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# Sources of Health Information, Ability to Assess its Credibility, and Interests in Health-Related Content

*Original scientific article*

UDC 374.22+614:37.011.2

**KEYWORDS:** adult education, critical thinking, public health, health literacy, reliability of health information

**ABSTRACT** – Non-formal education represents an important context for the acquisition of health-related knowledge outside formal educational institutions and the structured healthcare system. In Slovenia, health-oriented non-formal educational programmes delivered by folk high schools enable adults to access health information while simultaneously supporting the development of critical thinking skills. Data were collected using a structured questionnaire administered via the online platform IKA, and analysed through univariate, bivariate, and multivariate statistical procedures. Online articles were identified as the most frequently used source of health information. The highest levels of perceived credibility were attributed to written professional sources and healthcare professionals, whereas social media and celebrity sources were rated as the least trustworthy. When evaluating the reliability of health information, the respondents prioritised factual accuracy, clarity, and source credibility. Four key thematic domains of interest emerged: nutrition, physical activity, management of health conditions, and mental health and personal development. The findings indicate a clear need for educational interventions that strengthen the critical evaluation of health information.

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**KLJUČNE BESEDE:** izobraževanje odraslih, kritično mišljenje, zdravstvena pismenost, reliability of health information

**POVZETEK** – Neformalno izobraževanje odraslih predstavlja pomemben kontekst za pridobivanje znanja, povezanega z zdravjem. Poleg centrov za krepitev zdravja izvajajo programe, usmerjene v dvig zdravstvene pismenosti, tudi ljudske univerze. Na udeležencih programov ljudskih univerz je bila izvedena raziskava, usmerjena v ugotavljanje interesa odraslih za zdravstvene vsebine ter sposobnost kritične presoje zdravstvenih informacij. Uporabljene so bile univariatne, bivariatne in multivariatne statistične analize. Rezultati so pokazali, da so respondenti kot najpogostejše uporabljen vir zdravstvenih informacij navedli poljudne članke, objavljene na spletu. Najvišjo stopnjo zaznane verodostojnosti so pripisali pisnim strokovnim virom in zdravstvenim delavcem, kot najpomembnejši kriterij za oceno zanesljivosti zdravstvenih informacij pa so izpostavili točnost, jasnost in verodostojnost. S faktorizacijo odgovorov na postavke interesa za zdravje smo identificirali štiri interesna področja: prehrana, telesna dejavnost, obvladovanje zdravstvenih stanj ter duševno zdravje in osebnostni razvoj. Ugotovitve kažejo na jasno potrebo po izobraževalnih intervencijah, ki krepijo kritično vrednotenje zdravstvenih informacij in so usmerjenе v razširjanje in poglobljanje poznavanja omenjenih štirih interesnih področij, povezanih z zdravjem.

## 1 Introduction

Health psychology is a relatively young psychological discipline, focused both on researching the influence of various psychological processes (cognitive, emotional, motivational) and behaviour (actions) on human health, as well as on applying research findings in the field of interventions to promote health and health-related

rational choices, and to strengthen the collective awareness directed toward health and well-being of all involved in the local community. The fundamental premise of this research field is that health-related behaviour and its change are influenced by numerous factors and mechanisms at various levels (Marks et al., 2021; Tapper, 2021). There are numerous theories about the change in health behaviour, for example the Health Belief Model (Abraham & Sheeran, 2015), the Protection Motivation Theory (Prentice-Dunn & Rogers, 1986), the Theory of Planned Behavior (Ajzen, 1991), the Information-Motivation-Behavioral Skills Model (Fisher et al., 2003), the Social Cognitive Theory (Bandura, 1986), and others. Meta-studies that examined various constructs in these theories and their impact on behaviour confirm the complexity of the issue, as constructs within the individual theories or models mostly explain only a small portion of the variability in the results (Marks et al., 2021; Tapper, 2021).

Based on the above-mentioned models, regardless of the explanatory power of an individual model or its constructs, it is possible to extract factors that contribute to behaviour change and operate at different levels (Onion Model, Marks et al., 2021). Therefore, in our research we focused on two groups of potential influences on people's health decisions: 1) cognition, namely, attitudes toward health-related information and the ability to assess their credibility (which represents an element of critical health literacy); 2) motivation or interest in various types of knowledge in the field of health and healthy lifestyle.

In the first part of the research, we focused on cognition or on the aspect of health literacy, which we understand in the context of newer definitions, for example Nutbeam (2000), who defines health literacy at three levels: functional health literacy (basic reading and writing skills that enable an individual to use health information), interactive health literacy (development of skills that enable the individual to act independently and based on information/knowledge), critical health literacy (the ability of an individual to critically evaluate and use information and actively participate in health care). We emphasized the second level of health literacy, in Nutbeam's model, which means interactive health literacy, and examined where the participants in the research obtain health information, to what extent they trust different sources of health information, by which criteria they evaluate them, and to what extent they change their behaviour under their influence. Evaluation of the quality of information sources, the selection of evaluation criteria, and – consequently – reflective scepticism represent important elements of critical thinking (Facione et al., 2011; Ennis, 1985; Halpern, 2014; Kompare & Rupnik Vec, 2016; Paul & Elder, 2006).

In the second part of the study, we explored the individuals' interest in health-related content, recognizing that such interests – alongside the perceived needs – constitute a fundamental component of motivation to engage with health education. Health outcomes and health-related behaviours are influenced by a complex interplay of factors operating across multiple levels, as conceptualized in the "Health Onion" model developed by Dahlgren and Whitehead (2021). This model delineates several layers of influence: innermost layer: non-modifiable individual characteristics, including age, sex, and genetic predispositions; first layer: individual lifestyle factors and

personal attitudes; second layer: social and community networks; third layer: broader living and working conditions, such as employment status, access to clean water and sanitation, availability of healthcare services, housing quality, educational attainment, work environment, and food security; outermost layer: overarching socioeconomic, cultural, and environmental determinants, including access to educational opportunities and reliable sources of health information.

The accessibility and availability of diverse educational programs financed by the state thus represent one of the many public health factors and are provided by both the Ministry of Health and the Ministry of Education. The latter primarily supports them through lifelong learning programs for the adult population, which in Slovenia are implemented by people's universities (adult education institutions/lifelong learning centres). The Resolution on Adult Education 2023–2030 in Slovenia (ReNPIO22-30, 2022) foresees the development of new publicly recognized programs (in which an individual does not obtain a formal qualification, only a certificate listing acquired knowledge and competencies) in various fields, including health, healthy lifestyle, and personal development.

In summary, the study is interested in the following research questions: What sources do people use to obtain health information? How do they perceive their credibility? What criteria do they use to judge the reliability of health information? What health topics are of interest to them?

## 2 Methods

A quantitative research study was conducted, based on descriptive and causal-non-experimental methods of work.

### 2.1 Instrument

For the study, a structured questionnaire was developed, consisting of three parts: 1. sources of health information, their perceived credibility, and impact on individual health behaviour (frequency of use and level of trust in individual health information sources); self-assessment of difficulties in understanding health information, 2. interest in various health-related topics, and 3. demographic information.

Most of the questionnaire consisted of the statements to which the respondents indicated their agreement on a five-point Likert scale. The questionnaire was developed by a working group of nine experts from the fields of education, health, economics, and psychology. Once a consensus among the experts was reached, the survey was carried out. To assess the internal consistency of the questionnaire, Cronbach's alpha coefficient was calculated, which indicated a high internal consistency with a value of 0.933.

## 2.2 Description of Data Collection and Processing

The questionnaire was prepared in electronic form and distributed to the respondents via their parent institutions, which implement various non-formal and publicly recognized programs that do not provide formal educational qualifications and are intended for adults. With the institutions' consent, the links to the questionnaire were sent to all individuals who had participated in any of the educational programs and who had given a written consent for the use of their email addresses. The survey was conducted in April 2023.

The collected data were processed using the statistical program SPSS. We applied univariate, bivariate, and multivariate statistical analyses: frequency distribution, mean values, ANOVA, chi-square test, and factor analysis. In some analyses, the number of responses is lower than 549, as the questionnaire did not require mandatory answers to avoid response fatigue. The respondents who answered fewer than two-thirds of the questions ( $n = 45$ ) were excluded from the analysis.

## 2.3 Sample

A total of 549 individuals responded to most of the questionnaire items. Thirty-six participants did not provide their age, and one participant did not provide their gender. Data on the age and gender distribution of the respondents are presented in Table 1.

**Table 1**

*Number of the respondents by gender and age/Število respondentov glede na spol in starost*

| <i>Age</i> | <i>Female</i> | <i>Male</i> | <i>Total</i> |
|------------|---------------|-------------|--------------|
| 15–30      | 28            | 7           | 35           |
| 31–50      | 176           | 21          | 197          |
| 51–70      | 196           | 37          | 233          |
| Over 70    | 38            | 9           | 48           |
| Total      | 438           | 74          | 513          |

## 3 Results

### 3.1 Sources of Health Information and Perceived Credibility

The participants were presented with a set of seven questions designed to evaluate the primary sources from which they most frequently obtain health-related information, the degree of trust placed in various information sources, the criteria used to assess the credibility of such information, the frequency with which they encounter comprehension difficulties, and the extent to which health information prompts behavioural change. Table 2 summarizes the responses from the sample population ( $N = 549$ ) regarding the sources most commonly used to access health-related information. The participants were permitted to select multiple response options for this item.

**Table 2**

*Information sources from which the respondents obtain health information/Viri zdravstvenih informacij iz katerih respondenti pridobivajo zdravstvene informacije*

| <i>Information sources</i>        | <i>N</i> | <i>%</i> |
|-----------------------------------|----------|----------|
| Online articles                   | 348      | 63.4     |
| Friends, colleagues, relatives    | 280      | 51.0     |
| Healthcare professionals          | 277      | 50.5     |
| Health-related magazines          | 191      | 34.8     |
| Radio, television                 | 182      | 33.2     |
| Online forums and social networks | 177      | 32.2     |
| Health-related workshops          | 136      | 24.8     |
| Daily newspapers and magazines    | 128      | 23.3     |

As indicated in Table 2, the most commonly reported source of health-related information was online articles, cited by approximately two-thirds of the participants. Approximately 50% of the respondents reported obtaining health information from healthcare professionals, as well as from personal contacts such as friends, colleagues, and family members. Around one-third of the participants identified health-focused magazines, broadcast media, and internet forums as frequent sources. Fewer than 25% reported relying on daily newspapers, general-interest magazines, or health-related workshops. These results suggest that internet-based sources – excluding forums and social media platforms – constitute the primary avenue for accessing health information among the majority of the respondents.

**Table 3**

*The degree of trust in the source of information reflected by the average score/Stopnja zaupanja v vir informacij, ki jo odraža povprečna ocena*

| <i>Information sources</i>           | <i><math>\bar{X}</math></i> | <i>SD</i> |
|--------------------------------------|-----------------------------|-----------|
| Written professional sources         | 3.90                        | 0.74      |
| Healthcare professionals             | 3.84                        | 0.82      |
| Trusted individuals (friends/family) | 3.42                        | 0.66      |
| Social networks                      | 2.68                        | 0.71      |
| Celebrities                          | 2.57                        | 0.87      |

Legend/Legenda:  $\bar{X}$  – average value/aritmetična sredina/povprečje, SD – standard deviation/standardni odklon

As shown in Table 3, the participants rated the written professional sources as the most trustworthy, followed by healthcare professionals. The mean trust ratings for both sources were close to 4.0, corresponding to the response category “I trust it quite a lot.” the respondents also reported a relatively high level of trust in health-related information provided by close and trusted individuals ( $M = 3.42$ ). In contrast, lower mean trust scores were observed for social networks ( $M = 2.68$ ) and information disseminated by celebrities ( $M = 2.57$ ), indicating trust levels between “moderately trust” and “mostly do not trust.”

A further statistical analysis revealed no significant differences in trust levels across educational attainment for most information sources. However, trust in written professional sources was significantly higher among the participants with higher educational attainment than among those with lower educational attainment ( $F = 6.23$ ,  $p < 0.001$ ). Table 4 displays the mean scores and standard deviations for the responses, evaluating the extent to which each criterion influences the participants' judgments regarding the credibility of health-related information sources.

