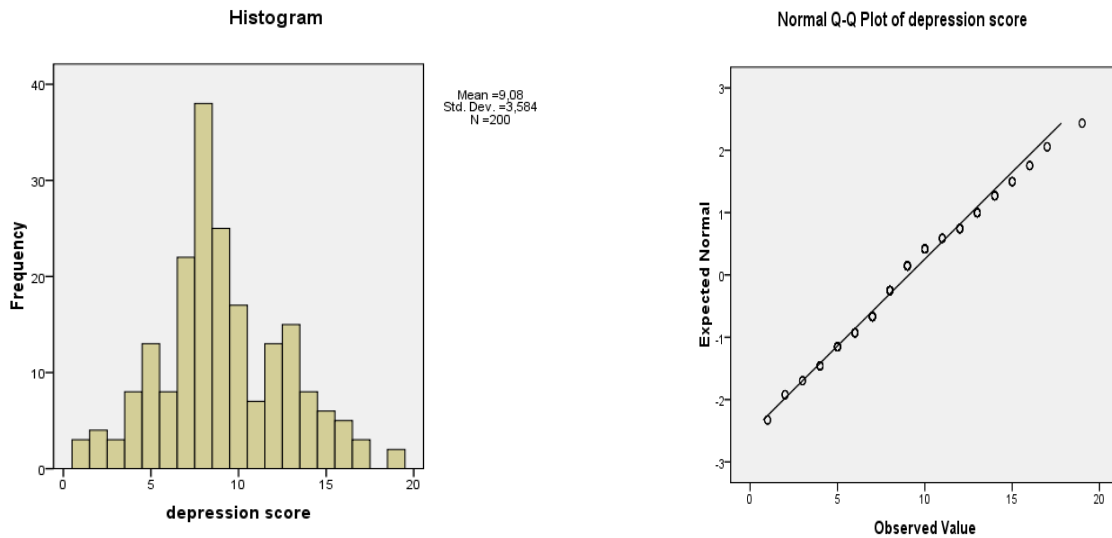
Table 3. Survey results

Questions	Answers			
	Yes	No	Total	
Do others respect your age factor?	Yes 125 (62,5%)	No 75 (37,5%)	Total 200 (100%)	
Do you agree medical service?	Yes 118 (59%)	Sometimes 80 (40%)	No 2 (1%)	200 (100%)
Do you agree officers' attitude?	Yes 120 (60%)	Sometimes 78 (39%)	No 2 (1%)	200 (100%)
Do you agree inmates' attitude?	Yes 129 (64,5%)	Sometimes 71 (35,5%)	No -	200 (100%)
Do you communicate with family members?	always 151 (75,5%)	Sometimes 47 (23,5%)	never 2 (1%)	200 (100%)
Do family members visit you (short-time)?	always 117 (58,5%)	Sometimes 80 (40%)	never 3 (1,5%)	200 (100%)
Do family members visit you (long-time)?	always 20 (10%)	Sometimes 127 (63,5%)	never 53 (26,5%)	200 (100%)
Can you describe daily mood?	Normal 16 (8%)	fluctuated 179 (89,5%)	low 5 (2,5%)	200 (100%)
What about future	Have plans	Don't have any		200 (100%)

expectations?	26 (13%)	plan 174 (87%)		
---------------	----------	-------------------	--	--

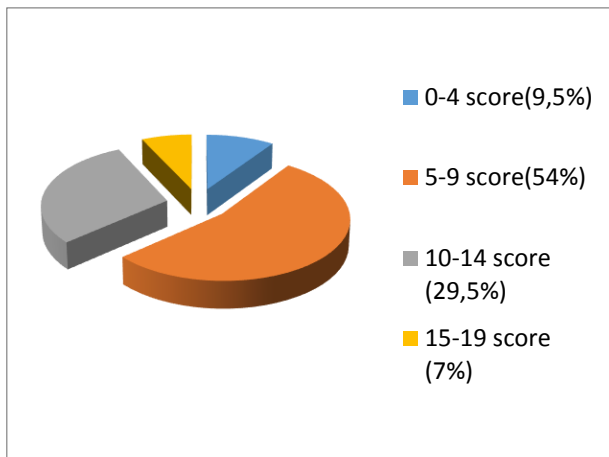
The results and distribution of the PHQ-9 test, which was used to measure depressive symptoms in the mental health of prisoners, are shown in the figures below.

Figure 4: Distribution of depression rates in older prisoners



The mean of depression score was 9.08 ± 3.58 ; median 9.0; the highest score was 19 and the lowest was 1. An average value higher than the median indicates a right-hand distribution. According to the Kolmogorov-Smirnov test, the distribution of results was obtained $df = 200$, $p < 0.05$. Skewness value 0.271; skewness standard error 0.172 was obtained, the response obtained from $0.172 \times 2 = 0.344$ proved to be a more normal distribution since the response was greater than the skewness value. $T = 16.12$ compared to the degree of mild depression of the scores obtained; $df = 199$, $p < 0.001$ was obtained. The figure below shows the percentage distribution of depression scores.

Figure 5. Distribution of depression rates by percentage



When analyzing the correlation and factor analysis between depression, increasing age factor and sentence duration, a correlation of positive statistical significance was found ($r = 0.174^*$, $r = 0.150^*$, $r = 0.146^*$, $p < 0.005$), as well as KMO (Keiser- According to Meyer-Olkin) and Bartlett's test ($\chi^2 = 21.4$; $p = 0.000$) factor analysis was considered possible. Depression was rated above 1 point (eigen value 1,397) as a major factor.

Results of the quality of life survey:

For mathematical analysis of the survey questions, the reliability index was first measured on the basis of the Cronbach alpha test and the results were satisfactory ($\alpha = 0.845$). (A test result greater than 0.8 allows the comparison of the relationships between the variables in the next step).

When analyzing questions related to **Domain I** physical health, the following distribution was recorded.

Figure 6. Question 2, 16 (How satisfied are you with your health and sleep patterns?)

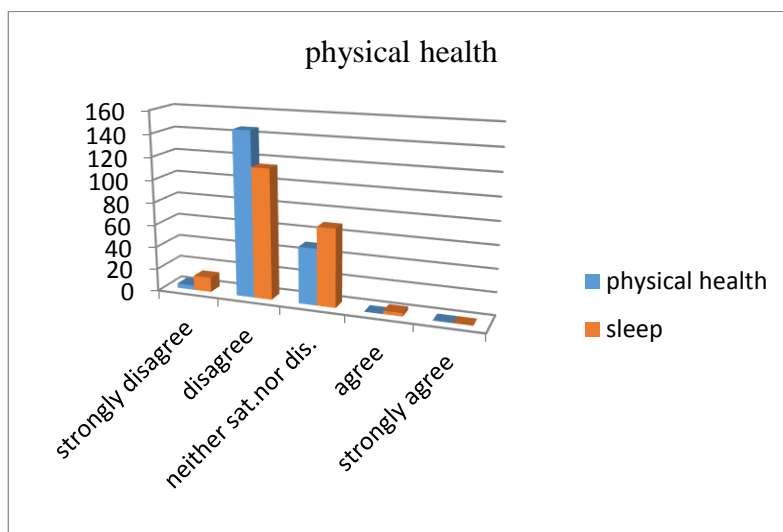


Figure 7. Question 3, 10 (Does your physical pain separate you from other activities? Are you satisfied with your energy for life activities?)

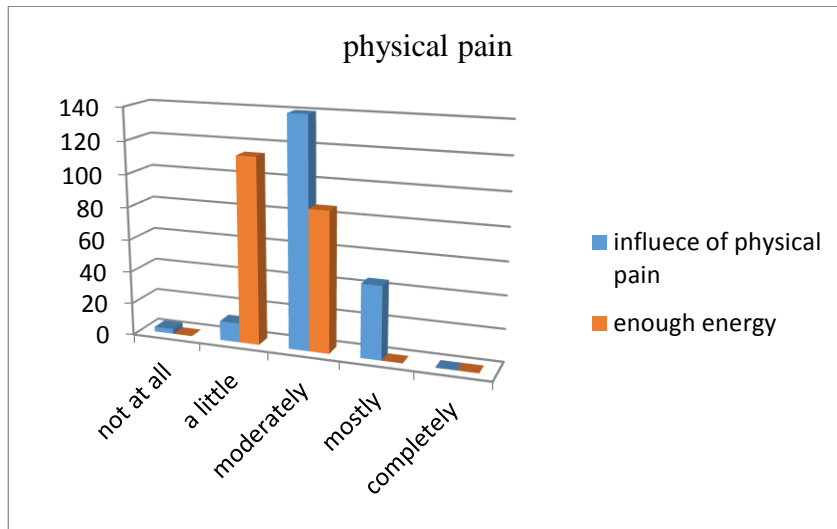


Figure 8. Question 4 (Do you feel the need for medical treatment in your daily life?)

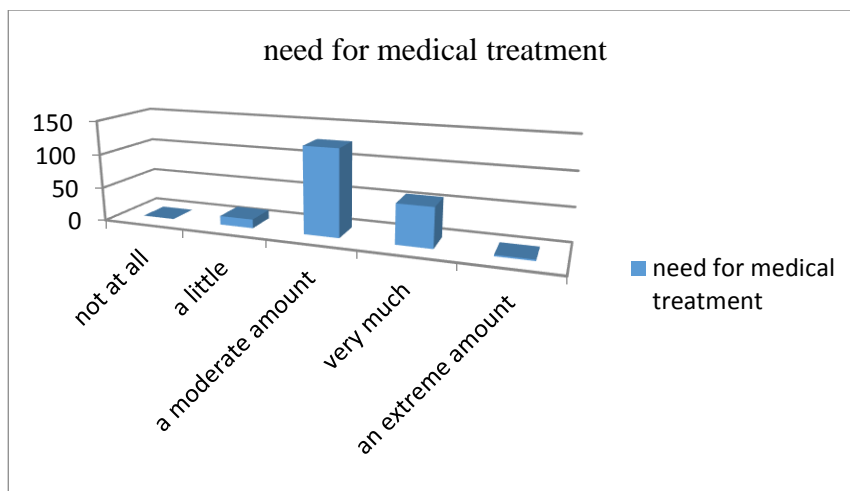
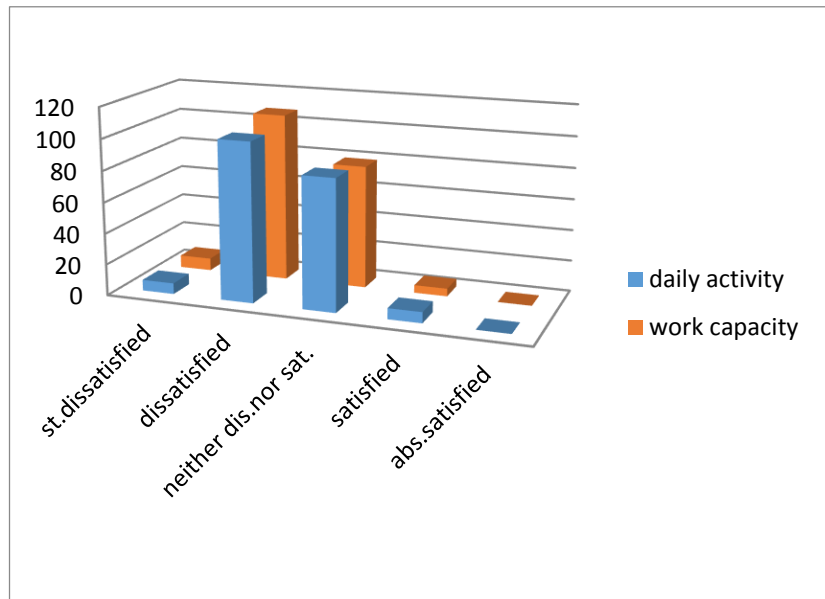


Figure 9. Questions 17 and 18 (describe satisfaction daily activity and work capacities)



Domain II mental health, the following distribution was recorded.

Figure 10. The first question- how would you rate your QoL (quality of life)?

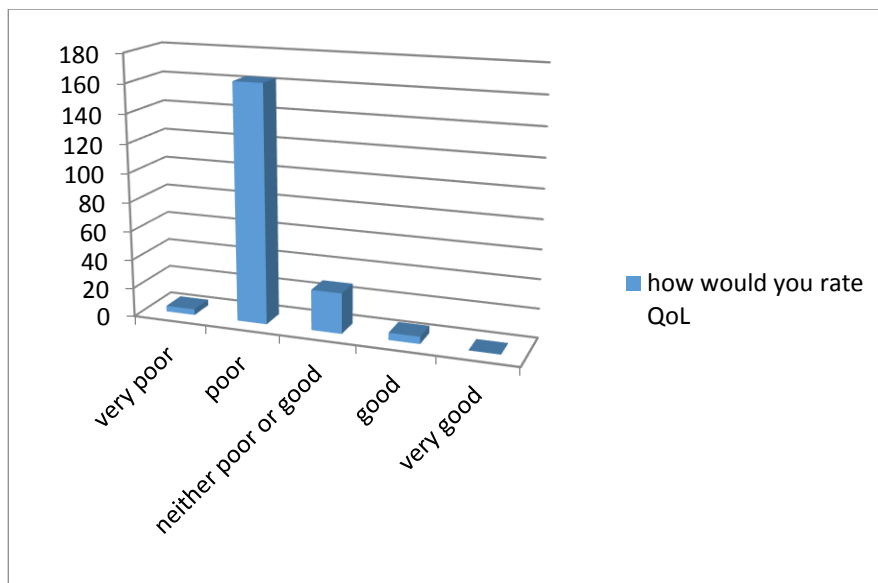


Figure 11. Question 5,6 (how you enjoy your life, and feel meaningful your life?)

