

QUALITY OF LIFE AMONG FEMALE PRISONERS IN SERBIA: GENERAL FINDINGS FROM THE PrisonLIFE PROJECT

Milena Milićević

Senior Research Associate, Institute of Criminological and Sociological Research,
Belgrade, Serbia¹⁰⁹

Abstract: Continued evaluation of quality of life is important for developing timely interventions, as research consistently shows that the well-being of female prisoners and rehabilitation outcomes are closely connected. Conducted within the PrisonLIFE project (No. 7750249, Science Fund of the Republic of Serbia), this study aimed to explore general dimensions of the quality of life of incarcerated women in Serbia. Data were collected using the Serbian version of the WHOQOL-BREF instrument, administered to 88 inmates at the Correctional Institution for Women in Požarevac. The average participant age was 39 years 7 months ($SD = 10$ years 10 months, range = 21–74), with an average sentence length of 6 years and 3 months ($SD = 7$ years 5 months, range = 2 months–40 years). A majority were first-time offenders (80%), housed in the closed ward (74%), and Serbian nationals (94%). The most common convictions were for drug-related offences (32%), followed by aggravated murder (11%) and murder (8%). Most had completed secondary education (48%), and nearly half had a history of drug use (47%). Among the WHOQOL-BREF domains, the Environment received the lowest mean score ($M = 11.22$), followed by Physical Health ($M = 12.97$). The highest-rated domains were Psychological Health ($M = 13.78$) and Social Relationships ($M = 13.90$). Item-level analysis showed the lowest satisfaction in areas related to sexual life, access to healthcare services, and the healthiness of the physical environment and living conditions. Conversely, inmates reported higher satisfaction with social support from friends, acceptance of their physical appearance, physical mobility and the ability to perform daily living activities. In line with the recognised need for gender-specific approaches in prison health, these findings point to specific concerns regarding institutional living conditions and healthcare access. Therefore, there is a need for improved environmental standards and gender-sensitive healthcare policies in the Serbian prison system.

Keywords: Quality of Life, Female Prisoners, Prison Health, WHOQOL-BREF, Serbia

Introduction

Female prisoners face a high burden of mental health problems, such as anxiety, depression, substance abuse, trauma, and suicidal behaviour, which strongly affect their quality of life (Faquim et al., 2020; Hidayati et al., 2021; Zhong et al., 2020). Previous research indicates that the issues of health inequalities and complex needs are central to their quality of life (Bartlett & Hollins, 2018; McCann et al., 2019). Prison conditions are also listed among key components of the quality of life of female prisoners, in addition to their health status (Miloni & Geitona, 2017). In the literature, there are findings about emotional and relational factors, including loneliness and social disconnection, as central features of the quality of life of female prisoners (Esposito, 2015). A number of scholars have highlighted concerns about substandard nutrition, overcrowding, and poor hygiene in prisons, as well as the neglect of gender-specific health needs, particularly in the areas of maternal and reproductive health, and the limited or no access to adequate prison- or community-based healthcare services

¹⁰⁹ mileninaadresa@gmail.com

(Bartlett & Hollins, 2018; Van Hout & Mhlanga-Gunda, 2018). The most well-known definition of quality of life dates back three decades, and according to that definition, quality of life is an “individuals’ perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns” (WHOQOL Group, 1995, p. 1405). As defined, it encompasses four dimensions: physical, psychological, social, and environmental. However, imprisonment can have a significant impact on the quality of life for individuals within the prison system (Jovanić et al., 2020; Slotboom et al., 2011). Prison deprivations, which include deprivations of autonomy, freedom, and social contact, among others, contribute to a decrease in the quality of life of imprisoned individuals (Edgemon & Clay-Warner, 2019).

Various factors can have an influence on prisoners’ overall quality of life. Wondimu et al. (2023) have emphasised the critical role of mental health, social support, economic opportunities, longer durations of imprisonment, and dietary quality, whereas Arifin et al. (2020) have found that spirituality plays a significant role in shaping the quality of life of female prisoners, with higher levels of spiritual engagement being positively associated with better overall well-being. At the same time, aspects of prisoners’ quality of life are highly relevant to understanding the general prison climate. For example, staff-prisoner relationships were identified as the most influential factor affecting the well-being and development of prisoners (Milićević, Ilijić, et al., 2024). According to Prost et al. (2020), the psychological aspect of the quality of life is the strongest determinant of overall quality of life, considering that mental health and emotional well-being have a central role in incarcerated populations. Furthermore, opportunities for meaningful engagement in daytime activities (Van Der Kaap-Deeder et al., 2017), and environmental conditions, including safety and recreational opportunities, were also key contributors, as well as psychological well-being, such as self-esteem, and physical health factors like mobility and pain management (Milićević, Ilijić, et al., 2024). Regarding living conditions, some of the environmental and systemic factors noted as important for the quality of life in female prisons are accommodation, cleanliness, nutrition and overall prison environment (Miloni & Geitona, 2017).