**Table 4**

*The average score of the influence of criteria on the judgment about the credibility of the obtained health information/Povprečna ocena vpliva kriterijev na presojo o verodostojnosti pridobljenih zdravstvenih informacij*

| <i>Credibility assessment criterion</i>          | $\bar{X}$ | <i>SD</i> |
|--------------------------------------------------|-----------|-----------|
| Justification of the truthfulness of information | 4.14      | 0.80      |
| Clarity of information                           | 4.12      | 0.78      |
| Credibility of the source of the information     | 3.76      | 0.91      |
| Persuasiveness of the person giving information  | 3.31      | 0.94      |
| Popularity of the information source             | 2.53      | 0.97      |
| Widespread dissemination of the information      | 2.49      | 0.96      |
| Likeability of the person giving information     | 2.47      | 0.99      |

Legend/Legenda:  $\bar{X}$  – average value/aritmetična sredina/povprečje, *SD* – standard deviation/standardni odklon

Two criteria were most influential in the evaluations of health-information reliability: justification of accuracy and clarity, followed by perceived source reliability. The weighting of these criteria varied significantly by educational level. The participants with a higher education relied more strongly on source credibility ( $F = 9.49$ ,  $p < 0.001$ ), justification ( $F = 4.64$ ,  $p < 0.001$ ), and communicator persuasiveness ( $F = 3.25$ ,  $p = 0.004$ ) than those with lower educational attainment.

Of the total sample, 417 respondents (76%) reported on difficulties understanding health information, while 132 (24%) did not respond. Among the respondents, 44% reported occasional difficulty, 46% reported rare or no difficulty, and 9% reported frequent or constant difficulty.

Regarding the behavioural impact, 543 participants responded. Approximately two-thirds reported attempting to change their behaviour based on the trusted health information, though not consistently. An additional 22.7% ( $n = 123$ ) reported occasional recall and action. Few respondents indicated no behavioural influence ( $n = 21$ ; 3.9%) or consistent behaviour change ( $n = 33$ ; 6.1%).

### 3.2 Interest in Health Education

The participants' interest in health-related topics was assessed across four thematic domains: nutrition, physical activity, management of health-related situations, and mental health and personal development.

Overall, interest in nutrition-related topics was moderate to high (all  $M > 3$ ). The highest-rated items concerned the role of nutrition in health ( $M = 4.11$ ,  $SD = 0.78$ ) and healthy meal preparation ( $M = 3.90$ ,  $SD = 0.84$ ), whereas lower interest was observed for eating disorders ( $M = 3.33$ ,  $SD = 1.01$ ) and dietary habits ( $M = 3.52$ ,  $SD = 0.94$ ).

Topics related to physical activity were rated highly, with mean scores approaching 4. The greatest interest was expressed in identifying suitable forms of exercise ( $M = 4.04$ ,  $SD = 0.87$ ), understanding the health benefits of physical activity ( $M = 3.99$ ,  $SD = 0.88$ ), and integrating physical activity into daily life ( $M = 3.96$ ,  $SD = 0.89$ ).

The domain of managing health-related situations elicited substantial interest, particularly first aid ( $M = 4.14$ ,  $SD = 0.82$ ) and everyday health maintenance ( $M = 4.02$ ,  $SD = 0.83$ ). Interest in mental health and personal development topics was generally moderate. Stress management ( $M = 3.51$ ,  $SD = 1.34$ ), emotional regulation ( $M = 3.49$ ,  $SD = 1.37$ ), and conflict resolution ( $M = 3.44$ ,  $SD = 1.33$ ) were rated highest, while addiction management received the lowest interest rating ( $M = 2.16$ ,  $SD = 1.51$ ).

### *3.3 Connections Between Thematic Areas of Interest as a Basis for Developing Educational Modules*

Next, we explored how individual interest variables in different health-related topics are connected. The factor analysis using the principal component method with Varimax rotation revealed that the topics group into four domains, as originally defined in the questionnaire: nutrition, physical activity, managing health-related situations, and mental health with personal development. Only one item, sleep, shifted categories. While it was theoretically placed under prevention, the analysis showed that it is more closely related to topics from the "Physical activity" domain. This finding suggests that the topic "The effect of sleep on health" could be placed under "Physical activity," as people interested in physical activity are also interested in sleep, and vice versa, those uninterested in physical activity are also not interested in the impact of sleep on health (Table 5).

**Table 5**

*Results of factor analysis with the Varimax Rotated Component Matrix/Rezultati faktorjske analize z rotirano komponentno matriko Varimax*

| <i>Variables</i>                                                      | <i>Components (factors)</i> |                           |                  |                   |
|-----------------------------------------------------------------------|-----------------------------|---------------------------|------------------|-------------------|
|                                                                       | <i>Mental Health</i>        | <i>Physical Exercises</i> | <i>Nutrition</i> | <i>Prevention</i> |
| How to communicate effectively and resolve conflicts?                 | 0.831                       | 0.188                     | 0.110            | 0.143             |
| How to recognize, accept, and regulate emotions?                      | 0.815                       | 0.272                     | 0.086            | 0.164             |
| How to become more self-confident?                                    | 0.775                       | 0.086                     | 0.125            | 0.099             |
| How to become more self-focused (mindfulness)?                        | 0.755                       | 0.208                     | 0.131            | 0.140             |
| How to motivate myself (work, study, sports...)?                      | 0.750                       | 0.125                     | 0.187            | 0.227             |
| How to manage stress?                                                 | 0.729                       | 0.300                     | 0.097            | 0.166             |
| How to avoid or manage addiction?                                     | 0.623                       | 0.018                     | 0.199            | 0.223             |
| How to include physical activity in daily life?                       | 0.205                       | 0.771                     | 0.268            | 0.127             |
| What physical/sport activities are suitable for me?                   | 0.239                       | 0.767                     | 0.313            | 0.133             |
| Why is physical activity important for my health/well-being?          | 0.181                       | 0.737                     | 0.245            | 0.281             |
| How can I take care of my health daily?                               | 0.244                       | 0.673                     | 0.347            | 0.222             |
| How to adjust my diet to my physical activity?                        | 0.204                       | 0.543                     | 0.380            | 0.158             |
| How does sleep affect my health?                                      | 0.289                       | 0.532                     | 0.106            | 0.509             |
| How to prepare a healthy meal?                                        | 0.110                       | 0.307                     | 0.762            | 0.010             |
| How to eat healthily without giving up foods?                         | 0.107                       | 0.269                     | 0.738            | 0.027             |
| What in nutrition is crucial for health?                              | 0.155                       | 0.317                     | 0.710            | 0.201             |
| What are different dietary habits?                                    | 0.152                       | 0.236                     | 0.702            | 0.243             |
| How do dietary supplements affect health?                             | 0.205                       | 0.091                     | 0.603            | 0.253             |
| What are eating disorders?                                            | 0.154                       | 0.095                     | 0.458            | 0.457             |
| How to navigate the healthcare system?                                | 0.173                       | 0.104                     | 0.109            | 0.756             |
| Which preventive programs and education are available in Slovenia?    | 0.256                       | 0.103                     | 0.224            | 0.750             |
| How to provide first aid in various situations?                       | 0.195                       | 0.101                     | 0.057            | 0.655             |
| How to avoid infectious diseases?                                     | 0.112                       | 0.386                     | 0.138            | 0.654             |
| What are the most common chronic diseases and how to reduce the risk? | 0.146                       | 0.475                     | 0.254            | 0.630             |
| <i>Cronbach's alpha</i>                                               | 0.825                       | 0.863                     | 0.866            | 0.906             |

## 4 Discussion

### 4.1 Sources of Health Information and Their Perceived Credibility

The initial phase of the study examined the sources from which the participants obtain health information, their perceived credibility, the criteria used to assess reliability, and the influence of information on health-related behaviour. This analysis was guided by the framework proposed by Sørensen et al. (2012), which emphasizes the abilities to access, understand, appraise, and apply health information, and was further informed by theories of critical thinking (Paul et al., 1989; Ennis, 1985).

The findings indicate that the participants most frequently rely on the digital sources of health information, particularly the internet articles, while the professional sources, such as healthcare experts and specialized publications, are used less often. This pattern is concerning, as digital environments, especially social media and online forums, enable the dissemination of unverified and potentially misleading information. Despite this, approximately one-quarter of the respondents identified such platforms as important sources of health information. As noted by Van Kessel et al. (2022), this underscores the growing importance of digital and health literacy, which are essential for critically evaluating online health content in contemporary information environments. Although not the most commonly utilized sources of health information, professional publications and healthcare experts are perceived as the most credible, receiving the highest mean trust ratings. On average, the participants reported trust levels close to 4, corresponding to the response “I trust quite a lot.” However, it is important to note that the individuals with lower levels of health literacy tend to place less trust in the information provided by the healthcare professionals and more trust in sources such as television, social media, and blogs, maintained by celebrities, friends, and pharmaceutical companies (Chen et al., 2019). The participants also expressed a relatively high trust in the health information received from close personal contacts. While such sources may be well-intentioned and emotionally supportive, they are not necessarily accurate or evidence-based, and may primarily serve to reduce psychological discomfort rather than convey factual content. Despite somewhat lower average ratings, the trust placed in the health information disseminated through social media platforms and by celebrities remains, from the standpoint of critical thinking theory, concerningly high. The mean responses approached the category of “moderate trust,” suggesting a limited understanding of the principles underpinning source credibility. Notably, except for professional sources, no statistically significant differences were observed in trust levels across educational attainment. As expected, individuals with higher education reported significantly greater trust in professional sources – a likely consequence of the role of education in fostering critical thinking and a stronger orientation toward scientific authority. Within this context, the concept of critical health literacy becomes particularly salient. As noted by Sadar and Erjavec (2021), critical health literacy is essential in an era characterized by the constant and ubiquitous availability of diverse information sources. The ability to assess the credibility, relevance,

and accuracy of such information is a fundamental competency for informed health decision-making in the digital age.

In our sample, the primary criteria influencing the individuals' assessments of information reliability were clarity, justification of truth, and source credibility. These align with the key constructs in the critical thinking theory, which emphasize such factors in evaluating credibility. A recent meta-analysis by Ou & Ho (2024) identified message quality, source credibility, and message fluency as the most influential factors in credibility judgments. Our findings are consistent with this, as the participants in our study reported a relatively high trust in information that was clear and came from credible sources. A notable finding is the comparatively lower average scores assigned to other criteria; however, these scores remain relatively high in absolute terms, nearing the threshold of "moderately influential." According to the established theoretical frameworks in critical thinking, factors such as source popularity, widespread dissemination, and the likeability of the information provider are not considered valid indicators of credibility. Further analysis revealed that the perceived importance of specific criteria was associated with the participants' educational attainment. Individuals with higher levels of education attributed a significantly greater importance to the credibility of the source of information, justification of information, and persuasiveness of the person giving the information than those with lower educational backgrounds. The first two criteria are exactly those central to professional education and are consistently employed by experts across diverse domains. When evaluating information credibility, experts tend to prioritize content-specific features and draw upon domain-specific or scientific knowledge. In contrast, non-experts (or laypersons) are more likely to rely on superficial cues, such as surface characteristics or social endorsement (Ou & Ho, 2023). Based on these findings, it is recommended that the development of a critical attitude toward health-related information be prioritized as a core objective in publicly endorsed health and healthy lifestyle education programs (in Slovenia). In particular, the concept of credibility of information should be explicitly addressed, and learners should be equipped with skills for evaluating the trustworthiness of health information as a key objective and strategy for enhancing informed decision-making regarding health.

#### *4.2 Interest in Health Education Among Adult Users of Public's Universities Programs – Thematic Relevance of the Proposed Modules*

The publicly recognized adult education program on health, healthy lifestyles, and personal development was designed using a modular structure, following the established guidelines for adult education program development (Dovžak et al., 2020). The program was based on the presumed needs and challenges of the adult population. Four modules were envisioned: Healthy Nutrition, Physical Health and Disease Prevention, Exercise for Health, and Mental Health with a Focus on Personal Development. In the second phase of the study, we examined the perceived relevance and interest in the proposed modules among the potential program participants. The results indicate that the proposed modules and their thematic content – formulated as

specific questions in the survey, which the modules would address – elicited a considerable interest. On average, participant ratings approached 4 on a 5-point Likert scale (“I am quite interested”), suggesting a high potential for engagement among the users of adult education (folk high school) programs.