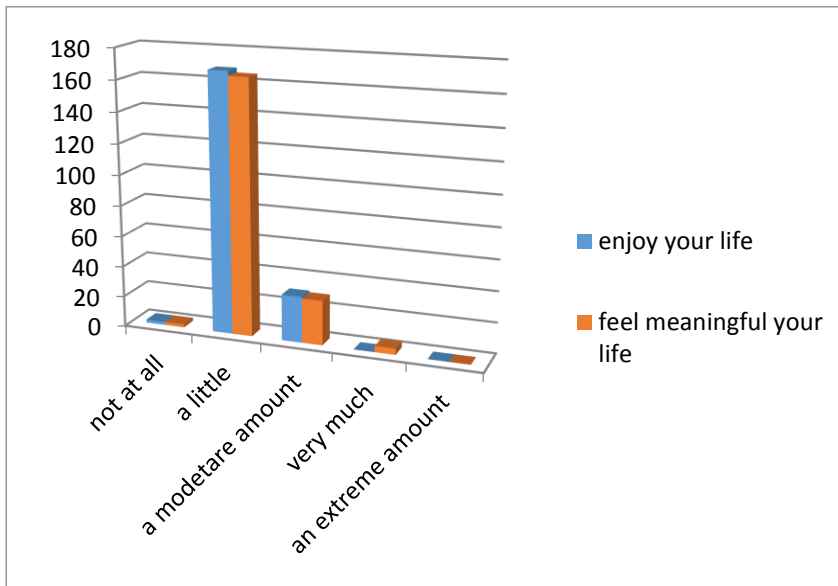
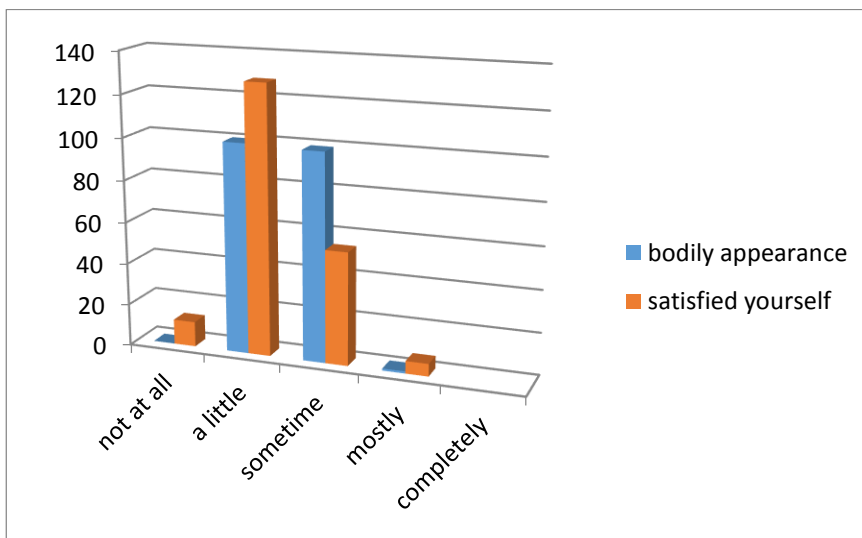
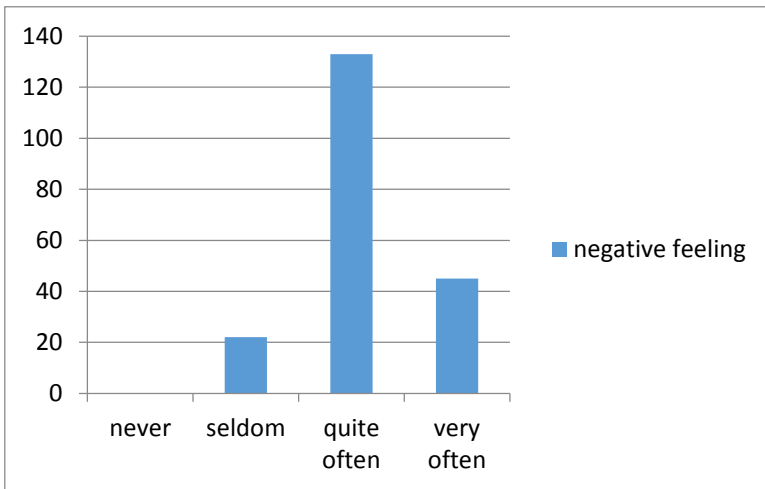


Figure 12. Question 11,19 (accept your bodily appearance and are you satisfied yourself)



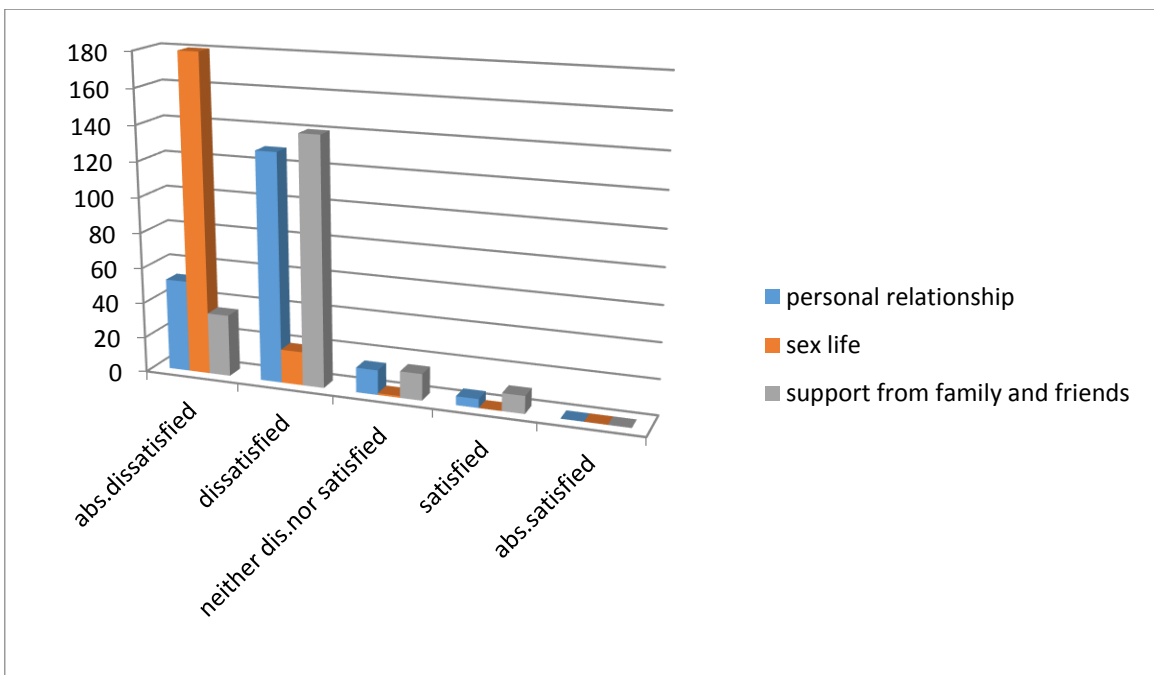
The last question in Domain II (Question 26) involves determining how often a person has negative feelings such as blue mood, anxiety, depression and despair.

Figure 13. Question 26 (negative feelings)



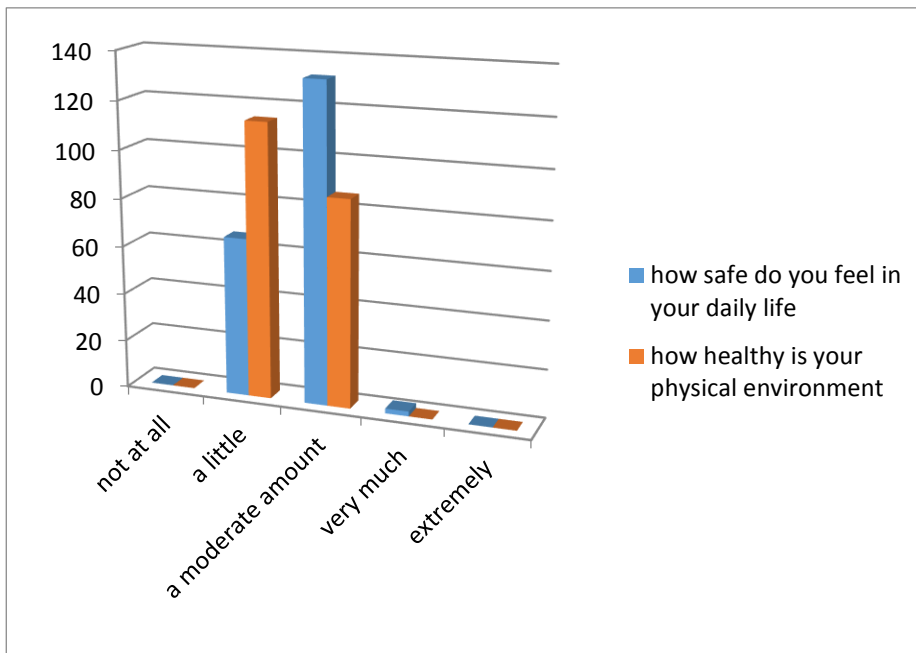
Domain III involves satisfaction with social interpersonal relationship, sex life, and support from family, relatives, and friends.

Figure 14. Question(20,21,22) interpersonal relationship



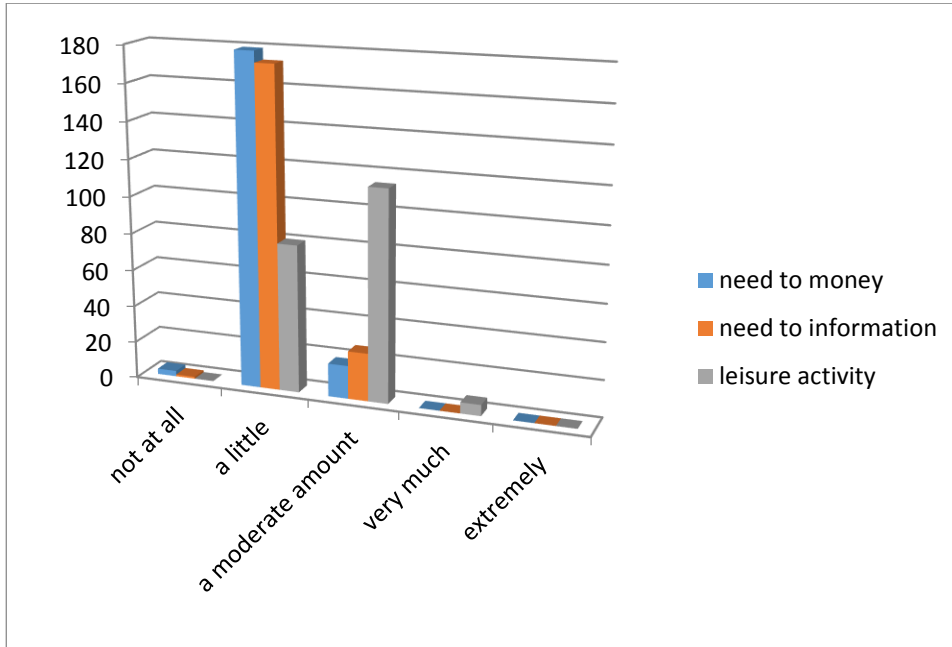
Domain IV questions include the impact of environmental factors and their management skills. First of all, the questions related to the problem of how safe a person feels in daily life and how healthy the physical environment is (Question 8, 9) are described.

Figure 15. Question (8,9) environmental factors



The next 3 questions on Domain IV (Questions 12,13,14) include enough money to meet the needs, information leisure activities.

Figure 16. Question (12, 13, 14)



According to the graphs, dissatisfaction with health opportunities, physical pain separating individuals from daily activities, lack of energy, need for medical treatment in daily life, sleep problems was recorded in the first domain; low quality of life, low self-esteem about themselves, and body appearance; also negative feelings as frustration, anxiety, tension;

dissatisfaction with interpersonal relationships, and difficulty accessing daily information and resources were noticed.

Age and quality of life of prisoners

The increasing age factor is also accompanied by a low assessment of QoL. Statistical analysis shows that there is a negative correlation between the age factor of prisoners and the assessment of quality of life, as the quality of life of prisoners decreased with age ($F=24,32$; $df=198$; $t=-5,8$; $r=-0,359^{**}$; $p<0,001$).

There is a statistically significant negative correlation between the increasing age factor and the higher QoL of male prisoners in the study.

When regression was measured between the two factors, adjusted Rsquare 0.125; Rsquare 0.129; Dublin-Watson ratio 1,128; $p < 0.001$ was obtained. The very small difference between Adjusted Rsquare and Rsquare indicates that there is a statistically significant cause-and-effect relationship between them.