Previous research conducted in Serbia has reported gender-based differences in how prisoners perceive their quality of life (Ilijić et al., 2024; Milićević et al., 2023). Male prisoners tended to rate their psychological and physical health more positively, in contrast to female prisoners who reported higher scores for social relationships. It is important to note that both groups consistently rated environmental quality of life, which encompasses safety, resources, and conditions, as the lowest. In U.S. prisons, for example, women also reported significantly lower quality of life than men, particularly in the physical health and psychological domains (Prost et al., 2020). Furthermore, Ilijić et al. (2024) reported that male prisoners generally rated their quality of life and health more positively than female prisoners. One-third of men gave neutral ratings, and another third rated their quality of life as good or very good, while nearly 40% of women rated theirs as poor or very poor. Similarly, about half of the men were satisfied with their health, compared to nearly half of the women who reported dissatisfaction. Overall, disparities in physical and mental health directly impact their overall well-being and quality of life (McCann et al., 2019).

Based on previous research, there is a need for context-specific research. This study explores the quality of life reported as reported by female prisoners in Serbia to better understand their lived experiences.

Methods

Procedure

This study was conducted within the national PrisonLIFE research project. The Ethics Committee of the Institute for Criminological and Sociological Research (No. 103/2020, 38c/2022, 274/2022, 119/2024) granted ethical approval. Data was collected from the Correctional Institution for Women in Požarevac, the only prison for female prisoners in Serbia, using convenience sampling. A research invitation and study information were posted on the prison notice board for two weeks. The general inclusion criteria were literate Serbian-speaking prisoners who had served more than 30 days and

voluntarily agreed to participate in the research. Data collection took place in one session using the paper-and-pencil method in the prison dining room, with researchers available for clarification if needed. Prisoners handed the completed questionnaire in sealed envelopes directly to the researchers. All prisoners gave written informed consent before participating in the study. The data was collected in May 2022.

Measures, Scoring and Data analysis

The World Health Organization Quality of Life Brief Version (WHOQOL-BREF) is a 26-item, self-administered instrument widely used to assess quality of life (Saxena et al., 2001; Skevington et al., 2004; WHOQOL Group, 1995). The WHOQOL-BREF has four domains, which are Physical Health (7 items), Psychological Health (5 items), Social Relationships (3 items), and Environmental Health (8 items), and two general items for overall quality of life and health. The physical domain assesses energy, mobility, pain, sleep, daily activities, and work capacity. The psychological domain includes cognitive and emotional states, self-esteem, and spirituality. The social domain addresses personal relationships, social support, and sexual activity. The environment domain includes safety, financial resources, health and social care access, home environment, opportunities for recreation, and physical features of one's surroundings.

Items are rated on a 5-point Likert scale, using descriptors such as 'never' to 'always' or 'very poor' to 'very good'. Two general items are analysed separately. Domain scores are calculated by averaging item responses and multiplying by four (range: 4–20), with higher scores indicating better quality of life. Descriptive statistics were calculated to describe the characteristics of our sample and all WHOQOL-BREF items and scores (Milićević, Mededović, et al., 2024). Missing data were present in 26 of 37 variables (70.3%). Sociodemographic and sentencing items had the lowest rates (1.1%–2.3%), while more sensitive WHOQOL-BREF items, such as satisfaction with transport (30.7%), sexual life (5.7%), and self-satisfaction (3.4%), had higher rates of missing data. A pairwise deletion strategy was used to retain as much data as possible for analysis.

Sample

Demographic characteristics of the sample are presented in Table 1. A total of 88 participants were included in our sample. Their average age was 39 years 7 months ($SD = 10$ years 10 months). The age ranged between 21 and 74 years, with the highest percentage of participants between 31 and 40. Educational levels varied, with the majority completing elementary (25%) or high school (48%). Nearly half of the sample (48%) had a partner or was married, while 24%, 18%, and 8% were single, divorced, or widowed, respectively. Furthermore, 23% of participants had one child, 28% had two children, and 17% had three or more children. Conversely, 32% reported not having any children. In terms of religion, 10% reported none, 80% identified with Christianity, 6% with Islam, and 1.0% with other religions. Regarding citizenship, most of our participants were from the Republic of Serbia (94%), while 3% held foreign citizenship.

Table 1. Sample Demographic Characteristics ($n = 88$)

Variable		<i>n</i>	%
Age (years)	$M = 39.55, SD = 10.82$		
Age (category range)	20–30 years	17	19.3
	31–40 years	32	36.4
	41–50 years	26	29.5
	51 years or older	13	14.8
Education	Unfinished elementary school	8	9.1
	Elementary school	22	25.0
	High school	42	47.7
	Vocational college or higher	15	17.1
	Missing data	1	1.1
Marital status	Single	21	23.9