Given that poor nutrition is a recognized risk factor for numerous chronic non-communicable diseases – such as type 2 diabetes, cardiovascular disease, and certain cancers (Musaiger & Al-Hazzaa, 2012) – we developed the Healthy Nutrition module. The most highly rated topics in this module included: What aspects of nutrition are most important for health? How to prepare a healthy meal? and How to eat healthily without giving up favourite foods? The lowest-rated topic concerned eating disorders, though even this item received an average rating above 3 (“moderately interested”). These findings affirm the appropriateness and relevance of the selected topics for this module. In the Exercise for Health module, all proposed topics received exceptionally high ratings. The participants expressed the greatest interest in questions such as: What types of physical or sports activities are appropriate for me? and Why is exercise important for health and well-being? These results underscore a strong demand for content in this area. Particularly for older adults, physical activity is considered a key factor in maintaining health and overall well-being (Chia et al., 2023).

Considering that the general health literacy in Slovenia remains relatively low – with two-thirds of the population demonstrating limited navigational health literacy (Vrdelja et al., 2022) – we developed the Physical Health and Preventive Activities module, which encompasses a broad range of relevant topics. The average scores for all items within this module exceeded 3.6. The most interest was shown in the following topics: first aid knowledge, the concept of healthy living, the impact of sleep on health, and strategies for reducing the risk of chronic diseases, with mean scores approaching or exceeding 4. Additional interest was observed in areas related to preventive health programs in Slovenia and navigating the healthcare system, indicating that the module aligns well with the participant needs and interests.

Finally, based on the findings by Cybulski et al. (2015), who reported that biopsychosocial challenges reduce the quality of life in older adults, we developed the Personal Development module. Although this module received the lowest overall interest ratings compared to the others, the average scores for most topics remained above 3, indicating a moderate interest. The highest-rated topics included: How to manage stress, How to recognize, accept, and regulate emotions, and How to communicate effectively and resolve conflicts. The lowest-rated topic pertained to addiction management, which received a mean score slightly above 2, corresponding to “mostly not interested.” This may suggest that the individuals who participate in voluntary adult education programs either do not identify with addiction-related issues or perceive them as less personally relevant.

The factor analysis also shows that there are two thematic clusters that can be placed in two modules – next to the module in which we placed it in the program or in the prevention module – namely, sleep and eating disorder. This provides a justification for placing both contents in the context of different modules.

### *4.3 Practical Implications*

Given that the public adult education programs are grounded in voluntary participation, the curriculum design should be aligned with the actual interests, needs, and motivational determinants of prospective participants. The findings of the present study provide an important empirical basis for future curriculum development, enabling the design of educational content that is both relevant and engaging for adult learners.

The results further offer the guidelines for the continued development of programs aimed at strengthening health literacy. A particular emphasis should be placed on fostering the awareness of the credibility of information sources, as well as on developing the competencies for the critical evaluation of the reliability and validity of health-related information.

At the content level, the study indicates a consistently high level of interest across all the examined health domains, including physical activity, healthy nutrition, prevention of chronic diseases, and mental health.

### *4.4 Limitations of the Study*

Several limitations should be considered when interpreting the findings of this study. The sample was limited to the participants in non-formal education programs at people's universities (adult education institutions/lifelong learning centres) in Slovenia, which may limit the generalizability of the findings to the wider adult population. The study was conducted using an online questionnaire, which may have excluded individuals with limited digital literacy or access to digital tools. While the questionnaire covered a broad range of health topics and informational behaviours, it did not explore deeper qualitative aspects, such as personal meaning, motivation, or barriers to behaviour change. The cross-sectional nature of the study does not allow for causal conclusions, and future longitudinal or mixed-methods research would be valuable in confirming and expanding upon these results.

## **5 Conclusion**

This study highlights the predominance of digital sources in the acquisition of health information, alongside notable variations in perceived credibility across information sources. While healthcare professionals and professional publications were identified as the most trusted sources, the relatively high level of trust placed in social media and celebrity sources indicates a limited understanding of source credibility among parts of the population. These findings underscore the importance of strengthening critical health literacy as a central component of public health education.

The results further demonstrate a strong interest in structured, non-formal health education programs, particularly in areas related to nutrition, physical activity, preventive health, and personal development. To ensure quality and effectiveness, such programs should be based on evidence-based content, delivered by healthcare professio-

nals, and designed to promote clarity, relevance, and critical evaluation of information sources. By addressing these criteria, public health education initiatives can play a key role in supporting informed health decision-making and improving the population's health outcomes.

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## **Viri zdravstvenih informacij, sposobnost ocenjevanja njihove verodostojnosti in zanimanje za vsebine, povezane z zdravjem**

*Zdravju povezano vedenje ni rezultat zgolj individualne izbire, temveč ga oblikuje preplet osebnih, socialnih, okoljskih in sistemskih dejavnikov (Marks idr., 2021; Tapper, 2021). To kompleksnost pojasnjujejo različni modeli spreminjanja zdravstvenega vedenja (Ajzen, 1991; Fisher idr., 2003; Abraham in Sheeran, 2015; Prentice-Dunn in Rogers, 1986). Ker posamezni modeli pojasnijo le del variabilnosti zdravstvenega vedenja, je potrebno večdimenzionalno razumevanje odločanja o zdravju (Marks idr., 2021; Tapper, 2021). Raziskava se osredotoča na dva sklopa dejavnikov: kognitivne vidike zdravstvene pismenosti, predvsem dostopanje do informacij, zaupanje v vire in presojo njihove verodostojnosti, ter motivacijski vidik, izražen kot interes odraslih za različne zdravstvene vsebine. Zdravstvena pismenost je razumljena po Nutbeamovem modelu, ki razlikuje med funkcionalno, interaktivno in kritično zdravstveno pismenostjo (Nutbeam, 2000). Posebej pomembna je kritična zdravstvena pismenost, saj omogoča presojo kakovosti, zanesljivosti in uporabnosti informacij. Presoja zdravstvenih informacij je povezana s kritičnim mišljenjem, ki vključuje vrednotenje dokazov, argumentov, virov in logične utemeljenosti informacij (Facione, 2011; Ennis, 1985; Halpern, 2014; Paul in Elder, 2006). V digitalnem okolju, kjer so zdravstvene informacije množično dostopne, vendar različno zanesljive, postaja kritična presoja eden ključnih pogojev za varno odločanje o zdravju. Van Kessel idr. (2022) zato digitalno zdravstveno pismenost opredeljujejo kot pomemben dejavnik zdravja. Interes za zdravstvene vsebine predstavlja motivacijski pogoj za vključevanje odraslih v izobraževalne programe.*

*Namen raziskave je bil ugotoviti, katere vire zdravstvenih informacij odrasli uporabljajo, koliko jim zaupajo, katere kriterije uporabljajo pri presoji zanesljivosti, v kolikšni meri informacije vplivajo na njihovo vedenje ter katere zdravstvene vsebine jih najbolj zanimajo.*

*Izvedena je bila kvantitativna raziskava z deskriptivno in kavzalno-neeksperimentalno metodo. Uporabljen je bil strukturiran vprašalnik s tremi sklopi: viri zdravstvenih informacij, njihova zaznana kredibilnost in vpliv na vedenje; interes za zdravstvene vsebine ter demografski podatki. Večina postavk je bila oblikovana na petstopenjski Likertovi lestvici. Vprašalnik je pripravila interdisciplinarna skupina devetih strokovnjakov, njegova notranja konsistentnost pa je bila visoka (Cronbach  $\alpha = 0,933$ ). Vpra-*

šalnik je bil izveden elektronsko aprila 2023 med odraslimi, vključenimi v neformalne oziroma javnoveljavne programe izobraževanja odraslih na ljudskih univerzah. Podatki so bili obdelani s programom SPSS; uporabljene so bile frekvenčne porazdelitve, aritmetične sredine, analiza variance, hi-kvadrat test in faktorska analiza. Vzorec je obsegal 549 oseb. Med respondenti, ki so navedli spol in starost, je bilo 438 žensk in 74 moških. Največ respondentov je bilo starih od 51 do 70 let.

Prva ključna ugotovitev je, da odrasli zdravstvene informacije najpogosteje pridobivajo iz digitalnih virov. Spletne članke je kot vir navedlo 63,4 % respondentov. Približno polovica informacije pridobiva od prijateljev, sodelavcev in sorodnikov ter od zdravstvenih delavcev. Tretjina uporablja zdravstvene revije, radio in televizijo ter spletne forume oziroma družbena omrežja, manj kot četrtnina pa zdravstvene delavnice in dnevno časopisje. Druga ključna ugotovitev je razkorak med pogostostjo uporabe in zaznano verodostojnostjo virov. Čeprav so spletni viri najpogosteje uporabljeni, respondenti najvišjo stopnjo zaupanja pripisujejo pisnim strokovnim virom ( $M = 3,90$ ) in zdravstvenim delavcem ( $M = 3,84$ ). Relativno visoko zaupanje je bilo izraženo tudi do informacij zaupanja vrednih oseb ( $M = 3,42$ ). Nižje, vendar ne zanemarljivo zaupanje je bilo izkazano do družbenih omrežij in javnih osebnosti. Zaupanje v pisne strokovne vire je bilo statistično značilno višje pri višje izobraženih respondentih ( $F = 6,23$ ;  $p < 0,001$ ). Pri presoji zanesljivosti zdravstvenih informacij sta bila najpomembnejša kriterija utemeljenost resničnosti informacije ( $M = 4,14$ ) in razumljivost informacije ( $M = 4,12$ ), sledila je zanesljivost vira. Nižje so bili ocenjeni prepričljivost osebe, popularnost vira, razširjenost informacije in všečnost vira, vendar ti kriteriji pri delu respondentov še vedno vplivajo na presojo. Višje izobraženi respondenti so statistično značilno večji pomen pripisali zanesljivosti vira ( $F = 9,49$ ;  $p < 0,001$ ), utemeljenosti informacij ( $F = 4,64$ ;  $p < 0,001$ ) in prepričljivosti osebe, ki informacijo posreduje ( $F = 3,25$ ;  $p = 0,004$ ). Tretja ključna ugotovitev je, da ima pomemben delež odraslih težave z razumevanjem zdravstvenih informacij in s prenosom informacij v vedenje. Med respondenti jih je 44 % navedlo, da zdravstvene informacije včasih težko razumejo, 46 % jih ima takšne težave redko ali nikoli, 9 % pa pogosto ali vedno. Približno dve tretjini skuša na podlagi zaupanja vrednih informacij spremeniti vedenje, vendar jim to ne uspe vedno. Le 6,1 % jih je navedlo, da vedenje zagotovo spremenijo, 3,9 % pa, da zdravstvene informacije na njihovo vedenje ne vplivajo. Drugi del raziskave je pokazal visok interes za izobraževalne vsebine s področja zdravja. Največ zanimanja je bilo izraženega za pomen prehrane za zdravje, pripravo zdravih obrokov, zdravo prehranjevanje brez občutka odrekanja, izbiro ustreznih oblik gibanja, pomen gibanja za zdravje, vključevanje gibanja v vsakdanje življenje, prvo pomoč in vsakodnevno skrb za zdravje. Vsebine duševnega zdravja in osebnostnega razvoja so bile ocenjene nekoliko nižje, vendar je bil izražen zmeren interes za obvladovanje stresa, uravnavanje čustev ter učinkovito komunikacijo in reševanje konfliktov.

Faktorska analiza je potrdila štiri vsebinska področja interesa: prehrana, gibanje, preventiva oziroma obvladovanje zdravstvenih situacij ter duševno zdravje z osebnostnim razvojem. Spanje se je statistično močneje povezalo s področjem gibanja.