To determine the relationship between the increasing age factor of prisoners and their daily moods such as frustration, tension, and despair, the QoL questionnaire examined the age-related correlation with question 26 and the T-independent test ($F = 28.8$; $t = 2.6$; $df = 198$, $p < 0.05$). A value of p less than 0.05 indicates that the result is statistically significant. When measuring the coefficient d (magnitude of the impact value), a moderate impact value was obtained. At the same time, a statistically significant weak correlation was found ($r = 0.19^{**}$; $p = 0.007$).

$$d = t \sqrt{\frac{N_1 + N_2}{N_1 N_2}} = 0,52$$

In a survey of prisoners, 13% of inmates noted they had plans for the future, but the majority of respondents didn't have any idea. The analysis of the relationship between the increasing age factor and the mentioned point revealed a statistically significant effect, as well as a weak correlation ($F=18,38$; $df=198$; $t = 2,5$, $d=0,5$; $r=0,15^*$; $p<0,05$).

There is a statistically significant negative correlation between the increasing age factor and the Question 6 of QoL survey (*How do you feel your life is worth it?*) ($r=-0.31^{**}$; $p<0.001$).

A statistically significant negative correlation was noticed between the increasing age factor and the degree of satisfaction with interpersonal relationships ($r=-0.20^*$; $p<0.05$). The results of the T-independent test also show a link between an increase in the age factor and a decrease in the satisfaction of older prisoners with interpersonal relationships ($F=52,9$; $df=198$; $p<0,001$).

A statistically significant positive correlation ($r=0.174^*$; $p<0.05$) was noticed between the PHQ-9 screening test results and the increasing age factor. Also, based on T-independent test results, higher depression was observed in prisoners over 60 years of age compared to those younger than 60 years of age ($9,35\pm3,3$; $7,12\pm4,8$) ($F=7,3$; $df=198$; $p<0,05$).

Regime conditions and QoL of elderly inmates

First of all, when analyzing the conditions of the 3 regimes, it is noted that the rights in the strict and severe regimes are more limited than in the common regime.¹⁰⁰

One-Way ANOVA test, Tukey HSD, Scheffe, Bonferroni tests showed a statistically significant difference between the common regime and the strict regime (-0.175 ; $p < 0.05$). Although there was a negative difference between the common regime and those serving prison sentences, the value of statistical reliability did not justify itself.

To assess the effect of regime conditions on the mood of prisoners, the results of the PHQ-9 depression survey of older prisoners serving in 3 different regimes were compared.

Table 4. PHQ-9 result and prison conditions

Regime	Number of pr.	Mean	Min.	Max.	Norm.test (Kolmogrov Smirnov)			
common	83	9,36±2,8	4	17	Statistic 0,141	Df 83	Sig. 0,000	
strict	97	7,76±3,2	1	17	0,142	97	0,000	
Severe (Qobustan prison)	20	14,35±2,3	10	19	0,191	20	0,055	

Statistically significant positive difference was noticed examining the effect of regime conditions on their depressive mood, according to the One-Way ANOVA test, Tukey HSD, Scheffe, Bonferroni tests ($1,599$; $-4,989$; $p < 0,05$). Inmates who were in severe regime conditions suffered higher depression symptoms than common regime's prisoners.

Characteristics criminal act and QoL

Convicts who participated in the study were conditionally divided into groups according to their criminal acts as: homicide, death; drug trafficking, sale.

According to the One Way ANOVA test, $\eta^2=0.16$ ($F=2.377$; $p<0.05$) ($\eta^2=intergroup/total\ variance$) was obtained when determining the magnitude of the high impact.

¹⁰⁰ Code of Criminal Procedure of the Azerbaijan Republic <https://www.legislationline.org/documents/action/popup/id/8876>

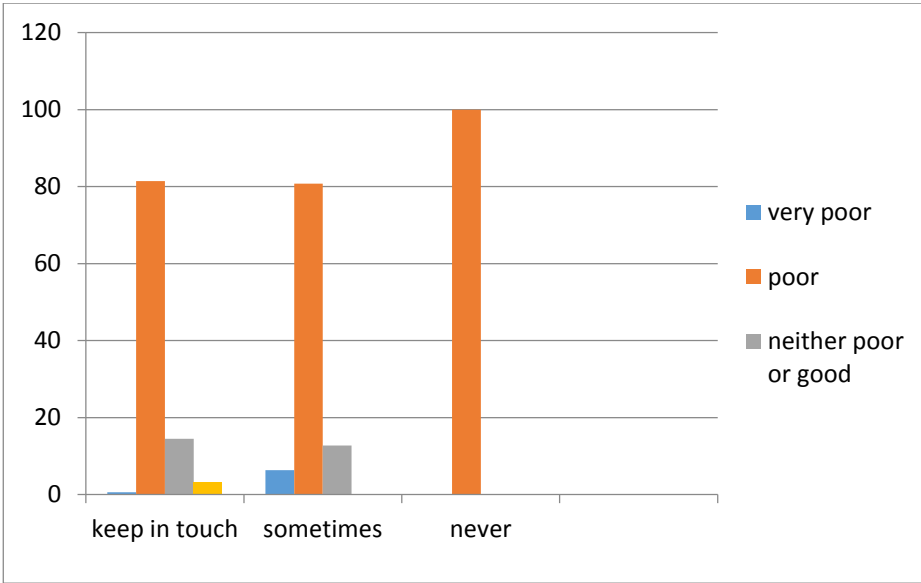
At the same time, depression score of inmates who committed criminal acts -sexual violence, rape (12 ± 4.2) were higher than who committed homicide (10.8 ± 3.8). Prisoners who committed fraud (7.3 ± 1.5); and drug trafficking (7.6 ± 2.9), their depression rate were lower than the others. The small difference between Adjusted Rsquare (0.180)and Rsquare (0.184) indicates that there is a statistically significant cause-and-effect relationship between them.

Penalty duration and QoL

During the collection of demographic data of older prisoners, the length of their sentences was recorded, and when measuring the impact of the remaining period of imprisonment on the mental health, emotional state and QoL of prisoners, a statistically significant negative correlation was examined ($r = -0.271^{**}$; $p < 0.001$). In order to determine the effect of the remaining period of imprisonment on the mood of convicts, they divided into two group (I group –till 2 years; II group- more than 2years until release); and II group members’ PHQ-9 results were higher than I group, respectively, 6.8 ± 3.2 and 9.18 ± 2.98 . ($F=0.58$; $t= 4.5$; $df=198$; $d=0.72$; $p=0.00$).

Interpersonal relationships and QoL

Figure 17. Maintenance of relationships with family members



The graph describes the maintenance of relationships with family members; prisoner's interpersonal relationships and QoL of older prisoners. The inmates who don't have any relation with family members, all of their QoL features were poor.

Depression rates of 3 groups (who keep in touch, sometimes, and never) members were various. Elderly inmates who regular contact with family members (8.6 ± 3.2), their depression score were lower than others; sometimes (10.3 ± 4.08); in never contact (14.5 ± 0.7). Based on this statistically significant figures, we can remark that contact with family members has a significant impact on the daily mood of older prisoners.

A statistically significant positive correlation was remarked when analyzing the impact between questions 20-22 of the survey (*satisfaction with personal relationships, satisfaction with sex, and satisfaction with support from friends*) on quality of life assessment.

Table 5. Satisfaction with relationships

	QoL				
	Kruskal Wallis (non-parametrik test)			Spearman cor.coefficient	
	χ^2	df	p value	r	p value
satisfaction with personal relationships	90,55	3	0,000	0,469**	0,000
satisfaction with sex life	83,126	2	0,000	0,646**	0,000
satisfaction with support from friends	75,10	3	0,000	0,495**	0,000

A statistically significant correlation was found when analyzing the effect of questions on questions 17 and 18 of the survey (satisfaction with the ability to perform daily activities and satisfaction with work capacities) with the assessment of QoL.

Table 6. Correlation between personal satisfaction and QoL

	QoL				
	Kruskal Wallis (non-parametrik test)			Spearman cor.coefficient	
	χ^2	df	p value	r	p value
Satisfaction daily activity	46,196	3	0,000	0,409**	0,000

Satisfaction work capacity	49,513	3	0,000	0,418**	0,000
Satisfaction personal relationship	90,55	3	0,000	0,469**	0,000
Satisfaction material state	72,243	2	0,000	0,529**	0,000
Getting daily information	66,89	2	0,000	0,527**	0,000
Satisfaction with themselves (S19)	62,553	3	0,000	0,475**	0,000
Negative feelings, anxiety, blue mood (S26)	96,354	2	0,000	-0,535**	0,000

The One-Way ANOVA test was used to separate two groups with future expectations (1), and no thoughts or expectations for the future (2), ($\eta^2 = 0.12$; $F=29,132$; $df=1$; $p<0.001$); a statistically significant average impact rate was found. According to the Spearman test between the two factors, a negative correlation was recorded during the measurement operation ($r=-0.349^{**}$; $p<0.001$). Thus, the gradual decline of participants' hopes, ideas and plans for the future is accompanied by an underestimation of the quality of life.

Social-emotional support program

A program was developed to improve social and emotional skills among the study participants and applied to both staff and inmates.

Social emotional training (SET) skills are a relatively new concept. Today, the importance of social emotional skills in SET is emphasized by educators, methodologists, policy makers in education and scholars who do more research in this area. SET can be considered as the first step in the regulation of penitentiaries and relations between prisoners in our country.

What does SET mean? In scientific texts, the term SEL (Social, and Emotional Learning) has different definitions and intersects with widely used educational terms such as character education, emotional, social psychological well-being, satisfaction, and sustainability (Elias, 2013). Despite the differences in terminology, effective use of socio-emotional skills helps to overcome the negative effects of stress and develop successful strategies to support oneself and others.

The broader meaning of SET is given in the Collaborative for Academic, Social, and Emotional Learning (CASEL) model, which translates as “Academic, Social, and Emotional Learning”. According to CASEL (2015), SET is a process of learning, applying and strengthening five socio-emotional skills.

How should an employee help both the convict and himself who are experiencing the exciting moments of the crisis? Employees play a key role in this process, which is why the training program has been developed for staff as well as prisoners. So how do you help employees develop their social and emotional skills to support prisoners?

It is both possible and necessary to develop these skills in a penitentiary institution. It should be noted that this program was developed at the request of the Institute of Education for implementation in schools with the support of UNICEF in Azerbaijan.

The main purpose of the program

Using social and emotional skills, it aims to support both oneself and others, develop successful strategies by reducing the negative effects of stress, instilling in employees resilience and coping with stress and negative effects, developing psychological well-being and improving positive employee-prison relationships.

The main tasks of the program

1. Mastery of the theoretical foundations of socio-emotional learning and assessment of psychological satisfaction by employees;
2. Improving social and emotional skills, both personal and interpersonal;
3. Develop stress management skills in employees and use those skills in appropriate situations;
4. To study and apply the importance of creating a supportive environment in the staff of convicts
5. Study and apply strategies for supportive communication with prisoners.

To achieve this, some teaching methods are used - reflexive exercises, dialogues / discussions and work on personal examples.

The structure of the program

The program consists of two main topics, each of which, in turn, is divided into sub-topics.

The first topic is related to socio-emotional skills and the theoretical foundations and application of SET. The main goal of this stage of the training is the participants' inner experiences, personal ideas and qualities. The sessions focus on understanding the employee's

internal resources derived from personal and professional life experiences and improving personal and interpersonal relationships. As a result, employees are expected to develop self-confidence, optimism and psychological and social well-being, as well as the ability to develop and support themselves and prisoners.

The second topic focuses on the study and application of ways to develop social and emotional skills in prisoners. The main purpose of this part of the training is to create a supportive environment and for employees to learn and apply various techniques to establish supportive communication with prisoners. It also analyzes the age characteristics of learners in the selection of different techniques. Group approaches and role-playing games are used to assess strategies for different age groups. As a key outcome, staff skills are expected to improve their skills in evaluating strategies appropriate to different age groups (especially older prisoners) and analyzing application opportunities to create a supportive environment in the penitentiary.

Outcomes of the training

Employees:

- Assess and apply their skills, including self-awareness, to protect the well-being of individuals and prisoners;
- understands the importance of their own well-being as a factor influencing the well-being of employees;
- Learns different approaches to enhance professional development using all available resources, including self-reflection, as well as leadership and collaboration with colleagues.
- Understands the importance of a supportive environment for the psychosocial well-being of older prisoners and learns how to create it in an institution.

The developed program should be applied for a longer period of time for further evaluation and the results should be monitored. For this reason, evaluation and measurement of program effectiveness can be chosen as the goal for another study.

During the study, a short survey was conducted to analyze how the officers surveyed mastered the content of key concepts related to socio-emotional skills. Points considered during the survey:

- What do you think is meant by self-awareness?
- How can you explain your self-management skills?
- What is social perception and social relations management?

- What do you think is meant by a supportive environment?
- Would you share your stress management skills and any strategy with us?

On August 20-21, 2021, a seminar-training on "Development of social and emotional skills, creation of a supportive environment" was organized with 35 young male officers who started their new service in the Penitentiary Service. All of them were high educated. At the same seminar, officers conducted a "Social Emotional Skills Self-Assessment Questionnaire". The questionnaire consists of 5 sections: self-awareness, self-regulation, social awareness, social management and responsible decision-making, 5 questions for each section, a total of 25 questions.