	Married	17	19.3
	Extramarital union	25	28.4
	Divorced	16	18.2
	Widowed	7	8.0
	Missing data	2	2.3
Number of children	None	28	31.8
	One	20	22.7
	Two	25	28.4
	Three or more	15	17.0
Religion	None	9	10.2
	Christianity	70	79.5
	Islam	5	5.7
	Other	1	1.1
	Missing data	3	3.4
Type of community	Urban or suburban	77	87.5
	Rural	10	11.4
	Missing data	1	1.1
Citizenship	Republic of Serbia	83	94.3
	Foreign / Dual	3	3.4
	Missing data	2	2.3

Table 2 presents the descriptive characteristics of the sample, including sentencing details, prison regime, and criminal and mental health history. The average length of prison sentence was 6 years and 3 months ($SD = 7$ years 5 months), ranging from 2 months to 40 years. However, most participants were sentenced to imprisonment for 3 to 10 years (38%), followed by those sentenced to over 1 to 3 years in a prison (36%). The majority of participants in our sample were housed in closed-regime prisons (74%), while 22% were in semi-open, and 2% in open regimes. Most were first-time prisoners (80%) and had served over two years at the time of data collection (42%). Their average age at the time of first conviction was 33 years 2 months ($SD = 11$ years 9 months), ranging from 18 to up to 74 years of age. Regarding the type of criminal offence, the most common were crimes against human health (32%), followed by property offences and offences against life and limb (25%, both). More precisely, the most common convictions were for drug-related offences (32%), followed by aggravated murder (11%) and murder (8%), aggravated/compound larceny and theft (7%, both) and fraud (6%). A total of 41% of participants had committed violent crimes, while 58% had committed non-violent crimes. Substance use before incarceration was reported by 47% of participants. A history of psychiatric hospitalization was confirmed by 22% of participants, whereas 24% reported past suicide attempts. Self-harm was confirmed by 31% of participants. Security measures related to compulsory treatment were reported in several categories: drug addiction (22%), alcohol addiction (3%), and psychiatric treatment in institutions and psychiatric treatment at liberty (7%, both).

Table 2

Sample Characteristics and Background Variables Related to Imprisonment and Mental Health History ($n = 88$)

Variable		<i>n</i>	%
Sentence length (category range)	1 year or less	7	8.0
	Over 1 to 3 years	32	36.4
	Over 3 to 10 years	33	37.5
	Over 10 to 20 years	10	11.4
	More than 10 years	4	4.5
	Missing data	2	2.3
Sentence length (years, months)	$M = 6$ y 3 mo, $SD = 7$ y 5 mo, Min = 2 mo, Max = 40 y		
Prison regime	Closed	65	73.9
	Semi-open	19	21.6
	Open	2	2.3
	Missing data	2	2.3

Criminal offences	Against human health	28	31.8
	Against property	22	25.0
	Against life and limb	22	25.0
	Against humanity ^a	5	5.7
	Relating to marriage and family	4	4.5
	Against economic interests	3	3.4
	Against road traffic safety	2	2.3
	Against public peace and order	1	1.1
	Missing data	1	1.1
Elements of violence	Violent crime	36	40.9
	Non-violent crime	51	58.0
	Missing data	1	1.1
Time served ^b (category range)	6 months or less	16	18.2
	Over 6 months to 1 year	15	17.0
	Over 1 year to 2 years	20	22.7
	Over 2 years	37	42.0
First-time prisoners	Yes	70	79.5
	No	16	18.2
	Missing data	2	2.3
First conviction (years, months)	$M = 33$ y 2 mo, $SD = 11$ y 9 mo, Min = 18 y, Max = 74 y		
Use of drugs before coming to prison	No	46	52.3
	Yes	41	46.6
	Missing data	1	1.1
History of a psychiatric/mental hospital stay	No	68	77.3
	Yes	19	21.6
	Missing data	1	1.1
History of a security measure imposed ^c	None	61	69.3
	Drug addiction treatment ^d	19	21.6
	Alcohol addiction treatment ^d	3	3.4
	Psychiatric treatment institutional ^e	6	6.8
	Psychiatric treatment at liberty ^d	6	6.8
History of self-harm	No	61	69.3
	Yes	27	30.7
History of suicide attempts	No	67	76.1
	Yes	21	23.9

^a Against humanity and other right guaranteed by international law. ^b At the time of data collection. ^c Multiple responses possible. ^d Compulsory. ^e Compulsory psychiatric treatment and confinement in a medical institution.

Results

Participants rated their overall quality of life with a mean score of 2.77 ($SD = 1.17$) and reported their satisfaction with health at a mean of 2.65 ($SD = 1.19$), based on a 5-point Likert scale. When asked about current illness, 53% of participants confirmed being ill, while 45% reported no current illness. When it comes to the Physical Health domain, participants reported the highest average score for mobility ($M = 3.92$) and the ability to perform their daily living activities ($M = 3.38$). The lowest score was observed for the need for medical treatment to function in daily life ($M = 2.80$), indicating a moderate level of perceived dependence on medical treatment. Participants indicated a moderate level of interference from physical pain in their daily activities ($M = 2.83$), highlighting the relevance of pain management in prison health care. Scores for other items, such as energy for daily life ($M = 3.32$) and satisfaction with work capacity ($M = 3.32$), reflected moderate levels of perceived physical well-being (Table 3).