Rezultati potrjujejo, da digitalni viri predstavljajo osrednji kanal pridobivanja zdravstvenih informacij, vendar to odpira vprašanje zanesljivosti, razumljivosti in strokovne ustreznosti informacij. V skladu z Van Kessel idr. (2022) je treba digitalno zdravstveno pismenost razumeti kot pomemben javnozdravstveni dejavnik. Razkorak med pogostostjo uporabe spletnih virov in večjim zaupanjem v strokovne vire kaže, da dostopnost informacij še ne pomeni njihove zaznane verodostojnosti ali uporabnosti. Ugotovitve so skladne z raziskavo Chen idr. (2019), ki kaže, da posamezniki z nižjo zdravstveno pismenostjo pogosteje zaupajo manj strokovnim virom, kot so televizija, družbeni mediji, blogi znanih osebnosti in neformalna družabna omrežja. V tej raziskavi se je pokazalo, da višje izobraženi respondenti bolj zaupajo pisnim strokovnim virom in pri presoji informacij v večji meri uporabljajo kriterije, povezane z verodostojnostjo vira in utemeljenostjo informacij. Razumljivost informacij in njihova dokazna utemeljenost sta bila prepoznana kot ključna kriterija presoje. To je skladno s teorijami kritičnega mišljenja, ki poudarjajo jasnost, relevantnost, argumentiranost in kredibilnost informacij (Ennis, 1985; Halpern, 2014; Paul in Elder, 2006). Tudi Ou in Ho (2024) ugotavljata, da na zaznavo kredibilnosti vplivajo kakovost sporočila, kredibilnost vira in jasnost sporočanja. Vpliv popularnosti, razširjenosti in všečnosti vira pri delu respondentov pa kaže, da je treba v izobraževalne programe vključiti vsebine o presoji verodostojnosti zdravstvenih informacij. Raziskava potrjuje ustreznost modularno zasnovanega programa za odrasle. Visok interes za prehrano je pomemben z vidika preprečevanja kroničnih nenalezljivih bolezni, pri katerih je neustrezna prehrana pomemben dejavnik tveganja (Musaiger in Al-Hazzaa, 2012). Visok interes za telesno dejavnost je skladen z ugotovitvami, da je gibanje ključno za ohranjanje zdravja in kakovosti življenja, zlasti pri starejših odraslih (Chia idr., 2023). Interes za prvo pomoč, preventivo in orientacijo v zdravstvenem sistemu je pomemben glede na ugotovitve o omejeni zdravstveni pismenosti prebivalcev Slovenije, zlasti na področju navigacije po zdravstvenem sistemu (Vrdelja idr., 2022). Vsebine duševnega zdravja in osebnostnega razvoja ostajajo pomembne zaradi vpliva psihosocialnih dejavnikov na kakovost življenja odraslih in starejših oseb (Cybulski idr., 2015).

Raziskava kaže, da odrasli zdravstvene informacije najpogosteje pridobivajo iz digitalnih virov, vendar največ zaupanja pripisujejo strokovnim virom in zdravstvenim delavcem. Pomemben delež respondentov ima vsaj občasne težave pri razumevanju zdravstvenih informacij, del respondentov pa pri presoji zanesljivosti upošteva tudi manj ustrezne kriterije, kot so popularnost, razširjenost in všečnost vira. Odrasli izražajo visok interes za izobraževalne vsebine s področja prehrane, gibanja, preventive, prve pomoči in vsakodnevne skrbi za zdravje, kar potrjuje ustreznost razvoja modularno zasnovanih javnoveljavnih programov za odrasle. Izobraževalni programi za odrasle naj zato ne vključujejo zgolj posredovanja zdravstvenih informacij, temveč tudi sistematičen razvoj kritične in digitalne zdravstvene pismenosti, presoje verodostojnosti virov ter prenosa znanja v vsakodnevno vedenje. Takšni programi lahko prispevajo k bolj informiranemu odločanju, večji samostojnosti posameznikov pri skrbi za zdravje in dolgoročnemu izboljšanju javnozdravstvenih izidov.

### *Izjava o dostopnosti raziskovalnih podatkov*

Članek temelji na raziskovalnih podatkih, ki se hranijo v 1ka sistemu in niso javno dostopni oziroma so dostopni pri avtorju na osnovi utemeljene prošnje.

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# Veščine komuniciranja izvajalcev zdravstvene nege v zahtevnih interakcijah s pacienti

Izvirni znanstveni članek

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**KLJUČNE BESEDE:** raznolikost pacientov, komunikacijska kompetentnost, zdravstvena nega

**POVZETEK** – V zadnjih letih se je struktura pacientov, ki vstopajo v zdravstveno obravnavo, spremenila, s tem pa so se spremenile tudi potrebe po znanju, veščinah in kompetencah izvajalcev zdravstvene nege za komunikacijo z raznolikimi pacienti. Namen raziskave je bil ugotoviti izkušnje, potrebe in ovire izvajalcev zdravstvene nege s pacienti, ki jih doživljajo kot težavne. Zastavili smo si sedem ciljev, iz katerih smo določili raziskovalna vprašanja. Raziskava je temeljila na kvalitativnem raziskovalnem pristopu s tehniko intervjuvanja. V priložnostni vzorec je bilo vključenih deset izvajalcev zdravstvene nege, sedem oseb ženskega spola in tri osebe moškega spola, ki so stari med 26 in 58 let ter imajo med 5 in 38 let delovnih izkušenj v zdravstvu. Intervjuvanci kot poseben izziv zadnjih nekaj let vidijo predvsem paciente, ki vstopajo v zdravstveno obravnavo z višjimi pričakovanji, paciente, ki ne razumejo navodil ali jih ignorirajo, nezaupljive paciente, paciente s specifičnimi diagnozami in agresivne paciente, ob tem pa poudarjajo pomen veščin izvajalcev zdravstvene nege, ki znajo ustrezno komunicirati s takšnimi pacienti ter ohraniti zbranost in mirnost tudi v nepredvidljivih in stresnih situacijah.

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**KEYWORDS:** diversity of patients, communication competences, healthcare

**ABSTRACT** – In recent years, the structure of patients entering healthcare has changed and with it so has the need for healthcare providers' knowledge, skills and competences to communicate with different patients. The aim of the study was to identify the experiences, needs and barriers of healthcare providers in dealing with patients they perceive as difficult. We set ourselves seven objectives from which we derived the research questions. The study is based on a qualitative research approach, with the interview technique. The random sample comprised ten healthcare providers, seven female and three male, aged between 26 and 58 years, and with between 5 and 38 years of professional experience in healthcare. The people in the sample see as particularly challenging, in recent years, patients who enter medical treatment with higher expectations, patients who do not understand or ignore instructions, suspicious patients, patients with certain diagnoses and aggressive patients, emphasising the importance of skills of healthcare providers who can communicate appropriately with such patients and keep calm even in unpredictable and stressful situations.

## 1 Uvod

Komunikacija je temeljni proces, ki pomembno prispeva k oblikovanju človekove identitete, samozavednosti, socialne interakcije in kakovosti življenja (Carter, 2019). V zdravstveni obravnavi ima komunikacija posebno vlogo, saj kot temeljna profesionalna kompetenca omogoča vzpostavitev zaupanja med izvajalcem zdravstvene nege in pacientom (Chichirez in Purcărea, 2018; Sharkiya, 2023) ter lahko vpliva na splošno zadovoljstvo z zdravstveno oskrbo, izboljša zdravstvene izide, klinično varnost in učinkovitost oskrbe (Cheon idr., 2024).

Učinkovita komunikacija med izvajalcem zdravstvene nege, pacientom in njegovimi svojci je ključna za kakovostno in uspešno zdravstveno obravnavo (Kourkouta in Papathanasiou, 2014; Prebil idr., 2009). Za njeno doseganje morajo izvajalci zdravstvene nege pacienta razumeti in z njim vzpostaviti iskren, spoštljiv in topel odnos, ki spodbuja razumevanje pacientovih potreb (Cilar Budler in Čuček Trifkovič, 2023; Kourkouta in Papathanasiou, 2014). Neprilagojena obravnava pacientov lahko vodi v slabe izide zdravljenja in nezadovoljstvo pacientov (Taylor, 2005), medtem ko neučinkovita komunikacija povečuje tveganje za nesporazume, neustrezno oskrbo in strokovne napake (Balzer Riley, 2020; Minnican in O'Toole, 2020). V situacijah, ko pacienti doživljajo strah in negotovost, se lahko odzovejo jezno, kar lahko ustvari zahtevne situacije, ki lahko ob neustreznem razreševanju privedejo tudi do agresije (Edwards, 2010; Pavord in Donelly, 2015).

Komunikacija v zdravstveni obravnavi je proces izmenjave informacij, ki vključuje aktivno poslušanje, razumevanje sporočila in interpretacijo neverbalnih sporočil (Chichirez in Purcărea, 2018). V sodobnih teoretičnih pristopih se najpogosteje umešča v okvir na pacienta osredotočene obravnave (patient-centered care), ki poudarja celostno razumevanje pacienta kot posameznika z lastnimi vrednotami, izkušnjami in potrebami (Mead in Bower, 2000). Ta pristop presega biomedicinski model, saj vključuje psihosocialne dimenzije bolezni ter poudarja pomen odnosa med pacientom in izvajalcem zdravstvene nege. Relacijski pristop dodatno izpostavlja, da komunikacija ni enosmeren prenos informacij, temveč proces soustvarjanja pomena v interakciji med udeleženci (Street idr., 2009). Iz tega izhaja, da kakovost odnosa pomembno vpliva na pacientovo sodelovanje, zadovoljstvo in zdravstvene izide.

Pri obravnavi raznolikih skupin pacientov se lahko pojavijo izzivi pri komuniciranju. V povezavi s tem se v literaturi pojavlja kritika pojma »težavni pacient«, ki se vse pogosteje razume kot socialno konstruiran in relacijski fenomen. Ta ne odraža zgolj značilnosti pacienta, temveč tudi percepcije, pričakovanja in obremenitve izvajalcev zdravstvene nege (Koekkoek idr., 2009). Zato uporaba tega pojma zahteva posebno previdnost, saj lahko vodi v poenostavljeno razumevanje kompleksnih situacij. Za celovito obravnavo je pomembno upoštevati tudi koncepte stigmatizacije in etiketiranja, ki lahko vplivajo na odnos do pacienta in kakovost zdravstvene obravnave (Link in Phelan, 2001).

## **2 Komuniciranje s težavnimi pacienti**

Pacienti, ki jih izvajalci zdravstvene nege pogosto dojemajo kot težavne, so prisotni v mnogih kliničnih okoljih (Adler, 2006). Njihova opredelitev je kompleksna, saj je pojem »težaven« subjektiven in pogosto odraža izkušnjo izvajalca zdravstvene nege, ne pa nujno objektivnih značilnosti pacienta (Koekkoek idr., 2006).

Literatura kritično obravnava uporabo tega pojma, saj lahko vodi v poenostavljanje kompleksnih situacij in zanemarjanje širšega konteksta, kot so organizacijski pritiski, časovne omejitve in komunikacijske ovire (Hahn idr., 1996; Koekkoek idr.,

2009). Poleg tega lahko takšno označevanje prispeva k stigmatizaciji pacientov ter negativno vpliva na terapevtski odnos, empatijo in kakovost obravnave (Link in Phelan, 2001). Zato nekateri avtorji predlagajo uporabo koncepta »težavne interakcije«, ki poudarja, da je težavnost rezultat odnosa med pacientom in izvajalcem zdravstvene nege ter konkretnih situacijskih okoliščin (McCabe, 2004). Takšen pristop omogoča manj pristransko razumevanje komunikacijskih izzivov.

Kljub temu se izvajalci zdravstvene nege v praksi pogosto srečujejo s pacienti, katerih vedenjske, čustvene ali komunikacijske značilnosti predstavljajo večji izziv v obravnavi. Ta vedenja so lahko povezana s stisko, strahom, bolečino ali preteklimi negativnimi izkušnjami z zdravstvenim sistemom, zato jih je treba obravnavati v širšem psihosocialnem kontekstu (Edwards, 2010). V zadnjih letih postaja komuniciranje v takšnih situacijah še posebej zahtevno. Razširjen dostop do informacij prek spleta je prinesel nove izzive. Pacienti, ki so še posebej časovno potratni in čustveno izčrpavajoči, dodatno poslabšujejo številne druge pritiske, s katerimi se izvajalci zdravstvene nege soočajo, kot so administrativne obremenitve, časovne omejitve in digitalizacija zdravstvene obravnave (Schuermeyer idr., 2017). V takšnih okoliščinah sta še toliko pomembnejši prilagojena komunikacija in izmenjava informacij, ki spodbuja razumevanje in sodelovanje ter omogoča enako kakovostno oskrbo (Carter, 2019).