Self-awareness (12,62±3,2; min.0, max.15), self-regulation (12,43±2,7; min.4, max.15), social-awareness (10,76±2,07; min.4, max.15), social management (12,43±3,1; min.2, max.15), and responsible decision-making (12,19±3,5; min.1, max.15) scores fluctuated between 0-15.

The strong positive correlation was determined between questionnaire sections, and it was statistically significant result.

The strong positive correlations were determined between Social Emotional Skills Self-Assessment Questionnaire items, Self-awareness and self-regulation, social-awareness, social management, responsible decision-making; also self-regulation and social management, responsible decision-making skills of officers.

Table 7: Social-emotional skills of COs

	responsible decision-making skills	social management	social-awareness	self-regulation	Self-awareness
Self-awareness	0.554**	0.728**	0.634**	0.595**	
self-regulation	0.737**	0.741**	0.514**		
social-awareness	0.477**	0.561**			
social management	0.80**				

($p < 0.05^*$; $p < 0.01^{**}$).

The next assessment tool was related to stress reactions. The main target of the survey was to assess the officers' stress management skills in 9 situations from 0-3 score. 0-3 was high, 4-7 medium, above 8 score was low level of stress management skill.

Table 8: Stress management skills od COs

	M.	median	St.d	minimum	maksimum	Skev.	Kurtosis
results	6.66	5.00	3.48	1	14	0.625	-0.222
Kolmogorov-smirnov test	0.197; df=35; p<0.001						

According to the measurement, it was mentioned that only 5 people have had high level of these skills, majority of the participants have displayed medium and low level of stress management skills (6.66 ± 3.48 ; $df=35$; $p<0.001$).

Conclusion:

- Monitoring of geriatric symptoms in the field of physical health, mental health, especially in the emotional state, low mood, frustration, anxiety, and tension of the elderly prisoners who participated in the study. Low, moderate, and high levels of depression were recorded when symptoms of depression were analyzed using the PHQ-9 survey (9.08 ± 3.58 ; $df = 200$; $p < 0.05$);

- Domain I - Physical impact on physical health is defined and observed in most cases, medical treatment is required, very little energy in daily life, sleep dissatisfaction, moderate satisfaction and dissatisfaction with daily activities and work skills stated that they were;

- Domain II - Low quality of life in questions related to mental health, rarely enjoying life, feeling worth living, very little and in some cases self-satisfaction, acceptance of appearance and frustration -reported quickly and regularly;

- Domain III - expressed dissatisfaction with personal relationships, sexual relations and support of relatives during the assessment of social relations;

- Domain IV - Very few in the management of environmental factors and in some cases feel physically healthy, safe in their daily lives, have very little money to meet their needs, have very little access to the information they need, and very little and in some cases dissatisfaction and moderate satisfaction with their leisure activities, place of residence and medical care provided;

- There is a negative correlation between the increasing age factor of prisoners and the assessment of quality of life, as the quality of life of prisoners decreased with age ($F=24.32$; $df=198$; $t=-5.8$; $r=-0.359$; $p<0.001$);

- The effect of T-independent test was found between the increasing age factor of the convicts and the cases of frustration, tension, despair in their daily moods ($F=28.8$; $t=2.6$; $df=198$, $p<0.05$);

- The analysis of the relationship between the increasing age factor and the point of recording ideas and plans for the future revealed a statistically significant effect, as well as a weak correlation ($F=18.38$; $df=198$; $t=2.5$, $d=0.5$; $r=0.15^*$; $p<0.05$).

- A statistically significant negative correlation was found between the increasing age factor and the QoL Survey (Question 6- *How do you feel your life is meaningful?*) ($R=-0.31^{**}$; $p<0.001$);

- a statistically significant negative correlation between the increasing age factor and the degree of satisfaction with interpersonal relationships, ($r=-0.20^*$; $p<0.05$);

- A statistically significant positive correlation was between the PHQ-9 screening test results and the increasing age factor ($r=0.174^*$; $p<0.05$). Also, when the T-independent test results measured the level of depression in accordance with the increase in the age factor, high depression was observed in convicts over 60 years of age compared to those under 60 years of age (9.35 ± 3.3 ; 7.12 ± 4.8) ($F=7.3$; $df=198$; $p<0.05$);

- the study revealed the impact of environmental factors, living conditions, conditions of detention on the assessment of quality of life of older prisoners (according to the Kruskal-Wallis test ($\chi^2= 13.7$; $p<0.001$));

- a statistically significant negative difference was obtained between the common regime and the strict regime (*One-Way ANOVA test, Tukey HSD, Scheffe, Bonferroni tests* - 0.175 ; $p < 0, 05$);

-a statistically significant difference was obtained between the common regime and the strict regime prisons' depression score (*One-Way ANOVA test, Tukey HSD, Scheffe, Bonferroni tests* $1,599$; $-4,989$; $p < 0.05$);

- A statistically significant cause-and-effect relationship was identified when analyzing the monitoring of depressive symptoms in the mood on the basis of criminal items (*adjusted* $R^2=0.180$; $R^2=0.184$; *Dublin-Watson ratio 1.39*; $p < 0.05$);

- Crimes of sexual violence, their depression score were higher than other convicts;

- Statistically significant negative correlation was found when measuring the impact of the remaining period of imprisonment on the mental health, emotional state and QoL of convicts ($r = -0.356^{**}$; $p < 0.001$);

- In order to determine the effect of the remaining period of imprisonment on the mood of convicts, a difference was noticed comparing convicts 1-2 years till the release and more than 2 years ($F=0.58$; $t=4.5$; $df=198$; $d=0.72$; $p=0.00$);

- No statistically significant difference was found in the assessment of the impact of the fact that an older prisoner had been previously convicted on their QoL, indicating that there was no correlation between the experience of the previous conviction, and the QoL assessment;

- statistically significant correlation between the degree of satisfaction of prisoners with personal relationships ($r = 0.469^{**}$; $r = 0.646^{**}$; $r = 0.495^{**}$; $p < 0.001$);

- statistically significant positive in assessing the self-satisfaction and quality of life of the elderly convict ($r = 0.475^{**}$; $p < 0.001$), negative correlation with the frequency of blue mood and the QoL ($r = -0.535^{**}$; $p < 0.001$), a negative correlation was examined between the results of the PHQ-9 depression survey and the QoL assessment ($r = -0.395^{**}$; $p < 0.001$)

Recommenadation:

- Enlightenment about geriatric syndromes (frequent falls, cognitive impairment and dementia, incontinence, sensory impairment and polypharmacy) should be realized among prisoners and staff personnel. Persons ageing in prisons should receive periodic medical and psychological care to identify new geriatric syndromes as they arise. It was emphasized in International Review of the Red Cross in 2016.

- Prison staff should be informed about risk factors and warning signs on risk of self-harm, depression symptoms and future effects. This can be main topic of seminar with officers.

- Psychologist should involve elderly inmates to group therapy to prevent social isolation and make connection with relatives. Because of social isolation can lead to diminished functional capacity or may be exacerbated by it, putting older adults at a risk for subsequent loneliness and other diseases (Perissinotto, C. M, et al. 2012).

-Prisons can be staffed in part by prisoners-volunteers, who may receive extensive training and mentored experience in hospice practices as other countries (Human Rights Watch, Heath C.et al 2011).

- Job satisfaction of the officers' need to be learnt more detailed and make special program consists of social-emotional skills. The problem has been highlighted in other research, too (Carnevale and colleagues (2018).

REFERENCES

1. A human rights approach to prison management. //Handbook for prison staff-second edition//King's College London, International Center for Prison Studies-2009
2. A pathway to care for older prisoners. A guide to improving the health, well-being and health care of older prisoners//Llywodraeth Cymru Welsh Government- October, 2011. [Electronic resource]
URL: <http://www.wales.nhs.uk/document/168109/info/>
3. Abner, C., Graying Prisons: States face challenges of an ageing inmate population.//State News. November-December, 2006. [Electronic resource]
URL:<https://studylib.net/doc/11214443/graying-prisons-states-face-challenges-of-an-aging-inmate>
4. Active ageing and quality of life in old age. United Nations Economic Commission for Europe//New York, and Geneva, 2012 [Electronic resource]
URL: <http://www.unece.org>
5. Aday, R.H. Aging prisoners' concerns toward dying in prison. //OMEGA-Journal of Death and Dying 52(3)// May, 2006.p.199-216 [Electronic resource]
URL: <https://www.researchgate.net/publication/240302607>
6. Aday, R. H. and Krabill, J. J. Older and geriatric offenders: Critical issues for the 21st century. //Special needs offenders in correctional institutions-2012, 1- p.203-233. [Electronic resource]
DOI: [10.4135/9781452275444.n7](https://doi.org/10.4135/9781452275444.n7)
7. Ageing Prison Population. 5th report of session 2019-2021//House of Commons Justice Committee-July 2020. [Electronic resource]
URL: <https://committees.parliament.uk/publications/2149/documents/19996/default/>
8. Ageing Inmate Population Project (1992-2012). Georgia Department of corrections, Operation, Planning and Training Division (OPTD), 2013. [Electronic resource]
URL:http://www.dcor.state.ga.us/sites/all/files/pdf/Research/Standing/Aging_inmate_population.pdf
9. Ageing and imprisonment. Workshop on ageing and imprisonment: identifying and meeting the needs of older prisoners. Summary report.//International Committee of the Red Cross-2018. [Electronic resource]
URL: <https://www.icrc.org/en/publication/ageing-imprisonment-summary-report>

10. Aging in Prison. Reducing elder incarceration and promoting public safety. //Center for Justice at Columbia University//November, 2015.
11. Andrews, D.A. and Bonta, J. Rehabilitating criminal justice policy and practice//Psychology, public policy and law-2010. 16(1)- p.39-55 [Electronic resource]
DOI: 10.1037/a0018362
12. Andrews, D.A., Bonta, J. and Wormith J.S. The risk-need- responsivity model (RNR): does adding the good lives model contribute to effective crime prevention?// Criminal justice and behavior, 38(7)- June, 2011. p.735-755. [Electronic resource]
URL:<http://cjb.sagepub.com/content/38/7/735>
13. Angus Ch. Older prisoners: trends and challenges./NSW Parliamentary Research Service. October, 2015. [Electronic resource]
URL: <https://www.parliament.nsw.gov.au/researchpapers/Documents/older-prisoners-trends-and-challenges/Older%20prisoners%20-%20trends%20and%20challenges.pdf>
14. Aldwin, C. M. and Levenson, M. R. Stress, coping, and health at midlife: A developmental perspective. //Handbook of midlife development, John Wiley & Sons, Inc.-2001, p. 188–214. [Electronic resource]
URL: <https://psycnet.apa.org/record/2001-06209-003>
15. Aldwin, C. M., Spiro, A., and Park, C. L. Health, Behavior, and Optimal Aging: A Life Span Developmental Perspective. //Handbook of the psychology of aging, Elsevier-2006. p.85–104. [Electronic resource]
URL: <https://doi.org/10.1016/B978-012101264-9/50008-2>
16. Aldwin, C. M., Park, C. L., Choun, S.,and Lee, H. The impact of military service on stress, health, and well-being in later life. // Long-term outcomes of military service: The health and well-being of aging veterans. //American Psychological Association-2018. p.167–186. [Electronic resource]
URL: <https://doi.org/10.1037/0000061-010>
17. Aldwin, C. M., Igarashi, H., Gilmer, D. F., and Levenson, M. R. Health, illness, and optimal aging: 3rd edition. //Springer Publishing Company-2017. [Electronic resource]
URL: <https://connect.springerpub.com/content/book/978-0-8261-3405-9>
18. Angela Koo. “Correctional Education Can Make a Greater Impact on Recidivism by Supporting Adult Inmates with Learning Disabilities”. //Journal of criminal law and criminology-2015, 105 (1)- p.233-270. [Electronic resource]

URL: <https://scholarlycommons.law.northwestern.edu/jclc/vol105/iss1/6>

19. At America's Expense: The Mass Incarceration of the Elderly /American Civil Liberties Union- June, 2012.
20. Augustyn, R.A., Older inmates in prison: considering the tipping point of age and misconduct.//Augustyn, R.A., Benschel, T. et al.// Criminology, Criminal Justice, Law & Society- 2020. [Electronic resource]
URL: <https://scholasticahq.com/criminology-criminal-justice-law-society/>
21. Austin, J., Irwin, J. and Hardyman, P. Exploring the needs and risks of the returning prisoner population.// "From Prison to Home" Conference/ U.S. Department of Health and Human Service, The Urban Institute- January, 2002.
22. Baidawi S. Older prisoners – A challenge for Australian corrections.//Susan Baidawi, Shalley Turner et al.//Trends and issues in crime and criminal justice, 426- August, 2011. [Electronic resource]
URL: <https://www.researchgate.net/publication/235506919>
23. Baidawi, S. Managing the health of an ageing prison population// Sax Institute //Justice Health and Forensic Mental Health Network// January 2015. [Electronic resource]
URL: www.saxinstitute.org.au
24. Banerjee, A., Nikumbh, V.B. and Thakur, R.P. Health problems among the elderly: a cross sectional study.// Annals of Medical and Health science research 3(1). March, 2013.p.19-25 [Electronic resource]
URL: www.amhsr.org
25. Bilotta C. Older people's quality of life scores, and adverse health outcomes at a one-year follow-up. A prospective cohort study on older outpatients living in the community in Italy. //Claudio Bilotta, Ann Bowling et al.//Health and Quality of life outcome, 9(72)- 2011. [Electronic resource]
URL: <http://www.hqlo.com/content/9/1/72>
26. Beck, A. J. and Harrison, P. M. Prisoners in 2000. Bureau of Justice Statistics Bulletin. August- 2001. [Electronic resource]
URL: <https://bjs.ojp.gov/content/pub/pdf/p00.pdf>
27. Bedard, R., Metzger, L. and Williams, B. Ageing prisoners: An introduction to geriatric health-care challenges in correctional facilities. International Review of the Red Cross- 2016, 98(903), p.917-939. [Electronic resource]

URL: <https://international-review.icrc.org/sites/default/files/irrc-903-12.pdf>

28. Bengtson V.L. and Settersten R.A. Handbook of Theories Ageing //Springer Publishing Company -2016.

29. Berlim M.T. and Fleck M.P. Quality of Life and Major Depression. //Quality of Life Impairment in Schizophrenia, Mood and Anxiety Disorders. Springer-2007, Dordrecht. [Electronic resource]

URL:https://doi.org/10.1007/978-1-4020-5779-3_12

30. Birren, J. E., and Schaie, K. W. Handbook of the Psychology of Aging-2006. 6th edition, [Electronic resource]

URL: <https://www.elsevier.com/books/handbook-of-the-psychology-of-aging/birren/978-0-12-101264-9>

31. Blazer, D. G., Hybels, C. F., and Pieper, C. F. (2001). The association of depression and mortality in elderly persons: A case for multiple, independent pathways. // *The Journals of Gerontology: Series A: Biological Sciences and Medical Sciences*, 56(8), p.505–509.