Table 3

Descriptive Statistics for WHOQOL-BREF Physical Health Domain Items

Item No.	Physical health domain	<i>M</i>	<i>SD</i>
3	To what extent do you feel that physical pain prevents you from doing what you need to do?	2.83	1.40
4	How much do you need any medical treatment to function in your daily life?	2.80	1.51
10	Do you have enough energy for everyday life?	3.32	1.28
15	How well are you able to get around?	3.92	1.18
16	How satisfied are you with your sleep?	3.15	1.41
17	How satisfied are you with your ability to perform your daily living activities?	3.38	1.22
18	How satisfied are you with your capacity for work?	3.32	1.39

Note: Theoretical range 1–5. Higher scores indicate better quality of life.

In the Psychological Domain, participants reported the highest average score for accepting their bodily appearance ($M = 4.13$), followed by satisfaction with self ($M = 3.81$) and a sense of meaning in life ($M = 3.60$). The ability to concentrate also received a relatively high rating ($M = 3.60$). In contrast, enjoyment of life had a lower mean score ($M = 2.70$), and the frequency of negative feelings was moderately high ($M = 2.85$), suggesting some emotional strain (Table 4).

Table 4

Descriptive Statistics for WHOQOL-BREF Psychological Domain Items

Item No.	Psychological domain	<i>M</i>	<i>SD</i>
5	How much do you enjoy life?	2.70	1.44
6	To what extent do you feel your life to be meaningful?	3.60	1.28
7	How well are you able to concentrate?	3.60	1.37
11	Are you able to accept your bodily appearance?	4.13	1.18
19	How satisfied are you with yourself?	3.81	1.34
26	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	2.85	1.25

Note: Theoretical range 1–5. Higher scores indicate better quality of life.

In terms of social relationships, participants reported the highest satisfaction with the support received from friends ($M = 4.07$), followed by satisfaction with personal relationships ($M = 3.81$). In contrast, satisfaction with sex life was notably lower ($M = 2.46$), indicating this area may represent a potential challenge in the prison environment (Table 5).

Table 5

Descriptive Statistics for WHOQOL-BREF Social relationships Domain Items

Item No.	Social relationships domain	<i>M</i>	<i>SD</i>
20	How satisfied are you with your personal relationships?	3.81	1.06
21	How satisfied are you with your sex life?	2.46	1.41
22	How satisfied are you with the support you get from your friends?	4.07	1.17

Note: Theoretical range 1–5. Higher scores indicate better quality of life.

Regarding environmental factors, participants reported the highest mean score for financial sufficiency ($M = 3.55$), followed by feelings of safety in daily life ($M = 3.37$). The lowest ratings were given to satisfaction with access to health services ($M = 2.32$), transport ($M = 2.41$), and physical living conditions ($M = 2.47$), suggesting key areas where the prison environment may be perceived as lacking (Table 6).

Table 6

Descriptive Statistics for WHOQOL-BREF Environment Domain Items

Item No.	Environment domain	<i>M</i>	<i>SD</i>
8	How safe do you feel in your daily life?	3.37	1.28
9	How healthy is your physical environment?	2.44	1.32
12	Have you enough money to meet your needs?	3.55	1.41
13	How available to you is the information that you need in your day-to-day life?	2.93	1.36
14	To what extent do you have the opportunity for leisure activities?	2.85	1.47
23	How satisfied are you with the conditions of your living place?	2.47	1.40
24	How satisfied are you with your access to health services?	2.32	1.30
25	How satisfied are you with your transport?	2.41	1.49

Note: Theoretical range 1–5. Higher scores indicate better quality of life.

Among the four global WHOQOL-BREF scores of the quality of life (Table 7), participants reported the highest average score in the domain of social relationships ($M = 13.90$), followed closely by the psychological and physical health scores ($M = 13.78$ and 12.97 , respectively). The lowest average score was observed in the environment domain ($M = 11.22$).

Table 7

Descriptive Statistics for WHOQOL-BREF Domains of Quality of Life Scores

WHOQOL-BREF domain	<i>M</i>	<i>SD</i>	<i>Mdn</i>	<i>Min</i>	<i>Max</i>
Physical health	12.97	3.83	13.14	5.14	20.00
Psychological	13.78	3.63	14.00	4.00	20.00
Social relationships	13.90	3.37	14.67	4.00	20.00
Environment	11.22	3.85	11.17	4.00	20.00

Note: Theoretical range 4–20. Higher scores indicate better quality of life.