Pomembno je, da izvajalci zdravstvene nege prepoznajo individualne potrebe pacienta, pri čemer so ključnega pomena dobra komunikacija v zdravstveni negi (Markides, 2011) in ustrezne komunikacijske veščine (Štante idr., 2018). Kakovostna komunikacija pomaga pacientu, da postane aktiven partner v procesu (Baby idr., 2018) in se lahko informirano odloča (Carter, 2019). Čeprav so zdravila, načrtovanje okolja in kadrovski viri prvi pogoj za obvladovanje zahtevnih vedenj, je učinkovita komunikacija pomemben vidik pri obvladovanju teh zahtevnih vedenj (Carter, 2019). Neustrezne komunikacijske veščine in komunikacijske ovire pa pogosto povzročajo konflikte (Pollozhani idr., 2013).

Za uspešno obravnavo je pomembno tudi, da se izvajalci zdravstvene nege zave dajo lastnih odzivov, čustev in stališč, saj ti pomembno vplivajo na potek interakcije s pacientom (Schuermeyer idr., 2017). Čeprav literatura omenja povezave med zahtevnim vedenjem in določenimi osebnostnimi značilnostmi ali duševnimi stiskami, opozarja tudi na nevarnost posploševanja in stigmatizacije, zlasti pri povezovanju s specifičnimi diagnozami (Koekkoek idr., 2006; Koekkoek idr., 2009). Takšne interpretacije lahko vodijo v pristransko obravnavo in zmanjšujejo možnosti za individualizirano, na pacienta osredotočeno oskrbo. Razvoj učinkovitih komunikacijskih strategij je zato ključen za preprečevanje neugodnih izidov v zdravstveni obravnavi (Schuermeyer idr., 2017).

### 3 Metodologija

Namen raziskave je bil preučiti komuniciranje izvajalcev zdravstvene nege s pacienti, ki jih doživljajo kot težavne.

Zanimalo nas je, kako izvajalci zdravstvene nege opredeljujejo težavne paciente, kako pogosto se z njimi srečujejo pri svojem delu in kako so se njihove komunikacijske potrebe v zadnjih letih spremenile, s katerimi ovirami se pri tem soočajo ter kako ocenjujejo zadostnost lastnih kompetenc za tovrstno komuniciranje, kakšne so njihove potrebe po dodatnem strokovnem izobraževanju na tem področju ter katere možnosti za izboljšanje komuniciranja s težavnimi pacienti prepoznajo znotraj svojega zavoda.

### 3.1 Metode in tehnike zbiranja podatkov

Raziskava je temeljila na kvalitativnem raziskovalnem pristopu, uporabljena je bila deskriptivna metoda dela, primarni podatki za analizo so bili zbrani s tehniko intervjuvanja. Sekundarne podatke smo zbrali s pomočjo pregleda strokovne in znanstvene literature, pridobljene s pomočjo podatkovnih baz COBISS, PubMed in SpringerLink.

### 3.2 Opis instrumenta

Za zbiranje podatkov je bila uporabljena predloga za polstrukturirani intervju, ki je bila oblikovana na podlagi pregleda tuje strokovne in znanstvene literature (Carter, 2019; Kourkouta in Papathanasiou, 2014; Schuermeyer idr., 2017). Predloga je bila sestavljena iz dveh sklopov in je vsebovala 14 vprašanj odprtega tipa s podvprašanji. Prvi del je bil namenjen pridobivanju sociodemografskih podatkov intervjuvancev (spol, starost, izobrazba, delovna doba v zdravstvu, zavod), drugi del pa pridobivanju podatkov, s pomočjo katerih smo odgovorili na raziskovalna vprašanja.

### 3.3 Opis vzorca

V priložnostni vzorec smo vključili deset izvajalcev zdravstvene nege, sedem oseb ženskega spola in tri osebe moškega spola, ki so stari med 26 in 58 let ter imajo med 5 in 38 let delovnih izkušenj v zdravstvu. Podrobni podatki so predstavljeni v tabeli 1.

**Tabela 1**

*Demografski podatki izvajalcev zdravstvene nege/Demographic data on healthcare providers*

| Oznaka | Spol   | Starost v letih | Izobrazba   | Zaposlitev      | Delovna doba v letih |
|--------|--------|-----------------|-------------|-----------------|----------------------|
| I1     | moški  | 57              | dipl. zn.   | DSO             | 38                   |
| I2     | ženski | 42              | dipl. m. s. | DSO             | 9                    |
| I3     | ženski | 35              | dipl. m. s. | bolnišnica      | 7                    |
| I4     | ženski | 48              | dipl. m. s. | zdravstveni dom | 28                   |
| I5     | ženski | 58              | dipl. m. s. | DSO             | 30                   |
| I6     | ženski | 44              | dipl. m. s. | DSO             | 18                   |
| I7     | ženski | 34              | dipl. m. s. | DSO             | 8                    |
| I8     | moški  | 28              | dipl. zn.   | bolnišnica      | 6                    |
| I9     | ženski | 26              | dipl. m. s. | zdravstveni dom | 5                    |
| I10    | moški  | 31              | dipl. zn.   | DSO             | 12                   |

### 3.4 Opis zbiranja in obdelave podatkov

Sodelovanje v raziskavi je bilo prostovoljno, vsem sodelujočim je bila v vseh fazah zbiranja in obdelave podatkov zagotovljena anonimnost, prav tako je raziskava potekala v skladu z veljavnimi etičnimi načeli raziskovanja. Za pridobivanje podatkov smo uporabili tehniko intervjuvanja. Intervjuji so potekali aprila in maja 2025. Razgovor smo s predhodnim dovoljenjem sodelujočih posneli s pomočjo mobilnega aparata. Tonske zapise smo po končanih intervjujih zapisali in jih posredovali intervjuvancem v avtorizacijo. Sledila je kvalitativna analiza, v okviru katere smo po večkratnem pregledu transkriptov izvedli odprto kodiranje, pri katerem smo relevantnim pomen-skim enotam pripisali kode. V nadaljevanju smo kode na podlagi vsebinske sorodnosti združevali v kategorije, pri čemer je proces vključeval primerjanje, združevanje ter preverjanje skladnosti med podatki.

Veljavnost oblikovanih kategorij smo zagotavljali s konstantno primerjavo znotraj podatkov, večkratnim pregledom intervjujev in pripadajočih citatov ter s transparentnim dokumentiranjem analitičnega postopka. Dodatno smo reflektirali vlogo raziskovalca in morebitne pristranskosti, s čimer smo prispevali k večji verodostojnosti interpretacije podatkov.

## 4 Rezultati

Izraze (kode) smo smiselno povezali v sedem kategorij, in sicer:

- ☐ Opredelitev težavnih pacientov.
- ☐ Stik s težavnimi pacienti.
- ☐ Spremembe potreb po komunikaciji s težavnimi pacienti.
- ☐ Ovire pri komunikaciji s težavnimi pacienti.
- ☐ Ocena kompetenčne usposobljenosti za komuniciranje s težavnimi pacienti.
- ☐ Vključenost v dodatna izobraževanja.
- ☐ Možnosti za spremembe in izboljšanje.

### *Kategorija 1: Opredelitev težavnih pacientov*

Izvajalci zdravstvene nege v raziskavi različno opredeljujejo težavne paciente, pri čemer se definicije nanašajo na klinične, vedenjske in komunikacijske značilnosti pacientov. Nekateri jih povezujejo z določenimi zdravstvenimi stanji, kot so senzorične okvare, nevrološke in kronične bolezni ter motnje v duševnem zdravju, drugi pa poudarjajo vedenjske in komunikacijske vidike, kot so agresivnost, nezadovoljstvo, zavračanje sodelovanja ali otežena komunikacija.

To ponazarjajo naslednje izjave intervjuvancev:

- ☐ »Med težavne paciente uvrščam osebe z okvarami sluha (gluhe), slepe, paciente z motnjami požiranja, paciente z demenco, Parkinsonovo boleznijo ter različnimi psihičnimi stanji.« (I1)
- ☐ »To so tisti, ki zaradi bolezni, svojih vedenjskih vzorcev, osebnostnih lastnosti ali psihičnega stanja otežujejo sodelovanje, izvajanje zdravstvene nege ali komuni-

kacijo. Mednje sodijo tudi agresivni, manipulativni, zelo zahtevni ali sumničavi pacienti.« (I2)

- »Gre za paciente, ki zaradi svojih čustvenih stanj, kot so intenzivna tesnoba, agresija ali nezadovoljstvo, zahtevajo poseben pristop.« (I3)
- »To so pacienti, ki imajo zaradi strahu, bolečine, nepoznavanja postopkov ali osebnostnih lastnosti težave pri sodelovanju.« (I4)
- »Sem sodijo tudi pacienti, ki zavračajo sodelovanje, izražajo nezadovoljstvo, imajo izbruhe jeze ali ne spoštujejo osebnih meja zaposlenih.« (I5)
- »Gre za paciente, ki pogosto brez razloga ustvarjajo konfliktne situacije oziroma so stalno nezadovoljni in polni pripomb.« (I6)

### *Kategorija 2: Stik s težavnimi pacienti*

Izvajalci zdravstvene nege poročajo, da se s težavnimi pacienti srečujejo zelo pogosto, pri čemer večina navaja vsakodnevne ali pogoste stike v klinični praksi. Najpogostejše so kot težavni pacienti izpostavljeni starejši bolniki z demenco, pacienti z duševnimi motnjami, kronični bolniki ter pacienti z agresivnim ali zahtevnim vedenjem.

To je razvidno iz naslednjih izjav intervjuvancev:

- »Vsak dan se srečujem s težavnimi pacienti, predvsem z osebami z duševnimi težavami in gluhih pacienti.« (I1)
- Gre predvsem za »starejše paciente z demenco« (I2, I4, I7, I9), »pa tudi kronične bolnike.« (I2, I4)
- »Težavni pacienti so pogosto starejši z demenco ali depresijo.« (I5, I8)
- »Srečujem se z zahtevnimi pacienti.« (I6)
- »To so tudi agresivni pacienti, s katerimi se srečujem pogosto.« (I10)

### *Kategorija 3: Spremembe potreb po komunikaciji s težavnimi pacienti*

Intervjuvanci soglasno poročajo o spremembah komunikacijskih potreb v zadnjih letih, ki se na eni strani odražajo v večji potrebi po empatični, individualizirani in strukturirani komunikaciji, na drugi strani pa v večji informiranosti pacientov. Hkrati izpostavljajo poslabšanje pogojev zaradi kadrovskih stisk, večje kompleksnosti pacientov in povečane čustvene zahtevnosti interakcij.

To potrjujejo spodnje izjave sodelujočih v intervjuju:

- »Potrebe po empatični, individualni in strukturirani profesionalni komunikaciji so danes bistveno večje.« (I5)
- »Pacienti so bolj informirani« (I2, I3, I4) in »pričakujejo bolj sodelovalen in osebni pristop.« (I8)
- »Zaradi pomanjkanja kadra imamo manj časa za kakovostno komunikacijo.« (I1)
- »Po covidu je več težavnih interakcij.« (I6) »Več je nestrpnosti in nezaupljivosti pacientov.« (I9)
- »Pacienti so danes bolj čustveno občutljivi in manj potrpežljivi.« (I4)

#### *Kategorija 4: Ovire pri komunikaciji s težavnimi pacienti*

Kot ključne ovire pri komunikaciji s težavnimi pacienti intervjuvanci navajajo pomanjkanje časa, nezadostna komunikacijska orodja, pomanjkanje informacij o pacientu ter zahtevne vedenjske vzorce pacientov, kot so agresivnost, nezaupanje in nesodelovanje.