URL: <https://doi.org/10.1093/gerona/56.8.M505>

32. Boggatz, T. Quality of life and person-centered care for older people.// International Journal on Ageing in Developing Countries- 5(2), 2020. p.201-202 [Electronic resource]

URL:<https://www.inia.org.mt/wp-content/uploads/2021/05/5.2.7-Book-Review-Maria-Fernanda-Ortega.pdf>

33. Bowling, A. Stenner P. Psychometric properties of the Older People's Quality of Life Questionnaire: which measure performs best with older people? // *Journal of Epidemiology and Community Health* 65(3). 2010. [Electronic resource]

URL:<https://jech.bmj.com/content/65/3/273.short?rss=1>

34. Bretschneider, W. Ageing prisoners and Ethic behind bars: Law, Human Rights and Health Care- Old (age) problem and new challenges.//PhD thesis//University of Basel-2015. [Electronic resource]

URL: edoc.unibas.ch

35. Brown, A. D. Identity work and organizational identification. // *International Journal of Management Reviews*-2017, 19(3), p.296-317. [Electronic resource]

URL:<https://www.researchgate.net/publication/318656583>

36. Buffel, T. Handler, S. and Phillipson, C. Age-friendly cities and communities: A global perspective. UK, Policy Press International Journal on Ageing in Developing Countries, 4 (2). 2019, p.156-158
37. California's Older Prisoner Crisis: Facts and Figures.//Legal Services for Prisoners with Children/ February 2010. [Electronic resource]
URL: www.prisonerswithchildren.org
38. Chandrika, S., Radhakumari, P., DeviMadhavi, B. Quality of life of elderly residing in old age homes and community in Visakhapatnam city.//IOSR Journal of Dental and Medical Sciences 14(10)- 2015. p.27-31 [Electronic resource]
URL: www.iosrjournals.org
39. Chiu, T. (2016). It's about time: Aging prisoners, increasing costs, and geriatric release. //US Department of Justice, Office of Justice Programs-2010 [Electronic resource]
URL: <https://www.ojp.gov/ncirs/virtual-library/abstracts/its-about-time-aging-prisoners-increasing-costs-and-geriatric>
40. Comfort, M. The costs of incarceration for families of prisoners. //Megan Comfort. McKay Tasseli. Landwehr Justin [et al.].//International Review of the Red Cross-2016, 98(903), p.783-798. [Electronic resource]
URL: <https://international-review.icrc.org/sites/default/files/irrc-903-5.pdf>
41. Constantino, P., Goncalves S., and Pinto, L. The impact of prisons on the mental health of prisoners in the State of Rio de Janeiro, Brazil.// Ciência & Saúde Coletiva, 21(7): 2016. p.2089-2099.
42. Crawley, E., and Sparks, R. Is there life after imprisonment?: How elderly men talk about imprisonment and release.// Criminology and criminal justice 6(63)- 2006.
43. Cuellar A.F. Vulnerable groups of prisoners. Handbook./ Alejandro Forero Cuellar, Maria Celeste Tortosa et al.// Center for the study of democracy/ Sofia-2015. [Electronic resource]
URL: https://www.files.ethz.ch/isn/188180/Handbook_groups%20of%20prisoners-en.pdf
44. Da Silva, J.V. and Baptista, M.N. Vitor quality of life scale for the elderly: evidence of validity and reliability.//Springer Plus-2016 [Electronic resource]
URL: <https://springerplus.springeropen.com/articles/10.1186/s40064-016-3130-4>
DOI 10.1186/s40064-016-3130-4

45. Dahlberg L, McKee KJ. Correlates of social and emotional loneliness in older people: evidence from an English community study. //Aging Ment Health. 2014 May;18(4)//p.504-14. doi: 10.1080/13607863.2013.856863.
46. De Motte. C. Understanding older male prisoners' satisfaction with Quality of life and wellbeing. PhD thesis/Nottingham Trent University, 2015. [Electronic resource]
URL: <http://irep.ntu.ac.uk/id/eprint/31213/>
47. Deborah, M.F. and Cecile, N.Y. Aging Inmates: Issues Surrounding Health Care, End-of-Life and Dying in Prison.//Palliative Medicine and Hospice care 4(2)-2018//e.3-e.5 [Electronic resource]
URL: doi: 10.17140/PMHCOJ-4-e007
48. Denhof, M.D., Spinaris, C.G., Mortan G.R. Occupational stressors in corrections organizations: types, effects and solutions. //U.S. Department of Justice, National Institute of corrections.- Jule, 2014. [Electronic resource]
URL: www.nicic.gov
49. Dugan, J., Roche V. and Tucker, I. The Prison Discipline Regime Review./Report to Correctional Service Commissioner. June, 2013. [Electronic resource]
URL: <https://files.corrections.vic.gov.au/2021-06/prisondisciplineregimereview.pdf>
50. Economic and budgetary projections for the 28 EU Member States (2013-2060)// European economy 3// European Union, 2015
51. Elderly prisoners. //Healthcare in Prison (345)-October, 2012
52. Erisman, W., & Contardo, J. B. Learning to Reduce Recidivism: A 50-State Analysis of Postsecondary Correctional Education Policy. //Institute for Higher Education Policy -2005.
53. Farzianpour F. Quality of life of the elderly residents.// Farzianpour Fereshteh, Hosseini Shayan et al.//American Journal of Applied Science 9(1). Science publication-2012.p.71-74
54. Farquhar, M. Elderly people's definitions of quality of life.// Soc Sci Med 41(10)-1995. p.1439-1446 [Electronic resource]
URL: <https://pubmed.ncbi.nlm.nih.gov/8560312/>
55. Fazel, S. Hawton, K. and Ramesh, T. Suicide in prisons: an international study of prevalence and contributory factors. //Lancet Psychiatry (4)- 2017; p. 946–52.
56. Fernández-Mayoralas G, et al. // Fernández-Mayoralas G, Rojo-Pérez F, Martínez-Martín P, Prieto-Flores ME, Rodríguez-Blázquez C, Martín-García S, Rojo-Abuín JM, Forjaz MJ; Spanish Research Group on Quality of Life and Ageing//. Active ageing and quality of life: factors

- associated with participation in leisure activities among institutionalized older adults, with and without dementia. //Aging Ment Health. 2015;19(11):1031-41. [Electronic resource]
URL: <https://pubmed.ncbi.nlm.nih.gov/25584744/>
57. Friedman H. S. Long-term relations of personality and health: dynamisms, mechanisms, tropisms. //Journal of personality-2000, 68(6), p.1089–1107. [Electronic resource]
URL: <https://doi.org/10.1111/1467-6494.00127>
<https://pubmed.ncbi.nlm.nih.gov/11130733/>
58. Fiske, S. T., and Taylor, S. E. Social cognition. McGraw-Hill Book Company-1991. [Electronic resource]
URL:<https://psycnet.apa.org/record/1991-97723-000>
59. Formosa, M. Active and Healthy Ageing in Malta: Gerontological and Geriatric Inquires.//International Journal on Ageing in Developing countries. 3(2)-2018.p.191-193 [Electronic resource]
URL: <https://www.inia.org.mt/wp-content/uploads/2019/07/3.2-8-BR-Final.pdf>
60. Formosa, M. Class dynamics in later life- Older persons, class identity and class action in Malta. Hamburg, January, 2009. [Electronic resource]
URL:https://www.researchgate.net/publication/278027865_Class_dynamics_in_later_life_-_Older_persons_class_identity_and_class_action_in_Malta
61. Formosa, M. Renewing universities of the third age: challenges and visions for the future. REVISTA DE PENSAMENT I ANÀLISI, 9. 2009. p. 171-196 [Electronic resource]
URL: <https://www.e-revistes.uji.es/index.php/recerca/article/view/153>
62. Formosa, M. COVID-19 and older persons: Reflections on human rights, ageism, isolation, dementia care and gender. //International Journal on Ageing in Developing countries. 6(1)-2021.p.5-19 [Electronic resource]
URL:<https://www.inia.org.mt/wp-content/uploads/2021/07/6.1.1-COVID-19-and-older-persons-Reflections-on-human-rights-ageism-isolation-dementia-care-and-gender-.pdf>
63. Forster, William; Forster, Bill. England and Wales: the state of prison education. //Journal of Correctional Education-1996. 47 (2). p.101–105. [Electronic resource]
URL:<https://www.istor.org/stable/i23291925>
64. Fujita, K., Carnevale, J. J., and Trope, Y. Understanding self-control as a whole vs. part dynamic. //Neuroethics-2018, 11(3), p.283–296. [Electronic resource]

URL: <https://doi.org/10.1007/s12152-016-9250-2>

<https://psycnet.apa.org/record/2016-10119-001>

65. General Report of the CPT-26th //European Committee for the prevention of torture and inhuman degrading treatment or punishment//January-December 2016// Council of Europe, 2017.
66. Giorgio de Gessa. "Active ageing" and health: an exploration of longitudinal data for four European countries.//PhD thesis/ London School of Hygiene and Tropical Medicine. December-2011 [Electronic resource]
URL:<http://researchonline.lshtm.ac.uk/682446/>
67. Gormley, C., J. Prison, Power, and People with Learning Disabilities: The Complexities of Curtailed Lives.//PhD dissertation thesis/ University of Glasgow-January, 2017.
68. Glaser, K. Life course influences and well-being in later life: a review//Glaser, K., Price, D.et al.// Institute of Gerontology, King's College London and Department for Work and Pensions//Autumn, 2009. [Electronic resource]
URL: www.equalityhumanrights.com
69. Greifinger, R.B., Public health behind bars, from prisons to communities./October, 2021
70. Gross, A. The Health of America's Aging Prison Population//Gross, A.et al.// Epidemiologic Reviews (40) //Johns Hopkins Bloomberg School of Public Health, 2018.p.157-165
71. Gupta, A., Girdhar, N.K. Risk factors of suicide in prison.//Delhi psychiatry journal 15(1)-April, 2012.
72. Gupta, N. Development, elder abuse and quality of life: Older women in urban India.//International Journal on Ageing in Developing Countries, 1(2)- 2016. p.158-173 [Electronic resource]
URL:<https://www.inia.org.mt/wp-content/uploads/2017/01/1.2-8-India-158-to-173-Final.pdf>
73. Hairstone C.F., Prisoners and Families: Parenting issues during incarceration. //National Policy Conference//U.S. Department of Health and Human Service, The Urban Institute-January, 2002.
74. Hall, R.C., Hall, R.C. and Chapman, M.J. Identifying geriatric patients at risk for suicide and depression.//Clinical geriatrics 11(10)- 2003. [Electronic resource]
URL: www.mmhc.com