Discussion

This study was conducted with the aim of presenting the context-specific quality of life from the perspective of female prisoners in Serbia. According to our findings, female prisoners viewed social and psychological domains similarly but rated environmental conditions lower than all other domains. First, there is a mixed but moderately positive perception of physical quality of life, particularly positive regarding physical mobility and the ability to perform daily living activities and negative when it comes to the need for medical treatment and the presence of physical pain. Second, there is a moderately positive perception of the psychological aspect of quality of life in general, with body image and self-acceptance rated most favourably, in contrast to the enjoyment of life and the presence of negative feelings or distress. Next, the item-level analysis showed the highest satisfaction with support from friends and the lowest satisfaction with intimate relationships. Finally, the healthiness of the physical environment and living conditions and the access to healthcare services were rated the lowest, in contrast to the financial situation and the feelings of safety in daily life. Our findings are consistent with the previous studies. A recent study revealed that female prisoners faced several quality-of-life challenges during the COVID-20 pandemic in the Philippines, particularly in the physical, social, and interpersonal domains (Ramirez, 2023). As reported, several stressors negatively impacted their mental and emotional well-being, namely, physical (weight issues, personal hygiene concerns), social (difficulty adjusting socially and emotionally to pandemic restrictions), and interpersonal (heightened experiences of depression and boredom). According to findings from research conducted in Greece, imprisonment has an adverse effect on both physical and mental health, particularly for female prisoners (Miloni & Geitona, 2017). The authors reported that more than half of the participants reported a deterioration of their mental health during their time in prison, along with a notable decline in self-reported health status (from 23% reporting moderate to poor health before imprisonment to 66% reporting the same status of their health during imprisonment). In this same research, almost half of the participants rated access to health services and the quality of healthcare as *poor/very poor*. These findings align with our results, in which female prisoners gave the lowest ratings for satisfaction with access to health services. This low satisfaction score could be a reflection

of a broader pattern of unmet health needs among female prisoners in Serbia. Prior research also found a lack of adequate mental health services in prisons for female prisoners (Bartlett & Hollins, 2018; Hidayati et al., 2021). Female prisoners in Brazil experience a high burden of physical and mental health issues, including mental disorders, in addition to a history of severe physical violence, which significantly impacts their quality of life (Leal et al., 2022). The findings indicated that poverty, limited education, and restricted access to health care before and during imprisonment also contribute to poor quality of life.

In our study, female prisoners reported reduced enjoyment of life and a moderate level of emotional distress, which may indicate the need for psychosocial support to improve their overall quality of life in prison. In their research on the quality of life of female prisoners in China, Zhong et al. (2020) concluded that mental health care is important for improving prisoner well-being and that the first steps should include mental health screening and therapeutic interventions. This finding corresponds with other studies that show that for women in U.S. prisons, who tend to report lower quality of life, particularly in health-related domains, gender-responsive programs are particularly important to support their well-being and successful reintegration after release from prison (Prost et al., 2020). As has been argued elsewhere (Carcedo et al., 2019), sexual satisfaction is closely tied to mental health, particularly in contexts of deprivation. In our study, satisfaction with sex life was notably low, supporting the view that sexual and emotional needs remain significant yet often overlooked aspects of prisoners' quality of life. It is necessary to have a closer look at the finding that the availability of opportunities for leisure activities was one of the items with the lowest score. Participation or engagement in meaningful activities, including humanist, spiritual, and religious practices, is recognised as one of the important indicators of well-being and overall quality of life in female prisons (Duncan et al., 2018). In a study conducted in Italy, female prisoners described the importance of access to meaningful activities and explained that participation in work, projects, and social activities played a role in preventing depression, providing hope and structure, and supporting their future reintegration into society (Esposito, 2015).

Limited access to diverse and meaningful vocational training programs, low participation rates, and challenges in post-release reintegration are some characteristics of the female prisoners' quality of life in Sri Lanka (Ekanayake & Pavithra Madhuwanthi, 2021). As explained, meaningful vocational training is important for improving the quality of life as it fosters skills, self-worth, and opportunities for employment after release from prison. Still, its effectiveness is limited without broader support systems inside and outside the prison (Ekanayake & Pavithra Madhuwanthi, 2021). Increasing prisoners' autonomy and choices can significantly enhance their quality of life, as well (Van Der Kaap-Deeder et al., 2017). In particular, increased perceived afforded choice, especially in daytime activities like work, leisure, and education, is associated with higher subjective quality of life among Belgian prisoners (Van Der Kaap-Deeder et al., 2017). Ramirez (2023) highlighted the importance of social acceptance and access to therapeutic or rehabilitative support in improving prisoners' ability to cope and maintain a sense of well-being. In a qualitative study conducted in Italy, loneliness was described as a "prison disease" (Esposito, 2015). Recently, a scoping review of ten articles on the mental health needs in prison found, focusing specifically on the quality of life of female prisoners, that social support systems (from family, peers, and prison staff) are major determinants of quality of life, reducing recidivism and improving post-release outcomes (Hidayati et al., 2023). Therefore, it is not surprising that programs promoting healthy relationships and emotional insight are found vital for improving the quality of life of female prisoners (Wendt & Fraser, 2019). Female prisoners in Italia confirmed the importance of both "external" and "internal" support systems coming from family and social networks (Esposito, 2015). Current evidence suggests that the quality of prison life for female prisoners in Serbia is also relatively low, with only 25% of participants giving a positive overall assessment (Batrićević et al., 2023). When the quality of prison life was examined in detail, prisoner adaptation and distress received the highest scores, while well-being, bureaucratic legitimacy, organisation and consistency of the prison functioning, and decency were rated the lowest. In general, this study confirmed the importance of a gender-sensitive approach to prison life, arguing that addressing these specific dimensions, especially emotional well-being, fairness, order, and humane treatment, in order to improve the quality of life in female prisons (Batrićević et al., 2023). A group of