To je razvidno iz naslednjih izjav:

- »Največja ovira je pomanjkanje časa.« (I2, I3, I4, I8, I9)
- »Nimamo ustreznih pripomočkov za komunikacijo s pacienti, ki imajo govorno jezikovne motnje.« (I8)
- »Težave imamo pri pacientih, ki ne razumejo navodil ali jih ignorirajo.« (I7)
- »Ovira je tudi agresivno in manipulativno vedenje pacientov.« (I2)
- »Včasih nimamo dovolj informacij o pacientu, da bi razumeli njegovo vedenje.« (I4)
- »Velik izziv so tudi pritiski svojcev in prevelika pričakovanja.« (I5)

#### *Kategorija 5: Ocena kompetenčne usposobljenosti za komuniciranje s težavnimi pacienti*

Del intervjuvancev ocenjuje, da za učinkovito komunikacijo s težavnimi pacienti nimajo zadostnih kompetenc, zlasti na področju deeskalacije, postavljanja meja in obvladovanja čustvenih situacij. Drugi pa menijo, da so ustrezno usposobljeni, vendar poudarjajo pomen stalnega strokovnega izpopolnjevanja.

To se odraža v naslednjih izjavah intervjuvancev:

- »Primanjkuje mi veščin za deeskalacijo konfliktov.« (I2, I6, I9)
- »Včasih nimam dovolj strategij za postavljanje jasnih meja.« (I2, I6)
- »Težko obvladam svoje odzive v čustveno zahtevnih situacijah.« (I9)
- »Imam dovolj izkušenj, vendar je vedno prostor za dodatno izobraževanje.« (I3)
- »Pomembno je nadgrajevati znanje o komunikaciji z nasilnimi pacienti.« (I7)

#### *Kategorija 6: Vključenost v dodatna izobraževanja*

Intervjuvanci so različno vključeni v dodatna izobraževanja s področja komunikacije s težavnimi pacienti. Del se jih izobraževanj redno udeležuje, bodisi na pobudo delodajalca bodisi samoiniciativno, drugi pa v zadnjih letih niso bili vključeni v tovrstna izobraževanja. Udeleženci izobraževanj jih večinoma ocenjujejo kot koristna, vendar pogosto prekratka ali premalo poglobljena.

Intervjuvani so to podkrepili z izjavami:

- »Izobraževanj sem se udeležil na pobudo delodajalca.« (I2, I3, I4, I10)
- »Sama sem se udeležila spletnega seminarja o deeskalaciji.« (I8)
- »Izobraževanja so bila koristna, vendar prekratka in premalo kontinuirana za res poglobljeno delo s takšnimi pacienti.« (I2)
- V zadnjih dveh letih »se izobraževanj nisem udeležila.« (I6, I7)
- »Raje se posvečam osebnemu razvoju.« (I6)

### *Kategorija 7: Možnosti za spremembe in izboljšanje*

Intervjuvanci poudarjajo potrebo po sistemskih izboljšavah, zlasti na področju kontinuiranega izobraževanja, večje kadrovske podpore, psihološke pomoči ter razvoja jasnih smernic in strukturirane podpore pri delu s težavnimi pacienti. Pomembna je tudi krepitev interdisciplinarnega sodelovanja in organizacijske kulture.

To potrjujejo spodnje izjave sodelujočih v intervjuju:

- »Potrebna je večja sistemska pozornost in več izobraževanj.« (I2)
- »Izobraževanja bi morala biti kontinuirana in ne le enkrat letno.« (I4)
- »Izobraževanja bi bila učinkovitejša z igranjem vlog.« (I2)
- »Koristne bi bile simulacijske vaje« (I3, I8) in »analiza primerov iz prakse.« (I7)
- Potrebujemo »stalno psihološko podporo ob težjih primerih.« (I2, I4, I5, I7)
- »Smernice za ravnanje v pogostih konfliktnih situacijah bi bile zelo koristne.« (I2)
- »Vodje s svojim zgledom pomembno vplivajo na komunikacijsko kulturo.« (I6)

### *Medsebojna povezanost kategorij*

Analiza kaže medsebojno povezanost kategorij. Stik s težavnimi pacienti (2) lahko prispeva k temu, kako izvajalci zdravstvene nege razumejo opredelitev težavnih pacientov (1), hkrati pa omogoča lastno identifikacijo ovir pri komunikaciji s težavnimi pacienti (4) in zaznavanje spremenjenih potreb po takšni komunikaciji (3), posledično pa sproža premislek o oceni lastne kompetenčne usposobljenosti za komuniciranje s težavnimi pacienti (5) ter potrebo po dodatnem izobraževanju (6). Vključenost v dodatna izobraževanja (6) pa povratno vpliva na opredelitev težavnih pacientov (1) in na podajanje predlogov za spremembe in izboljšave (7).

## **5 Razprava**

Z raziskavo smo želeli preučiti komuniciranje izvajalcev zdravstvene nege s pacienti, ki jih doživljajo kot težavne. Zanimali so nas njihovo razumevanje tega pojma, pogostost srečevanja s takšnimi pacienti, zaznane spremembe v komunikacijskih potrebah, ovire pri komuniciranju, ocena lastnih kompetenc ter potrebe po dodatnem izobraževanju in sistemskih izboljšavah.

Rezultati raziskave kažejo, da se izvajalci zdravstvene nege na svojem delovnem mestu pogosto ali celo vsakodnevno srečujejo s pacienti, ki jih doživljajo kot težavne. Ta ugotovitev je skladna z literaturo, ki poudarja, da so takšne interakcije stalni del klinične prakse (Adler, 2006) in predstavljajo pomemben izziv (Schuermeyer idr., 2017) pri zagotavljanju kakovostne zdravstvene obravnave (Baby idr., 2018; Carter, 2019; Cheon idr., 2024; Kourkouta in Papathanasiou, 2014; Lipovec Čebren, 2019). S tem se potrjuje tudi izhodišče, da komunikacija v zdravstveni negi ni zgolj prenos informacij, temveč kompleksen relacijski proces, ki pomembno vpliva na izide obravnave.

Udeleženci raziskave pojem »težavni pacient« opredeljujejo široko in vanjo uvrščajo: gluhe paciente, slepe paciente, paciente z duševnimi težavami, paciente s specifičnimi boleznimi (kronične bolezni, motnje požiranja, demenca, Parkinsonova bolezen),

paciente s posebnimi vedenjskimi ali osebnostnimi lastnostmi, zahtevne paciente, nezadovoljne paciente, paciente z neustreznimi informacijami, konfliktne paciente in agresivne paciente. Literatura vse te paciente razvršča na pet glavnih skupin (Lučaniin, 2010; Shapcott, 2017): paciente s senzornimi in kognitivnimi težavami (slepi in slabovidni, gluhi in naglušni, pacienti s primanjkljaji na področju govora, pacienti s kognitivnimi primanjkljaji), paciente s psihičnimi težavami (depresivni pacienti, tesnobni pacienti), paciente s specifičnimi boleznimi, paciente v nekem posebnem čustvenem stanju (pacienti v stresu, pacienti v krizi, jezni in agresivni pacienti) ter paciente s težavami v doživljanju in vedenju. Takšna raznolikost potrjuje teoretična izhodišča, da gre za heterogeno kategorijo, ki jo je težko enoznačno opredeliti (Koekkoek idr., 2006).

Raziskava nadalje kaže, da so se komunikacijske potrebe pacientov v zadnjih letih spremenile. Izvajalci zdravstvene nege zaznavajo večjo potrebo po individualiziranem in empatičnem pristopu. Pacienti so bolj informirani in zato pričakujejo bolj hiter, vključujoč, oseben in sodelovalen pristop, kar je skladno s konceptom na pacienta osredotočene obravnave. Ta zahteva aktivno vlogo pacienta, partnerski odnos ter prilagojeno komunikacijo, kar potrjujejo tudi druge raziskave (Carter, 2019; Schuermeyer idr., 2017). Vendar pa udeleženci opozarjajo, da takšen pristop zaradi organizacijskih omejitev, zlasti pomanjkanja kadra in časa, pogosto ni v celoti izvedljiv.

Pomemben vidik rezultatov predstavljajo zaznane ovire pri komuniciranju. Izvajalci zdravstvene nege izpostavljajo predvsem časovne omejitve, pomanjkanje informacij, kompleksnost pacientovih potreb ter čustveno zahtevne situacije, kot so nezaupanje, agresija in visoka pričakovanja pacientov. Te ugotovitve so skladne z literaturo, ki poudarja, da organizacijski dejavniki pomembno vplivajo na kakovost komunikacije in lahko prispevajo k nastanku konfliktov (Schuermeyer idr., 2017). Ob tem rezultati potrjujejo tudi pomen empatije, aktivnega poslušanja in razumevanja pacientove perspektive kot ključne elemente učinkovite komunikacije, zlasti v zahtevnih interakcijah.

Intervjuvane osebe so nadalje izpostavile, da je vse več pacientov s kompleksnimi težavami, več je tudi nestrpnosti, nezaupljivosti, manj potrpežljivosti, več čustvene občutljivosti in previsokih pričakovanj pacientov in njihovih svojcev, zato se kažejo primanjkljaji kompetenc, ki bi zagotavljale učinkovito komunikacijo v zahtevnih situacijah. Tudi Ule (2010) poudarja, da sposobnost vzpostavljanja pristnega človeškega odnosa odraža stopnjo komunikacijskih veščin izvajalca zdravstvene nege. Koekkoek idr. (2006) pa dodajajo, da so pri obravnavi zahtevnih pacientov ključni elementi enaki kot pri vseh pacientih: spoštovanje, aktivno poslušanje, validacija čustev in neobsojajoč pristop (Koekkoek idr., 2006). Schuermeyer idr. (2017) ob tem izpostavljajo, da so zahtevni pacienti izrazito občutljivi na stališča in vedenje izvajalca zdravstvene nege. Takšni pacienti pogosto izkazujejo sovražno in konfrontacijsko vedenje, uporabljajo medicinski žargon ter izražajo prepričanje o lastni superiornosti v znanju. Pogosto doživljajo obravnavo kot neustrezno, kar lahko pri izvajalcih zdravstvene nege povzroča občutke negotovosti in ranljivosti, vključno z izpostavljenostjo grožnjam, zlasti ob neugodnih izidih zdravljenja.

Izvajalci zdravstvene nege pri komunikaciji z zahtevnimi pacienti zaznavajo številne izzive, vključno z nerazumevanjem ali neupoštevanjem navodil, nezaupanjem, visokimi pričakovanji ter agresivnim in manipulativnim vedenjem. Poseben izziv predstavlja tudi ohranjanje ustrezne in umirjene komunikacije v nepredvidljivih situacijah. Med pomembne ovire sodi pomanjkanje časa, ki omejuje dostop do informacij o pacientu ter zmanjšuje zmožnost empatije in razumevanja njegovega vedenja. Nekateri vedenjski vzorci pacientov lahko otežujejo interakcijo in negativno vplivajo na izide zdravstvene obravnave (Schuermeyer idr., 2017). Razumevanje značilnih vedenjskih tipov omogoča razvoj učinkovitih komunikacijskih strategij, kar prispeva k zmanjšanju stresa in izboljšanju obravnave. Od izvajalcev zdravstvene nege se pričakujejo prilagojena in učinkovita komunikacija, visoka stopnja empatije ter razumevanje pacientovih skrbi (Schuermeyer idr., 2017; Taylan in Weber, 2023). Empatija, ki vključuje spoštovanje čustev, aktivno poslušanje ter ustrezno verbalno in neverbalno izražanje, pomembno prispeva k izboljšanju zdravstvene obravnave (Rani, 2016; Vandecasteele idr., 2024). Razumevanje ozadja vedenja zahtevnih pacientov kaže, da sta jeza in sovražnost pogosto posledici strahu in občutka izgube nadzora, čeprav se lahko izražata kot konfrontacija ali ustrahovanje. Takšno vedenje lahko pri izvajalcih zdravstvene nege sproži obrambne odzive, kot sta uveljavljanje lastnih stališč ali izogibanje interakciji (Schuermeyer idr., 2017).

Intervjuvani izvajalci zdravstvene nege svojo kompetentnost za komuniciranje s težavnimi pacienti ocenjujejo kot zadostno, kar pripisujejo predvsem dolgoletnim izkušnjam. Kljub temu izražajo potrebo po dodatnem izobraževanju in nadgradnji znanja. Ta ugotovitev je pomembna, saj literatura poudarja, da komunikacijske veščine niso zgolj rezultat izkušenj, temveč jih je mogoče sistematično razvijati z usposabljanjem (Back idr., 2005; El-Messoudi idr., 2023). Usposabljanja, usmerjena v razvoj komunikacijskih kompetenc, dokazano izboljšujejo samozavest izvajalcev zdravstvene nege, zmanjšujejo stres, prispevajo k boljši kakovosti obravnave (Baby idr., 2018) in zmanjšujejo izgorelost (Back idr., 2005).