75. Halsey M., Deegan S. In Search of Generativity in Prison Officer Work: Balancing Care and Control in Custodial Settings. //The Prison Journal-2017.97(1). p.52-78. [Electronic resource]
URL: doi:[10.1177/0032885516679380](https://doi.org/10.1177/0032885516679380)
76. Handbook on Prisoners with special needs. Criminal justice handbook series. United Nations. New York-2009. [Electronic resource]
URL:https://www.unodc.org/pdf/criminal_justice/Handbook_on_Prisoners_with_Special_Needs.pdf
77. Haney, C. The psychological impact of incarceration: implications for post-prison adjustment. National Policy Conference// U.S. Department of Health and Human Service, The Urban Institute/ January, 2002.
78. Hanser, R.D., Hu, W. Elderly offender prison programming in the People's Republic of China and the United States./ Multidisciplinary Psychology: A Journal of Collaboration 1(1): 2020. [Electronic resource]
URL: <https://repository.ulm.edu/csp/vol1/iss1/2>
79. Heisel, M.J. Suicide and its preventions among older adults.//Canadian Journal of Psychiatry 51(3)-2006. p.143-154
80. Helena, M. Defining an Age Cut-Off for Older Offenders: A Systematic Review of Literature.// Helena, M., Haesen, S., Meyer, L. et al.//International Journal of Prisoner Health-April, 2020. [Electronic resource]
URL: DOI: [10.1108/IJPH-11-2019-0060](https://doi.org/10.1108/IJPH-11-2019-0060)
81. Hess, T. M. Attitudes toward aging and their effects on behavior. //Handbook of the psychology of aging. p.379-406. Academic Press-2006. [Electronic resource]
URL:
[https://projects.ncsu.edu/psychology/graduate/conc/develop/adultdevelopment/docs/research/Hess-\(2006\)-Handbook-Chapter.pdf](https://projects.ncsu.edu/psychology/graduate/conc/develop/adultdevelopment/docs/research/Hess-(2006)-Handbook-Chapter.pdf)
82. Human Rights of Older Persons. Summary of the Report of the Secretary-General to the General Assembly. 65/182 of December 2010. [Electronic resource]
URL: www.ohchr.org/EN/Issues/OlderPersons
83. Hummert, M. L. Age stereotypes and aging. In K. W. Schaie & S. L. Willis (Eds.), *Handbook of the psychology of aging*. p.249–262.// Elsevier Academic Press-2011. [Electronic resource]
URL: <https://doi.org/10.1016/B978-0-12-380882-0.00016-4>

84. Hyde, M. A measure of quality of life in early old age: The theory, development and properties of a needs satisfaction model (CASP-19). Hyde M., Wiggins R.D. et al.//Ageing and mental health, 7(3)-2003 [Electronic resource]
URL: <http://dx.doi.org/10.1080/1360786031000101157>
85. Ibsen, A. Z. Ruling by Favors: Prison Guards' Informal Exercise of Institutional Control. //Law & Social Inquiry-2013, 38(2), p.342–363. [Electronic resource]
URL:<http://www.istor.org/stable/24545901>
86. “In here, time stands still” the rights, needs, experiences of older people in prison. IPRT (Irish Penal Reform Trust)//Ireland, Dublin, 2016. [Electronic resource]
URL:www.iprt.ie
87. Jolliffe, D. and Haque, Z. Have prisons become a dangerous place? Disproportionality, safety and mental health in British Prisons.//Runnymede and University of Greenwich-2016
88. Kawachi, I., Sparrow, D., Vokonas, P. S. and Weiss, S. T. Symptoms of anxiety and risk of coronary heart disease. //The Normative Aging Study. Circulation-1994, 90(5), p.2225–2229. [Electronic resource]
URL: <https://doi.org/10.1161/01.cir.90.5.2225>
89. Khurana, H., & Raj, A. Aging and suicide. In B. Vijaya Prasad & S. Akbar (Eds.), *Handbook of research on geriatric health, treatment, and care*. p. 409–429. IGI Publishing//IGI Global-2018. [Electronic resource]
URL: <https://doi.org/10.4018/978-1-5225-3480-8.ch023>
90. Kim K.D., Peterson, B. Ageing behind bars, Trends and implications of graying prisoners in the federal prison system//Urban Institute- August 2014.
91. Kinman, G., Clements, A., and Hart, J. Work-life balance in UK prison officers. //University of Bedfordshire, Luton, Bedfordshire, UK- August, 2016. [Electronic resource]
URL: <https://journals.sagepub.com/doi/10.1177/0093854816664923>
92. Kiriakidis, S. Elderly suicide: risk factors and preventive strategies. //Annals of Gerontology and Geriatric Research-2015, 2(2), p.1-6. [Electronic resource]
URL:<https://www.iscimedcentral.com/Gerontology/gerontology-2-1028.pdf>
93. Kubiak Sh.,P., Covington, S. and Hillier, C. Trauma-informed corrections// Social work in juvenile and criminal justice systems, chapter 7. p.92-104
94. Kutsal Y.G., Geriatric syndromes.// International Journal on Ageing in Developing countries. 4(1)-2019.p.41-56 [Electronic resource]

URL: <https://www.inia.org.mt/wp-content/uploads/2019/08/4.1.4-Geriatric-Syndromes-pg-41-56-Final.pdf>

95. Layte R, Sexton E, Savva G. Quality of life in older age: evidence from an Irish cohort study. //J Am Geriatr Soc. 2013 May;61. [Electronic resource]
URL: doi: 10.1111/jgs.12198. PMID: 23662722.
96. Lee C. A systematic integrative review of programs addressing the social care needs of older prisoners. //Carolina Lee, Samantha Treacy, Anna Haggith [et al.]// Health and Justice 7(9)-2019. [Electronic resource]
URL:<https://doi.org/10.1186/s40352-019-0090-0>
97. Lespérance, F., Frasure-Smith, N., Talajic, M., and Bourassa, M. G. Five-year risk of cardiac mortality in relation to initial severity and one-year changes in depression symptoms after myocardial infarction. //Circulation-2002, 105(9),p.1049–1053. [Electronic resource]
URL: <https://doi.org/10.1161/hc0902.104707>
98. Liebling, A. Doing research in prison: Breaking the silence?. //Theoretical Criminology-1999, 3(2), p.147-173. [Electronic resource]
DOI: [10.1177/1362480699003002002](https://doi.org/10.1177/1362480699003002002)
99. Liebling, A. Prison suicide and prisoner coping.//Chicago journals, Crime and Justice (26)-1999. p.283-359. [Electronic resource]
URL: <http://www.jstor.org/stable/1147688>
100. Life course influences and well-being in later life: a review.//Institute of Gerontology, King's College London and Department for work and pension/Manchester, 2009. [Electronic resource]
URL: www.equalityhumanrights.com/justageing
101. Loeb, S. J., and Abudagga, A. Health-related research on older inmates: an integrative review. //Research in nursing & health-2006, 29(6), p.556–565. [Electronic resource]
URL: <https://doi.org/10.1002/nur.20177>
102. Lodge, C., Carnell, E. and Coleman, M. The new age of ageing. How society need to change.//International Journal on Ageing in Developing Countries, 1(2)-2016//p.197-199
103. Lucas, E.W., Mental health and criminal justice.//3rd National Outlook Symposium on Crime in Australia// Canberra, 22-23 March, 1999.

104. Madrid International Plan of Action on Ageing (MIPAA)//Political declaration//Second World Assembly on Ageing, //Madrid, Spain-8-12 April, 2002 [Electronic resource]
[URL:https://www.age-platform.eu/policy-work/madrid-international-plan-action-ageing-mipaa](https://www.age-platform.eu/policy-work/madrid-international-plan-action-ageing-mipaa)
105. Maschi T., Morgen, K., Zgoba, K., and Ristow J. Age, cumulative trauma and stressful life events, and post-traumatic stress symptoms among older adult in prison: do subjective impression matter? // The Gerontologist 51(5)- August, 2011. p.675-686
106. Maschi, T., Viola, D., and Koskinen, L. Trauma, Stress, and Coping Among Older Adults in Prison: Towards a Human Rights and Intergenerational Family Justice Action Agenda//Traumatology- September 2015. [Electronic resource]
 URL: <http://dx.doi.org/10.1037/trm0000021>
107. McHorney C.A, Ware J.Jr, Lu J.F, and Sherbourne CD. The MOS 36-item Short-Form Health Survey (SF-36): III. Tests of data quality, scaling assumptions, and reliability across diverse patient groups. //Med Care .Jan;32(1). 1994. p.40-66. [Electronic resource]
 URL: <https://pubmed.ncbi.nlm.nih.gov/8277801/>
108. Medhi, G.K., Hazarika, N.C., Borah, P.K. and Mahanta, J. Health Problems and Disability of Elderly Individuals in Two Population Groups from Same Geographical Location//The Journal of the Association of Physicians of India //August, 2006 [Electronic resource]
 URL: <https://www.researchgate.net/publication/6707164>
109. Mehrbrodt T., Gruber S. and Wagner M. Scale and Multi-item indicators.//SHARE//Survey of Health, Ageing and retirement in Europe. April, 2019. [Electronic resource]
[URL:http://www.share-project.org/uploads/tx_sharepublications/WP_Series_45_2019_Scales_and_Multi-Item_Indicators.pdf](http://www.share-project.org/uploads/tx_sharepublications/WP_Series_45_2019_Scales_and_Multi-Item_Indicators.pdf)
110. Meyers, T. Social support from outside the walls: Examining the role of relationship dynamics among inmates and visitors.//Journal of Criminal Justice (52). Elsevier –August, 2017.p.57-67 [Electronic resource]
 URL: www.elsevier.com/locate/jcrimjus
111. Mroczek, D. K., Spiro, A. III, and Griffin, P. W. Personality and Aging. In J. E. Birren & K. W. Schaie (Eds.), *Handbook of the psychology of aging*. p.363–377. Elsevier -2006. [Electronic resource]
 URL: <https://doi.org/10.1016/B978-012101264-9/50019-7>

112. Metzner J. L. Class action litigation in correctional psychiatry. //The journal of the American Academy of Psychiatry and the Law-2002, 30(1), p.19–32. [Electronic resource]
URL:<https://pubmed.ncbi.nlm.nih.gov/11931366/>
113. Millemann, M., Bowman-Rivas, R., and Smith, E. Releasing older prisoners.//Reforming Criminal Justice.p.325-339
114. Mitchell, A. J., & Dennis, M. Self harm and attempted suicide in adults: 10 practical questions and answers for emergency department staff. //Emergency medicine journal : EMJ-2006, 23(4), p.251–255. [Electronic resource]
URL: <https://doi.org/10.1136/emj.2005.027250>
115. Morrissey, M.B., Courtney, D., and Maschi, T. Sexual Abuse histories among incarcerated older adult offenders: a descriptive study.//Sexual abuse-breaking silence, chapter 2//Fordham University Graduate School of social service, USA- 2012. [Electronic resource]
URL: <https://www.intechopen.com/chapters/33655>
116. Murphy, D. Sh., Pre-prison, prison, post-prison: post traumatic stress symptoms. /PhD dissertation //Iowa State University-2004 [Electronic resource]
URL: <https://lib.dr.iastate.edu/rtd/806>
117. Nikolic E.A. Quality of life of elderly people living in a retirement home./ Nikoloc Erzebet Ac, Radic Ivana et al.// Vojnosanitetski pregled. Military-medical and pharmaceutical review 73(1)/ January 2016. p.42-46 [Electronic resource]
URL: <https://www.researchgate.net/publication/284204359>
118. O’Hara, K. Links between depressive symptoms and unmet health and social care needs among older prisoners.//O’Hara, K. et al.//Age and Ageing (45), 2016//p.158–163 [Electronic resource]
URL:<http://ageing.oxfordjournals.org>
119. Old Behind Bars. The Ageing prison population in the United States.//Human Rights Watch-2012. [Electronic resource]
URL: <http://www.hrw.org>
120. Older Prisoners. 5th report of session 2013-2014//House of Commons Justice Committee-July 2013. [Electronic resource]
URL: www.parliament.uk/justicecttee

121. Omolade S. The needs and characteristics of older prisoners: Result from Surveying prisoner crime reduction (SPCR) survey. Analytic Summary, Ministry of Justice UK-2014. [Electronic resource]
URL:https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/368177/needs-older-prisoners-spcr-survey.pdf
122. Ouslander, J.G., and Beck, J.C. Defining the health problems of the elderly.// Annual Review Public Health (3)- 1982.p.55-83. [Electronic resource]
URL: www.annualreviews.org
123. Owen, G., Fulton, R., and Markusen, E. Death at a distance: A study of family survivors. // *Omega: Journal of Death and Dying* 1982-1983, 13(3), p.191–225. [Electronic resource]
URL:<https://doi.org/10.2190/2PW7-ARQ8-Y4L8-B3YW>
124. Paleksic M.V. Professional stressors in prison officers: a cross-sectional study/ *Scr Med* 51(3)- 2020.p.166-173 [Electronic resource]
URL:<https://www.researchgate.net/publication/346158526> [Professional stressors in prison officers A cross-sectional study](#)
125. Pathath, A.W. Theories of Ageing.// *The International Journal of Indian Psychology* 4(3)- April, 2017.[Electronic resource]
URL: <https://www.researchgate.net/publication/318119608>
126. Peckel, L. preventing suicide in Prison Inmates.// *Psychiatry Advisor*, December, 2017. [Electronic resource]
URL:<https://www.psychiatryadvisor.com/home/topics/suicide-and-self-harm/preventing-suicide-in-prison-inmates/>
127. Porporino F.J. Managing the elderly in corrections.// *Resource material series* (94). 157th international training course visiting expert's paper. 2012 [Electronic resource]
URL: https://www.unafei.or.jp/publications/pdf/RS_No94/No94_VE_Porporino2.pdf
128. *Public Health Behind Bars, from prison to communities.*// New York USA/Springer Science Business Media, 2007
129. Psick, Z., Simon, J., Brown, R., and Ahalt, C. Older and incarcerated: policy implications of aging prison populations. // *International journal of prisoner health*-2017, 13(1), p.57–63. [Electronic resource]
URL: <https://doi.org/10.1108/IJPH-09-2016-0053>

