

**THE DETERMINANTS OF QUALITY OF LIFE IN OLDER ADULTS OF
CORRECTIONAL FACILITIES****Gulshan Aliyeva**Baku State University, PhD student
23 Zahid Xalilov Street, Baku 1148**Abstract**

The growing number of older prisoners has become a global challenge (Brie W., Cyrus A., Robert G., 2012). Over the past decade, there has been a concurrent disproportionate growth in the number of older prisoners. These figures were observed in the USA, Japan, Spain, United Kingdom and other countries statistics (William B., 2012). The arrest and sentencing of older adults are on the rise, and researchers consider prisoners to be older, or geriatric, by the age of 50 or 55 years (Aday R. 2003, Williams B. 2010, Besdine R. 2005). Older prisoners are likely to suffer from geriatric syndromes, falls, sensory impairment, incontinence, mental illness, depression, and other disease than other population in prison and society (Landefeld CS. 2004, Greinfinger R. 2007).

The main target of the research is to investigate QOL (quality of life) determinants of older offenders in Azerbaijan prisons. This research is the first step in Azerbaijan Penitentiary service to evaluate geriatric symptoms and QOL elements.

The objectives of the research: 1) descriptive and comparative analysis of different international literature, articles, policy papers, 2) explanatory investigation survey results analyzed during the study.

For this purpose WHOQOL-Bref survey instrument was used to assess determinants of quality of life. This survey contents four domains: Physical, Psychological, Social Relationships and environment, and the data was examined with SPSS program.

Considering the results of survey and comparing different literatures the some recommendation were made, that can be used in different programs and future researches.

Key words: Quality Of Life, Prisoners, Older Adults In Prison, Psychological Determinants Of Quality Of Life

Özet

Artan sayıda yaşlı mahpus küresel bir zorluk haline gelmişti (Brie W., Cyrus A., Robert G., 2012). Son on yılda, yaşlı mahkumların sayısında eşzamanlı orantısız bir artış oldu. Bu rakamlar ABD, Japonya, İspanya, Birleşik Krallık ve diğer ülke istatistiklerinde gözlemlenmiştir (William B., 2012). Yaşlı yetişkinlerin tutuklanması ve cezalandırılması artıyor ve araştırmacılar mahkumların 50 veya 55 yaşlarında daha yaşlı ve ya geriatric olduğunu düşünüyor (Aday R. 2003, Williams B. 2010, Besdine R. 2005). Yaşlı mahpuslar, hapisane ve toplumdaki diğer popülasyondan daha çok, geriatric sendromlar, duyu bozukluklar, idrar kaçırma, akıl hastalıkları, depresyon ve diğer hastalıklardan eziyet çekiyorlar (Landefeld CS. 2004, Greinfinger R. 2007).

Araştırmanın ana hedefi, Azerbaycan hapisanelerindeki yaşlı suçluların QOL (yaşam kalitesi) belirleyicilerini araştırmaktır. Araştırmanın amaçları: 1) farklı uluslararası literatürün,

makalelerin, politika belgelerinin tanımlayıcı ve karşılaştırmalı analizi, 2) çalışma sırasında analiz edilen açıklayıcı araştırma anket sonuçları.

Bu amaçla WHOQOL-Bref anket aracı yaşam kalitesinin belirleyicilerini değerlendirmek için kullanıldı. Bu anket, Fiziksel, Psikolojik, Sosyal İlişkiler ve Çevre olmak üzere dört alan içermektedir ve veriler SPSS programı ile incelenmiştir.

Anket sonuçları dikkate alınarak ve farklı literatürleri karşılaştırarak, farklı programlarda ve gelecekteki araştırmalarda kullanılabilecek bazı önerilerde bulunulmuştur.

Açar sözcükler: yaşam kalitesi, suçlu, ceza evlerinde yaşlı suçlular, yaşam kalitesi psikolojik faktörleri.

1. Introduction

Quality of life is a concept that includes different spheres. This contains the expectations of individual or society for better life, and determined by values, goals, socio-cultural content of the environment, family, education, work, environment, freedom. Moreover it is multifaceted concept that combines emotional, material, physical and social well-being. This concept should not be equated with the level of income. The World Health Organization explained the concept of quality of life by how the person perceives his or her position in the context of the cultural and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, personal beliefs, social relationships and relationship to environment.

In different research quality of life has been mentioned 4 main spheres, and sub-spheres: ecology, economics, politics and culture (Magee Liam; James Paul; Scerri Andy; 2012).

2. Literature review

Within this literature chapter, older prisoners and their current QoL (quality of life) state in different research papers, articles were mentioned. Moreover a review of the academic literature and include discussions of QoL in older age of older prisoners, which guides this research to formulate research questions.