authors from Iran found a lack of standardised, gender-responsive protocols for incarcerated women, especially in terms of health and for pregnant prisoners (Farhoudi et al., 2023). The obtained results indicate that environmental conditions may represent the most significant area of concern for female prisoners in Serbia, as suggested by the four global WHOQOL-BREF scores. This finding could imply the need for more stable or supported living conditions for women during incarceration, which could reflect positively on the physical aspect of their quality of life. Prost et al. (2022) found that female prisoners who experienced interpersonal trauma, such as captivity, reported significantly lower quality of life, particularly in the environmental domain, and had higher levels of post-traumatic stress, indicating a strong link between past trauma and poor prison life experience. In general, this study confirmed the need for trauma-informed care and financial security in improving prisoners' quality of life.

Limitations and Future Research Directions

Our study has several limitations. First, it is designed as a cross-sectional study based on self-reported data from a single national institution. Therefore, the findings may not be generalisable to all incarcerated women in Serbia or other contexts. Second, the absence of a comparison group and potential response bias should also be considered as one major limitation. Next, while the WHOQOL-BREF is a validated tool, it may not fully capture prison-specific or gender-specific aspects of quality of life. Future research should consider context-specific heterogeneity of the prison population in terms of offence type, mental health history, and prior institutional interventions when discussing quality of life in female prisons. Furthermore, more context-sensitive instruments and longitudinal approaches are recommended for future research.

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CRedit authorship contribution statement

Milena Milićević: Conceptualization, Data curation, Formal analysis, Methodology, Project administration, Validation, Writing – original draft, Writing – review and editing.

References

- Arifin, V. N., Aletta, A., & Abdullah, A. (2020). The Assessment of the Quality of Life Among Female Prisoners in Aceh Besar. *Proceedings of the 4th International Symposium on Health Research (ISHR 2019)*. 4th International Symposium on Health Research (ISHR 2019), Bali, Indonesia. <https://doi.org/10.2991/ahsr.k.200215.044>
- Bartlett, A., & Hollins, S. (2018). Challenges and Mental Health Needs of Women in Prison. *The British Journal of Psychiatry*, 212(3), 134–136. <https://doi.org/10.1192/bjp.2017.42>