130. Rashedi, V., Gharib, M., and Yazdani A.A. Social participation and mental health among older adults in Iran.//Iranian Rehabilitation Journal. 12(19)- March, 2014. p.9-13 [Electronic resource]
URL:https://www.researchgate.net/publication/264238006_Social_Participation_and_Mental_Health_among_Older_Adults_in_Iran
131. Rezaei, M. The Impact of Resilience on the Perception of Chronic Diseases From Older Adults' Perspective.// Rezaei Mahboubeh, Fatemeh Sadat Izadi-Avanji et al/ Journal of Client-Centered Nursing Care, 4(4)-2018, p. 231-239. [Electronic resource]
URL: <https://doi.org/10.32598/jccnc.4.4.231>
132. Ricciardelli, R., & Perry, K. Responsivity in practice: Prison officer to prisoner communication in Canadian provincial prisons. //Journal of Contemporary Criminal Justice-2016, 32(4), p.401–425. [Electronic resource]
URL: <https://doi.org/10.1177/1043986216660004>
133. Rikard, R. V., and Rosenberg, E. Aging Inmates: A Convergence of Trends in the American Criminal Justice System. //Journal of Correctional Health Care 13(3). p.150-162. -July 2007 [Electronic resource]
URL: <http://jcx.sagepub.com/content/13/3/150>
134. Rizzo, D., Davey, B., Irons, M. Interpersonal interactions between prisoners and officers in prisons: A qualitative meta-synthesis exploring prison officers wellbeing.//Journal of qualitative criminal justice and criminology, 10(1)- February 2021.
135. Ruzevicius J. Quality of Life and its Components' Measurement.//17th Toulon-Verona International Conference/Liverpool John Moores University, August 28-29, 2014. [Electronic resource]
URL: <https://www.researchgate.net/publication/26496151>
136. Perissinotto, C. M., Stijacic Cenzer, I., and Covinsky, K. E. Loneliness in older persons: a predictor of functional decline and death. //Archives of internal medicine-2012, 172(14), p.1078–1083. [Electronic resource]
URL:<https://doi.org/10.1001/archinternmed.2012.1993>
137. Population ageing In Europe: facts, implication and policies. //European Commission, 2014. [Electronic resource]
[URL:https://www.researchgate.net/publication/264160544_Population_ageing_in_Europe_Facts_implications_and_policies](https://www.researchgate.net/publication/264160544_Population_ageing_in_Europe_Facts_implications_and_policies)

138. Schaie, K. W., & Willis, S. L. (Eds.). *Handbook of the psychology of aging* (7th ed.). Elsevier Academic Press-2011. [Electronic resource]
URL: <https://psycnet.apa.org/record/2010-26788-000>
139. Scurrah, A.M., Learning on the inside in Risdon prison.//dissertation thesis//University of Tasmania at Launceston// October-2008.
140. Sharma, R. and Kaur, R. Elder abuse, depression, relationships and attachments: Determinants of mental health in later life. //International Journal on Ageing in Developing Countries 1(1)-2016//p.68-81
141. Shelton ,D., Bailey, Ch. and Banfi, V. Effective interventions for self-harming behaviors and suicide within the detained offender population: a systematic review.//Journal for evidence based practice in correctional health. 1(2)- May, 2017 [Electronic resource]
URL: <https://opencommons.uconn.edu/jepch/vol1/iss2/3>
142. Sim J., Bartlam, B., Bernard, M. The CASP-19 as a measure of quality of life in old age: evaluation of its use in a retirement community.//Quality of life research/Springer Science-2011. [Electronic resource]
URL: <https://www.researchgate.net/publication/49763636>
143. Skowronski B. and Talik E. Quality of life and its correlates in people serving prison sentences in Penitentiary Institutions //International journal of environmental research and public health- 18 (1655) -2021. [Electronic resource]
URL: <https://doi.org/10.3390/ijerph18041655>
144. Slide, K. Scowcroft, L. and Dolan, B. The impact of exposure to suicidal behavior in institutional settings.//Nottingham Trent University, 2019.
145. Srinivasan, P. Elderly: depression and quality of life./Srinivasan, P., Dharna Patel [et al.] //International Journal of applied research- 1(13)-2015. p.538-540 [Electronic resource]
URL: www.allresearchjournal.com
146. Smith R.A. The determinants of quality of life in a sample of older adults living in independent living communities.//PhD dissertation, Wichita State University-May, 2015. [Electronic resource]
URL:[https://soar.wichita.edu/bitstream/handle/10057/11607/d15021_Smith.pdf;sequence=](https://soar.wichita.edu/bitstream/handle/10057/11607/d15021_Smith.pdf;sequence=1)
1

147. Snowdon, B.A. Can music, art and cultural events be effective as a rehabilitation tool for effective for altering mood and behavior in prison inmates?//Falmouth University-March, 2019. [Electronic resource]
 URL:[https://www.academia.edu/39906692/Can Music Arts and Cultural Events be effec tive as a rehabilitation tool for](https://www.academia.edu/39906692/Can_Music_Arts_and_Cultural_Events_be_effec tive_as_a_rehabilitation_tool_for)
148. Soosova, M.S. Determinants of quality of life in the elderly.//Central European Journal of Nursing and Midwifery -7(3)-2016. p.484-493 [Electronic resource]
 URL: https://cejnm.osu.cz/artkey/cjn-201603-0005_determinanty-kvality-zivota-u-seniorov.php
149. Status Paper on Prison, Drugs and Harm Reduction.//World Health Organization-2005
150. Spiro, A. III. The Relevance of a Lifespan Developmental Approach to Health. In C. M. Aldwin, C. L. Park, & A. Spiro III (Eds.), *Handbook of health psychology and ageing*. p.75–93. //The Guilford Press-2007. [Electronic resource]
 URL: <https://psycnet.apa.org/record/2007-03414-005>
151. Sun, K. Treating depression and PTSD behind bars. An interaction schema approach/Forensic CBT: A Handbook for clinical practice, chapter 22//John Willey and Sons, Ltd Published-2014.
152. Tajvar, M., Fletcher, A. and Grundy E. Exploring associations between Social support and Mental health in older people: A systematic narrative review.//International Journal on Ageing in Developing Countries, 1(2)- 2016. p.174-193 [Electronic resource]
 URL: <https://www.inia.org.mt/wp-content/uploads/2017/01/1.2-9-Iran-174-to-193-Final.pdf>
153. Talarska, D. Determinants of quality of life and the need for support for elderly with good physical and mental functioning. //Medical Science Monitor (24)-2018. p.1604-1613 [Electronic resource]
 URL: <https://www.medscimonit.com/abstract/index/idArt/907032>
154. Testoni, I. Mental health in prison: Integrating the perspectives of prison staff.//Testoni, I., Nencioni, I. et al.,//International Journal of Environmental Research and Public Health- 2021. [Electronic resource]
 URL: <https://doi.org/10.3390/ijerph182111254>
155. Theofilou P., Quality of life, definition and measurement.//Europe Journal of Psychology 9(1)-2013. p.150-162 [Electronic resource]
 URL: <https://ejop.psychopen.eu/index.php/ejop/article/view/337>

156. Time for a comprehensive and ambitious international framework on the human rights of older persons!//AGE platform Europe Policy Statement// June, 2022. [Electronic resource]
URL: <https://www.age-platform.eu/>
157. Tomar Sh. The psychological effects of incarceration on inmates: can we promote positive emotion in inmates.//Delhi Psychiatry Journal, 16(1)-April, 2013. p.66-72
158. [Van Ginneken, E.](#) The Life in Custody Study: the quality of prison life in Dutch prison regimes./Van Ginneken [E.](#), [Palmen,H.](#), et al// [Journal of Criminological Research, Policy and Practice](#), 4(4)-2018, p. 253-268. [Electronic resource]
URL: <https://www.researchgate.net/publication/328700690>
159. Vaportzis, E., and Gow, A. People's Beliefs and Expectations About How Cognitive Skills Change with Age: Evidence From a UK-Wide Aging Survey//The American Journal of Geriatric Psychiatry-2018
160. Veenhoven, R. The Four Qualities of Life. //Journal of Happiness Studies 1, p.1–39 – March.2000 [Electronic resource]
URL: springer.com/article/10.1023/A:1010072010360
161. Vitorino,L.M., Paskulin, L.M., Vianna, L.A. Quality of life of seniors living in the community and in long term care facilities: a comparative study.//Rev.Latino-Am.Enfermagen -2013.p.3-11[Electronic resource]
URL: www.eerp.usp.br/rlae
162. Viotti S.. Work-related stress among correctional officers: A qualitative study. Reading, Mass.-2016, 53(4), p.871–884. [Electronic resource]
URL:<https://doi.org/10.3233/WOR-152238>
163. Vogel, R. Dementia in Prison: an Argument for Training Correctional Officers// Doctoral Papers and Masters Projects. 220- 2016 [Electronic resource]
URL: https://digitalcommons.du.edu/capstone_masters/220
164. Wahidin, A., and Cain, M. (Eds.). Ageing, Crime and Society (1st ed.). London, Willan.Press-2006 [Electronic resource]
URL:<https://doi.org/10.4324/9781843925729>
165. Wangmo, T., Handtke, V., Bretschneider, W., and Elger, B. Improving the health of older prisoners: Nutrition and exercise in correctional institutions. //Journal of Correctional Health Care, 24(4)- 2018//p.352-364.

166. Ware, J.E. SF-36 Health Survey, Manual and Interpretation Guide.//Ware E.John, Snow K.Kristin et al.//The Health Institute, New England Medical Center -1993
167. World Health Organization. (2017). WHO guidelines on integrated care for older people (ICOPE). Geneva, WHO World Health Organization -2017. [Electronic resource]
URL:<https://www.who.int/publications/i/item/9789241550109>
168. Weiner B.I., Otto R.K. The handbook of forensic psychology, fourth edition. New Jersey, USA- 2013 [Electronic resource]
URL: <https://www.wiley.com/en-ie/The+Handbook+of+Forensic+Psychology,+4th+Edition-p-9781118348413>
169. Wiacek, M. Deterioration of basic coordinative parameters defines life quality of elderly./Magdalena Wiacek, Wojciech Hanger et al.//Archives of Gerontology and Geriatric (49)-2019. p.212-214 [Electronic resource]
URL: <https://www.sciencedirect.com/science/article/abs/pii/S0167494308001635>
170. Wiggins R.D. Quality of life in the third age: key predictors of the CASP-19 measure/ Wiggins R.D. Higgs Paul F.D. et al.//Ageing and society (24) //Cambridge University Press - 2004. p.693-708 [Electronic resource]
URL:<https://doi.org/10.1017/S0144686X04002284>
171. Williams, B. A. Aging in Correctional Custody: Setting a Policy Agenda for Older Prisoner Health Care.//Williams Brie A., Stern Marc F.et al.//American Journal of Public Health 102(8)- August, 2012. p.1475-1481[Electronic resource]
URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3464842/>
172. Williams, B. A., Goodwin, J. S., Baillargeon, J., Ahalt, C., and Walter, L. C. Addressing the aging crisis in U.S. criminal justice health care. //Journal of the American Geriatrics Society- 2012, 60(6),p.1150–1156. [Electronic resource]
URL: <https://doi.org/10.1111/j.1532-5415.2012.03962.x>
173. Williams, B. A., Ahalt, C., and Greifinger, R. The older prisoner and complex chronic medical care. //Prisons and health//p.165-170 [Electronic resource]
URL: https://www.euro.who.int/_data/assets/pdf_file/0007/249208/Prisons-and-Health,-19-The-older-prisoner-and-complex-chronic-medical-care.pdf
174. WHO, Guidelines on Integrated Care for Older People// January, 2017 [Electronic resource]
URL: <https://www.who.int/publications/i/item/9789241550109>

175. WHO QOL-BREF Instruction, World Health Organization, Geneva- 1996,1998 [Electronic resource]
URL:<https://www.who.int/tools/whogol>
176. WHO QOL-SRPB, Users manual, Scoring and Coding for the WHOQOL SRPB Field instrument, World Health Organization, Geneva- 2002
177. World Health Statistics-2017//Monitoring Health for the SDG(Sustainable development goals)// WHO-2017
178. World Population Ageing 2013.// Department of Economic and Social Affairs Population Division. United Nations, New York, 2013. [Electronic resource]
URL:<https://www.un.org/en/development/desa/population/publications/pdf/ageing/WorldPopulationAgeing2013.pdf>
179. Woo, Y. An empirical test of the social support paradigm on male inmate society. // Youngki Woo, Mary. K.Stohr, Craig Hemmens [et al.] //International Journal of Comparative and Applied Criminal Justice-2016, 40(2),p.145-169. [Electronic resource]
URL: <https://doi.org/10.1080/01924036.2015.1089518>
180. Yarnell, S.C., Kirwin, P.D., and Zonana, H.V. Geriatrics and Legal System. //The Journal of the American Academy of Psychiatry and the Law (45)-2017.p.208-217
181. Yates, J. and Gillespie, W. The elderly and prison policy.//Journal of Ageing and Social Policy- February, 2000. p.167-175[Electronic resource]
URL: www.researchgate.net/publication/12146093
182. Yoon, I.A., Slade,K. and Fazel S. Outcomes of Psychological Therapies for Prisoners with mental health problems: A systematic review and meta-analysis.// Journal of consulting and clinical psychology- June, 2017 [Electronic resource]
URL: <http://dx.doi.org/10.1037/ccp0000214>
183. Zaninotto P, Falaschetti E, Sacker A. Age trajectories of quality of life among older adults: results from the English Longitudinal Study of Ageing. //Qual Life Res. 2009 Dec;18(10):1301-9. URL: <https://pubmed.ncbi.nlm.nih.gov/19806468/>
184. Aslan, M. & Hocoğlu, Ç. Yaşlanma ve Yaşlanma Dönemiyle İlişkili Psikiyatrik Sorunlar . Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi , 7 (1)-2017, 53-62 .
<https://dergipark.org.tr/tr/pub/duzcesbed/issue/31210/339576>
185. Aslan M. , Hocoğlu Ç. Yaşlılarda İntihar Davranışı. Psikiyatride Güncel Yaklaşımlar - Current Approaches in Psychiatry. 2014; 6(3): 294-309.