The concept of "quality of life" was first reflected in 1920 in the book of economic prosperity of A.C. Pigou. This concept was not adopted until the end of World War II. However, after expanding the concept of health, WHO also introduced the concept of quality of life and explained it as a cultural and value system in the current situation in which a person lives. Criteria for measuring and assessing quality of life developed in the second half of the last century (McCall, 2005; Ruzevicius, 2012). The author emphasizes that the development of society, changes in the value system also lead to changes in the content of the concept of quality of life. In the research work, he directly related to the impact of working conditions on the concept of quality of life, emphasized that this aspect of the problem has not been developed, and conducted a study with 50 employees in a small industrial organization.

Explaining the measurement of objective and subjective factors of quality of life, M. Farquhar emphasized that objective factors are far from the bias of the observer and that the results are more measurable and reliable. Factors such as crime, income, housing density are objective, job satisfaction, health and perception of the inner world are subjective parameters. The research consisted of 3 stages: in the first stage, older people explained how they

understood the concept of "quality of life". In the second phase, in-depth and unorganized surveys were conducted with 40 elderly people. In the third stage, group discussions were held on quality of life.

- How would you describe the concept of quality of life?
- What does your quality of life include?
- What are the factors that improve the quality of life?
- What are the factors that worsen the quality of life?

Responses from participants were "very positive", "quite positive", "neutral", "negative", and "very negative". When calculating the results, 40% rated it as very good, 21% as good, 23% as neutral, daily variable, 1% as negative, and 15% as very low. To the question of what constitutes the concept of quality of life, 65-85, 85+ age groups in both families, children (34%), activities (29%), other social relations (25%), health (10%), financial security (10%) formed a sequence of answers. The family factor was also emphasized in the interviews with them. Loss of loved ones, disruption of social ties, illness, helplessness, and financial problems were cited as factors worsening the quality of life in both age groups.

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 identified (Claire de Motte, 2015). 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 prisons (Crawley and Sparks 2005). 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 Manganeli 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 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.

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 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 people (Parmelee PA, Harralson TL, Smith LA, Schumacher HR.).

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 people.

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 (Landefeld et al., 2004). 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 disorders (Koenig, Johnson, Bellard, Denker, & Fenlon, 1995). In prison, 15% of inmates of all ages have serious mental illness, such as schizophrenia (Aday, 2003; Lurigio, Rollins, & Fallon, 2004).

In the United Kingdom, a study of older male inmates investigated the psychological impact of incarceration. Elderly "first-timers" were frequently found to be anxious, depressed, and to experience incarceration as a form of psychological trauma (Crawley & Sparks, 2006). After a long incarceration, older prisoners may also lose contact with the outside world and become "institutionalized," leading to significant anxiety about the possibility of release (Aday, 2003; Crawley & Sparks, 2006).

An analysis of the literature shows that the quality of life of older prisoners is closely linked to their environment, relationships, social status, care of close relatives, and financial situation. These factors also affect their mental health, that leads to a number of mental disorders.

3. Data and methods

This article primarily employs data from survey, QOL and depression measurement scale results. It was conducted in 3 prisons in Azerbaijan, 2020. In total 54 inmates from 2 different regime were interviewed.

The survey is divided by 8 following components related to the prison life and relationships:

- 1) The environmental factors in prisons,
- 2) Health conditions
- 3) Level of interpersonal relationships with prison staff and other inmates
- 4) Level of support and communication with family members,
- 5) The type visits (short and long visits),
- 6) Daily mood,
- 7) Depression level,
- 8) Hope for future

Long-lasting and with moderate or severe intensity, depression may become a serious health condition. It can cause the affected person to suffer greatly and function poorly at work, at school and in the family. At its worst, depression can lead to suicide (WHO, 2018). Considering that it is short and easy for respondents, and can be applied in multiple patient populations, so Patient Health Depression Questionnaire (PHQ-9) was used to determine depression level of inmates.

The third questionnaire QOL measurement scale was Likert scale, and consists of 26 questions in 4 domains: physical health, psychological, social relationships, and environment.

The first stage of the analysis was descriptive; percentage results of questionnaire and measurement scales were presented in tables. Next, variables such as regime, health condition, family support, and visits, depression level were tested. Here I tried to find answer the main question- what kind of factors influence elderly inmates quality life level, so use correlation to see such an association.

Research questions:

- How the main items of QOL (physical, psychological, social relationship, and environmental domains) of elderly inmates be observed in prison?
- What is the main difference between 2 different regime conditions, and their influence to inmates QOL scores?
- How it can be describes any association between depression score and QOL features?