- Batričević, A., Pavičević, O., Čopić, S., & Miličević, M. (2023). Quality of Prison Life of Female Prisoners in Serbia: Key Challenges and Areas of Strength. *Revija Za Kriminalistiko in Kriminologijo*, 74(4), 273–289.
- Carcedo, R. J., Perlman, D., Fernández-Rouco, N., Pérez, F., & Hervalejo, D. (2019). Sexual Satisfaction and Mental Health in Prison Inmates. *Journal of Clinical Medicine*, 8(5), 705. <https://doi.org/10.3390/jcm8050705>
- Duncan, J., Stansfield, R., Hall, S., & O'Connor, T. (2018). Women's Engagement with Humanist, Spiritual and Religious Meaning-Making in Prison: A Longitudinal Study of Its Impact on Recidivism. *Religions*, 9(6), 171. <https://doi.org/10.3390/rel9060171>
- Edgemon, T. G., & Clay-Warner, J. (2019). Inmate Mental Health and the Pains of Imprisonment. *Society and Mental Health*, 9(1), 33–50. <https://doi.org/10.1177/2156869318785424>
- Ekanayake, E. M. V. O., & Pavithra Madhuwanthi, L. A. (2021). Issues in Vocational Training Programs for the Female Prison Inmates in Sri Lanka: Trainers' Perspectives. *International Journal of Scientific and Research Publications (IJSRP)*, 11(6), 51–59. <https://doi.org/10.29322/IJSRP.11.06.2021.p11409>
- Esposito, M. (2015). Women in prison: Unhealthy lives and denied well-being between loneliness and seclusion. *Crime, Law and Social Change*, 63(3–4), 137–158. <https://doi.org/10.1007/s10611-015-9561-y>
- Faquim, J., Macedo, J., Oliveira, J., Machado, S., Ivancko, G., Costa, K., Alves, M., & Oliveira, T. (2020). Profile of incarcerated women in the interior of Brazil and the challenge of education in prison. *European Journal of Public Health*, 30(Supplement_5), ckaa166.1260. <https://doi.org/10.1093/eurpub/ckaa166.1260>
- Farhudi, B., Shahmohamadi, E., SeyedAlinaghi, S., Rostam Afshar, Z., Mirzapour, P., Nadji, S., Golsoorat Pahlaviani, F., Tashakorian, M., & Hackett, D. (2023). Sexual and reproductive history of female prisoners in Iran: A health care needs analysis. *International Journal of Prisoner Health*, 19(4), 591–598. <https://doi.org/10.1108/IJPH-12-2022-0076>
- Hidayati, N. O., Suryani, S., Rahayuwati, L., & Dewi, N. S. (2021). Scoping Review of Mental Health Problems among Female Prisoners. *Open Access Macedonian Journal of Medical Sciences*, 9(T6), 80–84. <https://doi.org/10.3889/oamjms.2021.7322>
- Hidayati, N. O., Suryani, S., Rahayuwati, L., & Widiyanti, E. (2023). Women Behind Bars: A Scoping Review of Mental Health Needs in Prison. *Iranian Journal of Public Health*, 52(2), 243–253. <https://doi.org/10.18502/ijph.v52i2.11878>
- Iljić, Lj., Pavičević, O., & Miličević, M. (2024). *Well-Being in Prison: The Case of Serbia*. Institute of Criminological and Sociological Research. <https://doi.org/10.47152/PrisonLIFE.D4.1>
- Jovanić, G., Petrović, V., & Macanović, N. (2020). Freedom deprivation in prisons of Serbia. *Journal of Investigative Psychology and Offender Profiling*, 17(2), 173–190. <https://doi.org/10.1002/jip.1540>
- Leal, M., Kerr, L., Mota, R. M. S., Pires Neto, R. D. J., Seal, D., & Kendall, C. (2022). Health of female prisoners in Brazil. *Ciência & Saúde Coletiva*, 27(12), 4521–4529. <https://doi.org/10.1590/1413-812320222712.10222022>
- McCann, L. J., Peden, J., Phipps, E., Plugge, E., & O'Moore, E. J. (2019). Developing gender-specific evidence-based standards to improve the health and wellbeing of women in prison in England: A literature review and modified eDelphi survey. *International Journal of Prisoner Health*, 16(1), 17–28. <https://doi.org/10.1108/IJPH-02-2019-0010>
- Miličević, M., Iljić, Lj., & Pavičević, O. (2023, September 6). *Gender perspective of quality of life and well-being in Serbian prisons: Preliminary findings*. 23rd Annual Conference of the European Society of Criminology – EUROCRIM2023, Florence, Italy.
- Miličević, M., Iljić, Lj., & Pavičević, O. (2024). *Staff-Prisoner Relationships and Quality of Life in Serbian Prisons: Preliminary Research Findings*. 24th Annual Conference of the European Society of Criminology – EUROCRIM2024, Bucharest, Romania.
- Miličević, M., Mededović, J., Iljić, L., Pavičević, O., Vujičić, N., & Drndarević, N. (2024). *Assessment and possibilities for improving the quality of prison life of prisoners in the Republic of Serbia: Criminological-penological, psychological, sociological, legal and security aspects – PrisonLIFE [Dataset]*. Data Center Serbia for Social Sciences. <http://dcs.ien.bg.ac.rs/id/eprint/64>
- Milioni, S. O., & Geitona, M. (2017). The Impact of Incarceration on Greek Female Prisoners' Self-reported Health Status. *Journal of Womens Health Care*, 6(4), 386. <https://doi.org/10.4172/2167-0420.1000386>
- Prost, S. G., McDonald, A., Plassmeyer, M., Middleton, J., & Golder, S. (2022). Not All Traumas Are Equal: Post-Traumatic Stress and Quality of Life among Women in Prison. *Women & Criminal Justice*, 32(6), 502–519. <https://doi.org/10.1080/08974454.2020.1871160>
- Prost, S. G., Panisch, L. S., & Bedard, L. E. (2020). Quality of Life in Jail: Gender, Correlates, and Drivers in a Carceral Space. *International Journal of Offender Therapy and Comparative Criminology*, 64(10–11), 1156–1177. <https://doi.org/10.1177/0306624X19896906>