V skladu z raziskovalnimi cilji so udeleženci izpostavili tudi več možnosti za izboljšanje komuniciranja s pacienti v njihovem zavodu. Poudarjajo potrebo po kontinuiranem strokovnem izobraževanju, zlasti z igranjem vlog, analizo primerov iz prakse in simulacijskimi vajami. To ugotovitev potrjujejo tudi Schuermeyer idr. (2017) in priporočajo, da izvajalci zdravstvene nege načrtujejo učinkovite komunikacijske strategije za težavne paciente, se o težavah pogovarjajo s kolegi in uporabljajo metode sproščanja, da bi se izognili pretirani obremenitvi, stresu ali izgorelosti.

Intervjuvanci so izpostavili tudi potrebo po sistemski ureditvi in podpori vodstva za dodatna izobraževanja in usposabljanja. Prav tako Adler (2006) ugotavlja, da je zdravstveni sistem slabo pripravljen na zagotavljanje potrebnih in obsežnih dolgoročnih storitev za težavne paciente. Z njim se strinjajo tudi Cheon idr. (2024), ki potrjujejo, da je treba razviti programe podpore in usposabljanja, ki bodo v prihodnosti olajšali komunikacijo s takšnimi pacienti. Koristno je znati prepoznati vzorce vedenja in imeti jasen načrt za obvladovanje težavnih pacientov (Schuermeyer idr., 2017).

Posebej pomembna ugotovitev raziskave je, da pomanjkanje kadra in časovne omejitve pomembno zmanjšujejo možnosti za kakovostno komunikacijo. Izvajalci zdravstvene nege poudarjajo, da bi bilo koristno imeti tudi smernice (protokole) za ravnanje v pogostih konfliktnih situacijah, stalno psihološko podporo in vključevanje drugih strokovnjakov ob pojavu težjih situacij, pa tudi možnost supervizije v stresnih situacijah. Takšen pristop potrjujejo Koekkoek idr. (2006), ki vidijo multidisciplinarno timsko delo s težavnimi pacienti kot nujno na poti do manj težav in manj napak. Adler (2006) pa navaja nekaj konkretnih smernic ob stiku s težavnim pacientom: imeti realistična pričakovanja v izogib pretiranemu zdravljenju, kaznovanju ali opuščanju zdravljenja; zagotoviti fizično in čustveno varnost; dostop do kriznega upravljanja in omejevalnih intervencij za neizogibne nujne primere; podpora in pomoč drugih za obvladovanje občutkov in vedenjskih reakcij, ki se pojavijo po zahtevnem stiku s težavnim pacientom. Schuermeyer idr. (2017) pa kot najboljšo strategijo prepoznavajo opustitev boja za moč, tako da se legitimizira pacientov občutek upravičenosti do najboljšega možnega zdravljenja.

## 6 Zaključek

Na podlagi ugotovitev raziskave in ob podpori strokovne in znanstvene literature lahko zaključimo, da je učinkovita komunikacija s pacienti, ki jih izvajalci zdravstvene nege doživljajo kot težavne, kompleksen in večdimenzionalen proces, ki pomembno vpliva na kakovost zdravstvene obravnave. Rezultati potrjujejo teoretična izhodišča, da takšnih situacij ni mogoče razumeti zgolj skozi značilnosti pacienta, temveč tudi kot rezultat interakcije med pacientom in izvajalcem zdravstvene nege.

Raziskava je pokazala, da se izvajalci zdravstvene nege s takšnimi pacienti srečujejo pogosto ter da se komunikacijske potrebe v sodobnem zdravstvenem okolju povečujejo, zlasti v smeri večje individualizacije, empatije in sodelovalnega pristopa. Ob tem pomembno vlogo omejujočega dejavnika predstavljajo pomanjkanje časa, kadra in sistemske podpore, kar otežuje uresničevanje na pacienta osredotočene komunikacije.

Čeprav izvajalci zdravstvene nege svoje kompetence večinoma ocenjujejo kot zadostne, rezultati kažejo na jasno potrebo po kontinuiranem strokovnem izobraževanju ter razvoju specifičnih komunikacijskih veščin za obvladovanje zahtevnih interakcij. Pomembni so tudi sistemski ukrepi, kot so podpora vodstva, multidisciplinarno sodelovanje, razvoj smernic za obravnavo konfliktnih situacij ter zagotavljanje psihološke podpore zaposlenim.

Raziskava ima tudi nekatere omejitve. Mednje štejemo predvsem majhnost vzorca, ki omejuje sploševanje rezultatov na širšo populacijo izvajalcev zdravstvene nege. Nadalje obstaja možnost pristranskosti zaradi socialno zaželenih odgovorov, saj so udeleženci morda podajali odgovore, ki so skladni s pričakovanji stroke ali družbe, ne pa nujno z njihovim dejanskim ravnanjem v praksi. V prihodnje bi bilo smiselno vključiti večji in bolj raznolik vzorec ter uporabiti kombinacijo metod za celovitejše razumevanje problematike.

Ksenija Strnad

## Communication Skills of Healthcare Providers in Challenging Interactions with Patients

*Communication is a fundamental process that significantly contributes to the formation of human identity, self-confidence, social interaction, and quality of life (Carter, 2019). In healthcare, communication plays a special role; as a core professional competency, it enables the establishment of trust between the healthcare provider and the patient (Chichirez & Purcărea, 2018; Sharkiya, 2023), and can influence overall satisfaction with healthcare services, improve health outcomes, clinical safety, and the efficiency of care (Cheon et al., 2024). Effective communication between the healthcare provider, the patient, and their relatives is essential for high-quality and successful healthcare delivery (Kourkouta & Papathanasiou, 2014; Prebil et al., 2009). To achieve this, healthcare providers must understand the patient and establish a sincere, respectful, and warm relationship that promotes the understanding of the patient's needs (Cilar Budler & Čuček Trifković, 2023; Kourkouta & Papathanasiou, 2014). Inadequate patient care can lead to poor treatment outcomes and patient dissatisfaction (Taylor, 2005), while ineffective communication increases the risk of misunderstandings, inappropriate care and professional errors (Balzer Riley, 2020; Minnican & O'Toole, 2020).*

*A particular challenge is posed by the patients whom the healthcare providers often perceive as "difficult." The literature warns that this concept is subjective and often reflects the experience of the healthcare provider rather than the objective characteristics of the patient (Koekkoek et al., 2009). Such labelling may contribute to patient stigmatisation and negatively affect the therapeutic relationship, empathy, and quality of care (Link & Phelan, 2001). Therefore, some authors propose the use of the concept of "difficult interactions," which emphasises that difficulty is the result of the relationship between the patient and the healthcare provider, as well as specific situational circumstances (McCabe, 2004).*

*For successful care, it is important that healthcare providers are aware of their own reactions, emotions, and attitudes, as these significantly influence the course of interaction with the patient (Schuermeyer et al., 2017). Although the literature mentions links between challenging behaviour and certain personality traits or psychological distress, it also warns against generalisation and stigmatisation, especially when associating such behaviour with specific diagnoses (Koekkoek et al., 2006; Koekkoek et al., 2009). Such interpretations may lead to biased treatment and reduce opportunities for individualised, patient-centred care. The development of effective communication strategies is therefore crucial for preventing adverse outcomes in healthcare (Schuermeyer et al., 2017).*

*The aim of the study was to examine the communication among healthcare providers with patients they perceive as difficult. The study used a qualitative approach and*

*a descriptive research method. Data were collected through semi-structured interviews with ten healthcare providers, aged between 26 and 58 years, with 5 to 38 years of work experience in healthcare. Data analysis was carried out using open coding and comparative analysis, enabling the formation of thematic categories and an in-depth understanding of the phenomenon studied.*

*The results show that healthcare providers encounter patients they perceive as difficult very frequently, often daily, confirming that such interactions are a constant part of the clinical practice. These patients are most often older adults with dementia, patients with mental disorders, chronically ill patients, and patients with aggressive or demanding behaviour. Definitions of “difficult patients” are diverse and include clinical, behavioural, and communication characteristics, such as sensory and cognitive impairments, psychological disorders, dissatisfaction, non-cooperation, and aggression, confirming the heterogeneity of this group and the complexity of their care.*

*The analysis showed that the patients’ communication needs have changed significantly in recent years. Healthcare providers perceive a greater need for empathetic, individualised, and structured communication, which is related to greater patient awareness, the accessibility of online resources, and changes in social expectations. Patients now expect a partnership-based relationship, more explanations, and active involvement in decision-making. This is consistent with the concept of patient-centred care, which emphasises the active role of the patient (Carter, 2019; Schuermeyer et al., 2017). At the same time, healthcare providers point to the deteriorating conditions for communication due to lack of time and staff shortages, as well as the increasing complexity of patient needs, which often leads to feelings of overload and reduced quality of interaction.*

*Among the main barriers to communication, the interviewees highlighted time constraints, lack of information about the patient, inadequate communication tools, and challenging behavioural patterns, such as aggression, distrust, non-cooperation, and high expectations. Additional burdens include the pressure from relatives, administrative demands, and the increasing complexity of health conditions. These circumstances hinder the establishment of a quality relationship, reduce opportunities for effective communication, and increase the risk of conflict situations (Schuermeyer et al., 2017). A significant challenge is also maintaining a professional, calm, and empathetic communication in emotionally demanding and unpredictable situations, where healthcare providers are often exposed to additional psychological pressure.*

*Regarding their own competencies for communicating with difficult patients, the interviewees’ views were divided. Some believe they have sufficient competencies due to many years of experience, while others point to a lack of specific skills, especially in conflict de-escalation, setting boundaries, assertive communication, and managing their own emotional responses. Most agree that a continuous professional development is necessary, as communication skills require an ongoing development and adaptation to new challenges in practice.*

*The participation in additional training varies among the interviewees. Those who attend such training evaluate it as beneficial, but often too brief, insufficiently systematic, and not sufficiently focused on the practical application of knowledge. They identify interactive approaches as the most effective forms of education, such as role-playing, simulation exercises, reflection on personal experiences, and analysis of concrete cases from practice, which enable the development of practical skills and greater self-confidence at work.*

*The study also places important emphasis on systemic factors. The interviewees highlighted numerous possibilities for improving communication with difficult patients. Key proposals include the introduction of continuous and systematic training, greater staffing support, development of clear guidelines for handling conflict situations, provision of psychological support for employees, and strengthening interdisciplinary cooperation. They also emphasise the importance of management support, organisational culture, and a safe working environment that encourages open communication, reflection, and professional development. Such measures could significantly contribute to reducing stress and improving the quality of care.*

*The discussion of the results confirms that the communication with patients perceived by healthcare providers as difficult is a complex, multidimensional, and context-dependent process that cannot be understood solely through the characteristics of the patient, but rather as the result of the interaction between the patient, the healthcare provider and the wider organisational environment (Koekkoek et al., 2006; McCabe, 2004). The literature emphasises the importance of empathy, active listening, and respect as key elements of high-quality communication (Vandecasteele et al., 2024; Rani, 2016).*

*Based on the findings of the study and supported by professional and scientific literature, it can be concluded that effective communication with patients perceived by healthcare providers as difficult is a complex and multidimensional process that significantly affects the quality of healthcare delivery. At the same time, lack of time, staffing shortages, and insufficient systemic support play an important limiting role, making it more difficult to implement patient-centred communication. The study highlights the need for further development of communication competencies, the introduction of structured training programmes, and systemic measures that will enable better working conditions for healthcare providers and improve the quality of patient care. Despite the limitations of the study, such as the small sample size and the possibility of response bias, the findings contribute to a deeper understanding of communication challenges in healthcare practice and represent an important starting point for further research and professional development.*

#### *Izjava o dostopnosti raziskovalnih podatkov*

Članek temelji na raziskovalnih podatkih, ki se hranijo v arhivu avtorja in niso javno dostopni; dostopni so pri avtorju na podlagi utemeljene prošnje.