4. Limitation:

Before discussing the findings, limitations of the study were mentioned:

- Limited numbers of participants;
- Limited number of regime (only 2);
- Research aimed to distinguish limited psychological factors influence to QOL;

5. Result and conclusion:

As it mentioned above “Quality of life measurement scale” consists of 26 questions in 4 domains: physical health, psychological, social relationships, and environment. Each of these domains items were described in the tables:

I group- Physical health

In this group, 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. Descriptive analysis of this figures show that, inmates in those prisons aren't satisfy their health, sleep, capacity of work, daily activity, and they mentioned their need to medical treatment.

Table 1. Physical health

How satisfied are you with your health?	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
	-	32 (59%)	22 (40,7%)	-	-
To what extent do you feel that physical pain prevents you from doing what you need to do?	Not at all	A little	A moderate amount	Very much	An extreme
	1 (1,9%)	5 (9,3%)	25 (46,3%)	23 (42,6%)	-
How much do you need any medical treatment to function in your daily life?	-	6 (11,1%)	13 (24,1%)	33 (61,1%)	2 (3,7%)
Do you have enough energy for everyday life?	Not at all	A little	Moderately	Mostly	Completely
	-	24 (44,4%)	30 (55,6%)	-	-
How satisfied are you with your sleep?	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
	5 (9,3%)	28 (51,9%)	20 (37,0%)	1 (1,9%)	-
How satisfied are you with your ability to perform your daily living activities?	2 (3,7%)	23 (42,6%)	22 (40,7%)	7 (13,0%)	-
How satisfied are you with your capacity for work?	5 (9,3%)	18 (33,3%)	26 (48,1%)	5 (9,3%)	-

II 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. Elderly inmates who thought their quality of life is good, and enjoy their life, are satisfied themselves; their percentage is lower than prisoners who appreciate those items with poor marks.

Unfortunately, nearly 68% of them mentioned negative feelings as anxiety, depression quite often and very often in their daily lives.

Table 2. Psychological domain

How would you rate your quality of life?	Very poor	Poor	Neither poor nor good	Good	Very good
	1 (1,9%)	27 (50,0%)	21 (38,9%)	5 (9,3%)	
How much do you enjoy life?	Not at all	A little	A moderate amount	Very much	An extreme amount
		32 (59,3%)	22 (40,7%)		
To what extent do you feel your life to be meaningful?	1 (1,9%)	32 (59,3%)	19 (35,2%)	2 (3,7%)	
How well are you able to concentrate?		17 (31,5%)	31 (57,4%)	6 (11,1%)	
Are you able to accept your bodily appearance?	Not at all	A little	Moderately	Mostly	Completely
		20 (37%)	33 (61,1%)	1 (1,9%)	
How satisfied are you with yourself?	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
	7 (13%)	23 (42,6%)	18 (33,3%)	6 (11,1%)	
How often do you have negative feelings such as blue mood, despair, anxiety, depression?	Never	Seldom	Quite often	Very often	Always
		16 (29,6%)	16 (29,6%)	21 (38,9%)	

III group- Social relationship domain (Personal relationships, Social support and Sexual activity)

As the literature review highlighted social relationship of elderly inmates influence their quality of life, if their interpersonal relationship is good enough, their quality of life level will be observed in high level. This table figures let us say that inmates who were satisfied their personal relationships, sex life and support from friends, their percentages' were extremely lower than who're dissatisfied all of these factors.

Table 3- social relationship domain features

How satisfied are you with your personal relationships?	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
	13 (24,1%)	26 (48,1%)	10 (18,5%)	5 (9,3%)	
How satisfied are you with your sex life?	37 (68,5%)	16 (29,6%)	1 (1,9%)		
How satisfied are you with the support you get from your friends?	10 (18,5%)	26 (48,1%)	10 (18,5%)	8 (14,8%)	

IV 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. These questions covered environmental factors in prisons, but the results of survey show that their attitude to prison environment, and opportunities were poor.