- Ramirez, N. B. (2023). Challenges encountered by the female person deprived of liberty amidst pandemic. *EPRA International Journal of Multidisciplinary Research (IJMR)*, 9(12), 139–146. <https://doi.org/10.36713/epra15119>
- Saxena, S., Carlson, D., Billington, R., & Orley, J. (2001). The WHO quality of life assessment instrument (WHOQOL-Bref): The importance of its items for cross-cultural research. *Quality of Life Research*, 10(8), 711–721. <https://doi.org/10.1023/A:1013867826835>
- Skevington, S. M., Lotfy, M., & O'Connell, K. A. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: Psychometric properties and results of the international field trial. A Report from the WHOQOL Group. *Quality of Life Research*, 13(2), 299–310. <https://doi.org/10.1023/B:QURE.0000018486.91360.00>
- Slotboom, A.-M., Kruttschnitt, C., Bijleveld, C., & Menting, B. (2011). Psychological well-being of incarcerated women in the Netherlands: Importation or deprivation? *Punishment & Society*, 13(2), 176–197. <https://doi.org/10.1177/1462474510396313>
- Van Der Kaap-Deeder, J., Audenaert, E., Vandevelde, S., Soenens, B., Van Mastrigt, S., Mabbe, E., & Vansteenkiste, M. (2017). Choosing when choices are limited: The role of perceived afforded choice and autonomy in prisoners' well-being. *Law and Human Behavior*, 41(6), 567–578. <https://doi.org/10.1037/lhb0000259>
- Van Hout, M. C., & Mhlanga-Gunda, R. (2018). Contemporary women prisoners health experiences, unique prison health care needs and health care outcomes in sub-Saharan Africa: A scoping review of extant literature. *BMC International Health and Human Rights*, 18(1), 31. <https://doi.org/10.1186/s12914-018-0170-6>
- Wendt, S., & Fraser, H. (2019). Promoting gender responsive support for women inmates: A case study from inside a prison. *International Journal of Prisoner Health*, 15(2), 126–137. <https://doi.org/10.1108/IJPH-03-2018-0011>
- WHOQOL Group. (1995). The World Health Organization quality of life assessment (WHOQOL): Position paper from the World Health Organization. *Social Science & Medicine*, 41(10), 1403–1409. [https://doi.org/10.1016/0277-9536\(95\)00112-K](https://doi.org/10.1016/0277-9536(95)00112-K)
- Wondimu, M., Siyoum, A., Ketema, I., Goshu, A. T., Habte, S., Mehadi, A., & Ayele, B. H. (2023). Undernutrition and associated factors among adult prisoners in Fiche town, central Ethiopia: A facility-based cross-sectional study. *Frontiers in Nutrition*, 10, 1144654. <https://doi.org/10.3389/fnut.2023.1144654>
- Zhong, S., Zhu, X., Chen, Y., Guo, H., Luo, C., Liang, X., Wang, F., Chen, H., Zhou, J., & Wang, X. (2020). High Psychiatric Morbidity and Comorbidity Among Female Prisoners in Hunan, China. *Frontiers in Psychiatry*, 11, 271. <https://doi.org/10.3389/fpsy.2020.00271>

KVALITET ŽIVOTA OSUĐENIH ŽENA U SRBIJI: OPŠTI NALAZI PROJEKTA PrisonLIFE

Milena Milićević, viša naučna saradnica, Institut za kriminološka i sociološka istraživanja, Beograd, Srbija

Apstrakt: Kontinuirana evaluacija kvaliteta života je od suštinskog značaja za razvoj pravovremenih intervencija, budući da istraživanja dosledno pokazuju da su dobrobit osuđenica i ishodi rehabilitacije usko povezani. Ova studija, sprovedena u okviru projekta PrisonLIFE (br. 7750249, Fond za nauku Republike Srbije), imala je za cilj da ispita opšte dimenzije kvaliteta života žena osuđenih na kaznu zatvora u Srbiji. Podaci su prikupljeni korišćenjem srpske verzije WHOQOL-BREF instrumenta, koji je primenjen na 88 osuđenica u Kazneno-popravnog zavodu za žene u Požarevcu. Prosečna starost ispitanica bila je 39 godina 7 meseci (SD = 10 godina 11 meseci, raspon = 21–74), dok je prosečna dužina kazne iznosila 6 godina i 3 meseca (SD = 7 godina i 5 meseci, raspon = 2 meseca–40 godina). Većina je bila prvi put osuđena (80%), smeštena u zatvorenom odeljenju (74%) i državljanke su Srbije (94%). Najčešća krivična dela bila su povezana sa drogom (32%), zatim teška ubistva (11%) i ubistva (8%). Najveći broj ispitanica imao je završeno srednje obrazovanje (48%), a skoro polovina je imala istoriju upotrebe psihoaktivnih supstanci (47%). Među domenima WHOQOL-BREF-a, najnižu prosečnu ocenu dobio je domen Okruženje ($M = 11.22$), a potom Fizičko zdravlje ($M = 12.97$). Najviše su ocenjeni domeni Psihičko zdravlje ($M = 13.78$) i Socijalni odnosi ($M = 13.90$). Na nivou pojedinačnih stavki, najniže ocene su se odnosile na zadovoljstvo seksualnim životom, pristup zdravstvenim uslugama i procenu zdravlja fizičkog okruženja i uslova života. Nasuprot tome, najviše zadovoljstvo izraženo je u vezi sa podrškom prijatelja, prihvatanjem fizičkog izgleda i fizičkom pokretljivošću. U skladu sa prepoznatom potrebom za rodno specifičnim pristupima kada je reč o zdravlju u zatvoru, nalazi ukazuju na konkretne izazove u vezi sa institucionalnim uslovima života i pristupom zdravstvenoj zaštiti. Stoga je neophodno unaprediti standarde fizičkog okruženja i razviti rodno senzitivne zdravstvene politike u zatvorskom sistemu Republike Srbije.

Ključne reči: kvalitet života, osuđenice, zatvorsko zdravstvo, WHOQOL-BREF, Srbija