Appendix 1. Demographic features of the participants

	N=200	frequency	percent
age	<60	32	16%
	>60	168	84%
total		200	100%
Education level	illiterate	9	4,5%
	1-9	54	29%
	10-11	78	39%
	Diploma and above	59	29,5%
total		200	100%
Types of crime that committed	murder	90	45%
	Sexual assault	7	3%
	Conflict	28	14%
	robbery	5	2%
	Drug traffic	58	29%
	others	12	6%
total		200	100%
Duration of the improsenment	Till 3 years	12	6,5%
	3-5 years	14	7%
	5-10 years	87	43%
	10-15 years	60	30%
	More than 15 years and life sentence	27	13,5%
total		200	100%
regime	common	83	41,5%
	strict	97	48,5%
	severe	20	10%
total		200	100%

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: _____ DATE: _____

Over the last 2 weeks, how often have you been bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly everyday
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, irritable, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite, weight loss, or overeating	0	1	2	3
6. Feeling bad about yourself - or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as school work, reading, or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite - being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself in some way	0	1	2	3

add columns: + +

TOTAL:

10. If you checked of any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all	_____
	Somewhat difficult	_____
	Very difficult	_____
	Extremely difficult	_____

PHQ-9 is adapted from PRIME MD TODAY, developed by Drs Robert L. Spitzer, Janet B.W. Williams, Kurt Kroenke, and colleagues, with an educational grant from Pfizer Inc. For research information, contact Dr Spitzer at rls8@columbia.edu. Use of the PHQ-9 may only be made in accordance with the Terms of Use available at <http://www.pfizer.com>. Copyright ©1999 Pfizer Inc. All rights reserved. PRIME MD TODAY is a trademark of Pfizer Inc.

Questionnaire form with elderly inmates

1	Name, surname	
2	Date of birth, age	
3	Article of imprisonment	
4	Length of conviction	
5	Are you suffering any disease?	
6	Are you respected, treated differently in sentence for your age factor ?	
7	Are you satisfied medical service in prison?	
8	Are you satisfied personalle of prisons attitude?	
9	Are you satisfied other prisoners' relation?	
10	Can you communicate with family members and relatives?	
11	Do your family members and relatives visit you short-term?	
12	Do your family members and relatives visit you long-term (3 days)?	
13	How can you describe your daily mood?	
14	How can you describe your future plan?	

**WORLD HEALTH ORGANISATION
QUALITY OF LIFE**

WHOQOL- BREF
Australian Version (May 2000)

Instructions:

This assessment asks how you feel about your quality of life, health, and other areas of your life. Please answer all the questions. If you are unsure about which response to give to a question, please choose the one that appears most appropriate. This can often be your first response.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the **last two weeks**.

Do you get the kind of support from others that you need?				
Not at all 1	Slightly 2	Moderately 3	Very 4	Completely 5

You would circle the number 4 if in the last two weeks you got a great deal of support from others.

If you did not get any of the support from others that you needed in the last two weeks you would circle 1.

Thank you for your help.

Please read the question, assess your feelings, for the last two weeks, and circle the number on the scale for each question that gives the best answer for you.

		Very poor	Poor	Neither poor nor good	Good	Very good
--	--	-----------	------	-----------------------	------	-----------

1	How would you rate your quality of life?	1	2	3	4	5
		Very dissatisfied	Fairly Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2	How satisfied are you with your health?	1	2	3	4	5

The following questions ask about how much you have experienced certain things in the **last two weeks**.

		Not at all	A Small amount	A Moderate amount	A great deal	An Extreme amount
3	To what extent do you feel that physical pain prevents you from doing what you need to do?	1	2	3	4	5
4	How much do you need any medical treatment to function in your daily life?	1	2	3	4	5
5	How much do you enjoy life?	1	2	3	4	5
6	To what extent do you feel your life to be meaningful?	1	2	3	4	5

		Not at all	Slightly	Moderately	Very	Extremely
7	How well are you able to concentrate?	1	2	3	4	5
8	How safe do you feel in your daily life?	1	2	3	4	5
9	How healthy is your physical environment?	1	2	3	4	5

		Not at all	Slightly	Somewhat	To a great extent	Completely
10	Do you have enough energy for everyday life?	1	2	3	4	5
11	Are you able to accept your bodily appearance?	1	2	3	4	5

12	Have you enough money to meet your needs?	1	2	3	4	5
13	How available to you is the information you need in your daily life?	1	2	3	4	5
14	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

		Not at all	Slightly	Moderately	Very	Extremely
15	How well are you able to get around physically?	1	2	3	4	5

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the **last two weeks**.

		Very Dissatisfied	Fairly Dissatisfied	Neither Satisfied nor Dissatisfied	Satisfied	Very satisfied
16	How satisfied are you with your sleep?	1	2	3	4	5
17	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18	How satisfied are you with your capacity for work	1	2	3	4	5
19	How satisfied are you with yourself?	1	2	3	4	5
20	How satisfied are you with your personal relationships?	1	2	3	4	5
21	How satisfied are you with your sex life?	1	2	3	4	5
22	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24	How satisfied are you with your access to health services?	1	2	3	4	5

25	How satisfied are you with your transport?	1	2	3	4	5
----	--	---	---	---	---	---

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

		Never	Infrequently	Sometimes	Frequently	Always
26	How often do you have negative feelings such as blue mood, despair, anxiety or depression?	1	2	3	4	5

WHOQOL-BREF (Azerbaijan language version)

Domain (sfera)	Sfera ilə bağlı aspektlər
Fiziki sfera	Gündəlik aktivlik Dərman və tibbi yardımdan asılılıq Enerji və yorğunluq Hərəkətlilik Ağrı və diskomfort Yuxu və istirahət İş imkanları
Psixoloji sfera	Xarici görüşün və təsvir Mənfi hisslər Müsbət hisslər Özünü qiymətləndirmə Din/şəxsi inanclar Düşünmə, öyrənmə, yaddaş və konsentrasiya
Sosial əlaqələr	Şəxsi əlaqələr Sosial dəstək Cinsi aktivlik
Ətraf mühit	Maddi mənbələr Azadlıq, fiziki təhlükəsizlik və mühafizə Tibbi və sosial qayğı: əlçatanlıq və keyfiyyət Ev mühiti Yeni informasiya və bacarıqların əldə edilməsi imkanları İstirahət imkanları/ asudə vaxt fəaliyyəti Fiziki ətraf mühit (çirklənmə/səs-küy/tıxac/iqlim) Nəqliyyat

Son 2 həftə ərzində həyatınızı xatırlayaraq aşağıdakı suala cavab verməyinizi xahis edirik:

	Ehtiyacınız olan dəstəyi ətrafdakılardan ala bilərsinizmi?	Həmişə yox 1	Çox yox 2	Orta dərəcəli 3	Bir qədər çox 4	Tamamilə 5
--	--	-----------------	--------------	--------------------	--------------------	---------------

Əgər son iki həftə ərzində heç bir dəstək ala bilməmişinizsə 1, kifayət qədər dəstək almırsızsa 4 rəqəmini dairəyə alın.

Zəhmət olmasa hər bir sualı oxuyun və sizə daha çox uyğun olan cavabı qeyd edin:

		Çox aşağı 1	aşağı 2	orta 3	yaxşı 4	Çox yaxşı 5
(G1)	Həyat keyfiyyətinizi necə qiymətləndirərdiniz?					

		Çox narazı 1	narazı 2	orta 3	Məmnun 4	Çox məmnun 5
(G4)	Sağlamlığınızdan nə dərəcədə məmnunsunuz?					

Aşağıdakı suallar son 2 həftə ərzində müəyyən hadisələri nə qədər yaşadığınızı təsvir edir:

		Heç bir halda	Çox az	Müəyyən hallarda	çox	Hədsiz dərəcədə
3 (F1.4)	Fiziki ağrılarınızın ehtiyacınız olan fəaliyyətdən sizi ayırdığını hiss edirsinizmi?	1	2	3	4	5
4 (F11.3)	Gündəlik həyatınızda hansısa tibbi müalicəyə ehtiyac olduğunu hiss edirsinizmi?	1	2	3	4	5
5 (F4.1)	Həyatınızdan nə qədər həzz alırsınız?	1	2	3	4	5
6 (F24.2)	Həyatınızın dəyəərə malik olduğunu hansı səviyyədə hiss edirsiniz?	1	2	3	4	5

		Heç bir halda	Çox az	Müəyyən hallarda	çox	Hədsiz dərəcədə
7 (F5.3)	Diqqətinizi necə cəmləyə bilərsiniz?	1	2	3	4	5
8 (F11.3)	Gündəlik həyatınızda nə dərəcədə təhlükəsiz hiss edirsinizmi?	1	2	3	4	5
9(F4.1)	Fiziki mühitiniz nə qədər sağlamdır(physical environment)?	1	2	3	4	5

		Heç bir halda	Çox az	Müəyyən hallarda	çox	Hədsiz dərəcədə
10(F2.1)	Gündəlik həyatınızda kifayət qədər enerjiniz varmı?	1	2	3	4	5
11 (F7.1)	Xarici görünüşünüzü qəbul edirsinizmi?	1	2	3	4	5

12 (F18.1)	Ehtiyaclarınızı ödəmək üçün kifayət qədər pula maliksinizmi?	1	2	3	4	5
13 (F20.1)	Günbəgün sizə lazım olan informasiya nə qədər əlçatandır?					
14 (F21.1)	Asudə vaxt fəaliyyəti üçün nə dərəcədə imkana sahibsiniz?					

		Çox aşağı	aşağı	orta	yaxşı	Çox yaxşı
15(F9.1)	Ətrafda gəzişmək imkanının nə dərəcədədir?	1	2	3	4	5

Aşağıdakı suallar son 2həftə ərzində həyatınızın müxtəlif aspektlərindən nə dərəcədə məmnun olduğunuzu təsvir edir

		Çox narazı	narazı	orta	Məmnun	Çox məmnun
16 (F3.3)	Yuxunuzdan nə dərəcədə məmnunsunuz?	1	2	3	4	5
17 (F10.3)	Gündəlik fəaliyyətinizi icra etmək bacarıqlarınızdan nə dərəcədə məmnunsunuz?	1	2	3	4	5
18 (F12.4)	İş bacarıqlarınızdan nə dərəcədə məmnunsunuz?	1	2	3	4	5
19 (F6.3)	Özünüzdən nə dərəcədə məmnunsunuz?	1	2	3	4	5
20 (F13.3)	Şəxsi münasibətlərinizdən nə dərəcədə məmnunsunuz?	1	2	3	4	5

21 (F15.3)	Cinsi həyatınızdan nə dərəcədə məmnunsunuz?	1	2	3	4	5
22 (F14.4)	Dostlarınızdan aldığınız dəstəkdən nə dərəcədə məmnunsunuz?	1	2	3	4	5
23 (F17.3)	Yaşadığınız yerdən nə dərəcədə məmnunsunuz?	1	2	3	4	5
24 (F19.3)	Tibb xidmətindən istifadənidən nə dərəcədə məmnunsunuz?	1	2	3	4	5
25 (F23.3)	Nəqliyyatdan nə dərəcədə məmnunsunuz?	1	2	3	4	5

Aşağıdakı sual son 2 həftə ərzində bu emosiyanın nə qədər tezliklə yaşandığını müəyyən edir:

		Heç vaxt	Təsadüfən	Tez-tez	Lap tez-tez	Mütəmadi
26 (F8.1)	Əhval ruhiyyənizin aşağı olması, məyusluq, təşviş, depressiya halları nə qədər tezliklə yaşanır?	1	2	3	4	5

Sorğu nümunəsini doldurmaqda sizə kimsə kömək etdimi? _____
 Sorğunu doldurmaq nə qədər vaxtınızı aldı? _____

Qiymətləndirmə ilə bağlı hansısa şərhləriniz varmı?

Yardım etdiyiniz üçün təşəkkürlər