Table 4- Environment domain

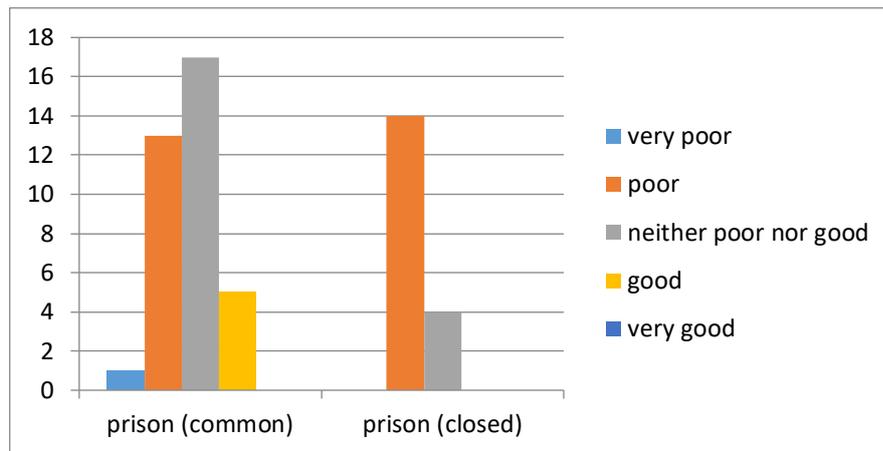
How safe do you feel in your daily life?	Not at all	A little	A moderate amount	Very much	Extremely
		22 (40,7%)	29 (53,7%)	3 (5,6%)	
How healthy is your physical environment?		25 (46,3%)	27 (50%)	2 (3,7%)	
Have you enough money to meet your needs?	3 (5,6%)	39 (72,2%)	12 (22,2%)		
How available to you is the information that you need in your day-to-day life?		39 (72,2%)	15 (27,8%)		
To what extent do you have the opportunity for leisure activities?		23(42,6%)	25 (46,3%)	6 (11,1%)	
How well are you able to get around?	2 (3,7%)	16 (29,6%)	19 (35,2%)	17 (31,5%)	
How satisfied are you with the conditions of your living place?	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
	9 (16,7%)	24 (44,4%)	21 (38,9%)		
How satisfied are you with your access to health services?	7 (13%)	22 (40,7%)	24 (44,4%)	1 (1,9%)	
How satisfied are you with your transport?		7 (13%)	47 (87%)		

The second step of the analyses I tried to answer one the main research question- how the regime of the prison influence their thought about quality of life?

Regime vs quality of life

In order to check the assumption of whether regime of the prison was specific in inmates' quality of life level, following analysis was undertake. Regime 1- that allow prisoners to walk, to contact, to communicate with others more than 2nd regime, these inmates results were higher than the second group, respectively ($\chi^2= 13,86$; $df=6$, $p=0,031$). The bar chart let us say that the regime and prison condition influence their quality of life attitude. People who are in closed condition, who have limited numbers of relatives visits and phone call, their QOL features' are poor.

Table 5. Quality of life level in different regime



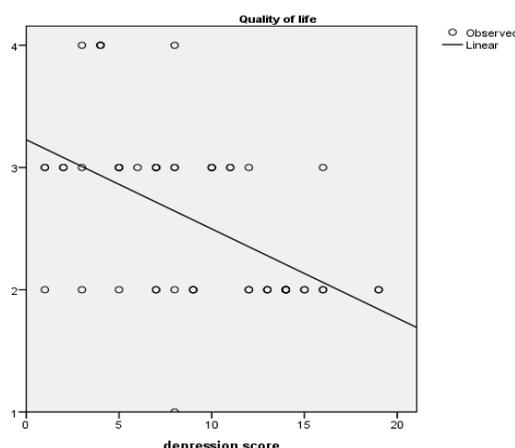
Depression level vs. Quality of life

The third research question of the paper was about association between two variables- depression and quality of life score. The literature review let me say that, depressed inmates present with significant deficits in many areas of social functioning (e.g., leisure, work, interpersonal relations, health status and academic performance), symptoms of depressive mood influence their QOL domains (Marcelo T., 2007).

The inmates whose quality of life was poor, their depression score was $11,81 \pm 4,48$; who thought that their quality of life was neither poor or good, their depression score was $7 \pm 3,9$; another hand, inmates whose quality of life was good, their results was $4,6 \pm 1,94$. In this case, the results justified that, people whose quality of life points are higher than another group member whose results are low; their depression score is significantly less than the second one. (Considering limitation of the number of participants, the results can't be ascribing for all population of the prisons)

When the results of depression scale and QOL survey described, and compared, there was realized negative correlation (Pearson $r = -0,51$; $\chi^2 = 19,9$; $df = 9$; $p = 0,019$). So we can say that, there is negative correlation inmates depression level and QOL feature, higher depression level assosiate low level of quality of life features.

Fig.1 Scree plot (quality of life and depression score)



Testing main research questions, and comparing results, we can conclude that the quality of life level of inmates connected their mental health, depression level (in this case), regime condition in the prison. The measurement results were consistent with literature review analysis. Based on this research we can continue analyses to test the other features of mental health and association among quality of life domains.

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