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# Razširjenost mitov o motnjah hranjenja med celjskimi srednješolci

*Izvirni znanstveni članek*

UDK 616.89-008.441+316.64

**KLJUČNE BESEDE:** motnje hranjenja, miti, kompulzivno prenašanje, anoreksija, bulimija

**POVZETEK** – Obdobje mladosti je zaznamovano z biološkimi spremembami, zaradi katerih se oblika telesa mladih opazno spreminja, želja po nadzoru teh sprememb pa lahko nezavedno vodi v nenadzorovano vedenje, ki povzroči razvoj motenj hranjenja. Prevalenca motenj hranjenja med slovensko mladino močno narašča, zato smo v raziskavi proučili, v kolikšni meri celjski srednješolci ( $N = 386$ ) poznajo mite o motnjah hranjenja, kako je poznavanje mitov o motnjah hranjenja povezano z nekaterimi dejavniki (spol, starost, stopnja izobrazbe staršev in osebna izkušnja) in iz katerih virov celjski srednješolci pridobijo znanje o motnjah hranjenja. Za pridobitev podatkov smo uporabili kvantitativno metodo raziskovanja, spletno anketiranje. Ugotovili smo, da celjski srednješolci poznajo večino najbolj razširjenih mitov o motnjah hranjenja. Spol udeležencev se je pokazal kot statistično pomembna spremenljivka, ki vpliva na poznavanje mitov, kjer so moški izkazali slabše poznavanje kot ženske, šola pa kot tisto okolje, v katerem srednješolci pridobijo največ znanja o motnjah hranjenja. Izhajajoč iz rezultatov raziskave spodbujamo razvoj preventivnih izobraževalnih programov, ki so usmerjeni na moško populacijo.

*Original scientific article*

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**KEYWORDS:** eating disorders, myths, binge eating disorder, anorexia, bulimia

**ABSTRACT** – The appearance of adolescents changes significantly due to all the biological changes that occur during puberty. Their desire to take control of these changes can unconsciously lead to uncontrolled behaviour, resulting in the development of eating disorders. The prevalence of eating disorders among young Slovenians is increasing rapidly. Therefore, we investigated the recognition of myths about eating disorders among secondary school students in Celje ( $N = 386$ ), how the recognition of myths about eating disorders correlates with certain factors (gender, age, parents' educational level and personal experience) and from which sources they acquire their knowledge about eating disorders. To collect the data, we used a quantitative method – an online survey. Recognition of the most common myths about eating disorders among secondary school students in Celje is high, contradicting the results of some other studies. Gender emerged as the statistically significant variable of myth awareness, with male participants demonstrating poorer recognition of myths, and school as the environment in which secondary school students acquire the most knowledge about eating disorders. Based on the results of the study, we encourage the development of educational programs focused on the male population.

## 1 Uvod

Motnje hranjenja so kompleksna duševna motnja, katere vzrok so notranje stiske posameznika (Altum Health, 2024). Motnje hranjenja se kažejo kot sprememba prehranjevalnega vedenja, pri čemer posameznik izgubi nadzor nad vrsto in količino hrane, ki jo zaužije. Težave s hranjenjem postanejo motnje hranjenja takrat, ko se okoli hrane začne vrteti večina misli, notranjih konfliktov in občutkov krivde (Serbec, 2010). Za bolnike sta značilni nizka samopodoba in samospoštovanje, lahko pa tudi

pretirana obremenjenost z zunanjim videzom in telesno maso (Pandel Mikuš, 2003). Motnja se navzven kaže z različnimi znaki, kot so prenačedanje, bruhanje, stradanje, zloraba odvajal ali diuretikov (Serneć, 2010), socialni odmik (Pandel Mikuš, 2003), strah pred prehranjevanjem ali posledicami uživanja določene hrane (Center of discovery Eating Disorder Treatment, 2023) in pretirana telesna aktivnost (Serneć, 2010). Znaki se lahko kažejo podobno kot zasvojenost (American Psychiatric Association, 2023) in ogrožajo zasebno in družinsko delovanje posameznika z motnjo (Feldhege idr., 2022). Več kot 70 % bolnikov z motnjami hranjenja ima poleg motenj hranjenja pogosto prisotne tudi druge duševne motnje (Keski-Rahkonen in Mustelin, 2016). Z motnjami hranjenja se danes sooča kar 70 milijonov svetovnega prebivalstva (Fernandez-Aranda idr., 2023), njihova stopnja smrtnosti pa je med duševnimi motnjami v samem vrhu – kar 5 % bolnikov z anoreksijo nervozo namreč umre (Meczekalski idr., 2013). Med najpogostejše motnje hranjenja sodijo anoreksija nervoza, bulimija nervoza in kompulzivno prenačedanje (Le LK idr., 2017). Zaradi porasta uporabe družbenih omrežij (The Recovery Village, 2023; Newport Academy, 2023), pojava t. i. diete kulture (diet culture) in poudarjanja individualne odgovornosti za zdravje (healthisma) (Brytek-Matera, 2023), lažje dostopnosti informacij (in dezinformacij) o prehranskih nasvetih (Pope idr., 2000), spremembe v družbenih lepotnih idealih (k mišičasti postavi) (Murray idr., 2016) in množičnega razcveta industrije zdrave prehrane in fitnesa (Navigating the Maze, 2024) so se razvile tudi nove oblike motenj hranjenja, to sta ortoreksija in bigoreksija.

### *1.1 Miti o motnjah hranjenja*

Mit v tem članku razumemo v drugem pomenu razlage v slovarskem sestavku Slovarja slovenskega knjižnega jezika kot »zelo pozitivna, a nerealna predstava o določenih dogodkih, pojavih, ljudeh« (SSKJ, 2024). V tabeli 1 so zbrani miti o motnjah hranjenja, ki se na spletu in v literaturi najpogostejše pojavijo (Feldhege et al., 2022; UR Medicine, 2023; Eating Recovery Center, 2020; Rachael Hartley Nutrition, 2018; Oliver-Pyatt, 2023; Johns Hopkins Medicine, 2023), v raziskavi pa smo preverjali, kako dobro jih (pre)poznajo celjski srednješolci.

**Tabela 1**

*Najpogostejši miti o motnjah hranjenja/The most common myths about eating disorders*

| <i>Miti</i>                                                                  |
|------------------------------------------------------------------------------|
| Za motnjami hranjenja zbolijo le ženske.                                     |
| Motnje hranjenja so odločitev.                                               |
| Ljudje z motnjami hranjenja nikoli ne ozdravijo.                             |
| Starši so tisti, ki povzročijo nastanek motenj hranjenja pri svojih otrocih. |
| Motnje hranjenja so le posameznikovo hrepenenje po pozornosti.               |
| Motnje hranjenja so le obdobje, ki bo minilo samo od sebe.                   |
| Ljudje z normalno telesno maso ne morejo imeti motenj hranjenja.             |
| Motnje hranjenja niso resna motnja.                                          |
| Ljudje zbolijo za motnjami hranjenja zaradi nezdravih prehranskih vzorcev.   |
| Da ima oseba motnje hranjenja, lahko trdimo že po zunanem videzu.            |
| Biti športnik ali zvest zdravi prehrani pomeni, da si zdrav.                 |
| Motnje hranjenja povzročijo le vplivi družbe in medijev.                     |
| Na razvoj motenj hranjenja vpliva le genetika.                               |
| Bolnik z motnjami hranjenja ozdravi, ko doseže normalno telesno maso.        |
| Dieta je normalen del življenja posameznika.                                 |

**2 Metodologija****2.1 Namen raziskave**

Namen raziskave je bil ugotoviti, kako dobro celjski srednješolci poznajo mite o motnjah hranjenja in katere (neodvisne) spremenljivke (spol, starost, stopnja izobrazbe staršev, osebna izkušnja z motnjami hranjenja) na to vplivajo.

**2.2 Raziskovalna vprašanja**

V sklopu raziskave smo si postavili tri raziskovalna vprašanja:

- ☐ Kateri miti o motnjah hranjenja so med celjskimi srednješolci najbolj razširjeni?
- ☐ Kako so različni dejavniki (spol, stopnja izobrazbe staršev, osebna izkušnja z motnjami hranjenja, starost) povezani s poznavanjem mitov o motnjah hranjenja?
- ☐ Iz katerih virov celjski srednješolci pridobijo znanje o motnjah hranjenja?

**2.3 Metode in tehnike pridobivanja podatkov**

V raziskavi smo uporabili metodi deskripcije in komparacije, kvantitativno metodo (spletno anketo) ter metodo analize. Podatke smo zbirali med januarjem in marcem 2024 s spletno anketo, ustvarjeno s pomočjo spletnega anketnega orodja IKA. Anketni vprašalnik smo posredovali dijakom in dijakinjam celjskih srednjih šol po šolskih kanalih.

## 2.4 Opis instrumenta

Anketa je bila oblikovana po nemškem vzorcu vprašalnika (Feldhege idr., 2022). V vprašalnik smo vključili spremenljivke: spol, starost, stopnja izobrazbe staršev in izkušnja z motnjo/-ami hranjenja. Poznavanje mitov smo preverjali s 15 trditvami mitov o motnjah hranjenja (tabela 1), na katere so anketiranci odgovorili z DA, če mit drži, oziroma z NE, če mit ne drži. Mite smo pridobili iz nemške raziskave (Feldhege idr., 2022) in različnih spletnih strani (UR Medicine, 2023; Eating Recovery Center, 2020; Rachael Hartley Nutrition, 2018; Oliver-Pyatt, 2023; Johns Hopkins Medicine, 2023). Da bi ugotovili, pri katerih virih celjski srednješolci pridobijo znanje o motnjah hranjenja, smo jim na izbiro ponudili 6 različnih virov (družinsko okolje, prijatelji, šola, družbena omrežja, splet, zdravstveni delavci) ter rubriko drugo.

## 2.5 Opis vzorca

V raziskavi je sodelovalo 386 celjskih srednješolcev, starih 14–19 let, od tega 313 žensk (81,1 %) in 73 moških (18,9 %). Glede na starost smo anketirance razdelili v 3 skupine: 14–15 let (31,3 %), 16–17 let (58,5 %) in 18–19 let (10,1 %). Največji delež anketirancev (54,4 %) je imel starša z visokošolsko ali višješolsko izobrazbo (univerzitetna izobrazba, magisterij ali doktorat znanosti), 31,3 % starša s srednješolsko izobrazbo, manjši delež pa starša z doktoratom ali znanstvenim magisterijem (13,5 %) ali osnovnošolsko izobrazbo (0,8 %) – anketiranci so označili starša z višjo stopnjo izobrazbe. Približno četrtina anketirancev (27,5 %) v naši raziskavi se/se je spopada/-la z motnjami hranjenja.

## 2.6 Metode za analizo podatkov

Pri analizi podatkov smo uporabili opisno statistiko (frekvence, odstotki) in inferenčno statistiko (hi-kvadrat test). Podatke smo statistično analizirali v programu IBM SPSS 22. Pri urejanju podatkov in tabel smo si pomagali s programom Microsoft Excel 2024.

# 3 Rezultati

V raziskavi smo želeli ugotoviti, kateri miti o motnjah hranjenja (tabela 1) so med celjskimi srednješolci najbolj razširjeni, zato smo analizirali delež anketirancev, ki so se z njimi strinjali. Ugotovili smo, da se zelo visok delež anketirancev (od 87,0 % do 97,4 %) z več kot polovico navedenih mitov ne strinja. Največji delež anketirancev (97,4 %) se ni strinjal z mitom »Motnje hranjenja niso resna motnja«. Več kot petina anketirancev se je strinjala z miti 2, 4, 9, 10, 11, 15 (glej tabelo 1).

Pri drugem raziskovalnem vprašanju smo preučevali, kako je poznavanje mitov povezano z različnimi spremenljivkami (spol, starost, stopnja izobrazbe staršev, osebna izkušnja). Analizirali smo mite, pri katerih se je pokazala statistično pomembna razlika ( $p < 0,05$ ) – to smo preverili s pomočjo hi-kvadrat testa. V nadaljevanju s pomočjo tabele prikazujemo rezultate hi-kvadrat testa samo za spol kot neodvisno spre-

menljivko, ker druge opazovane spremenljivke (starost, izobrazba staršev, izkušnja z motnjo) niso pokazale pomembne statistične povezave z analiziranimi miti.

### 3.1 Povezanost med spolom in poznavanjem mitov

**Tabela 2**

*Stopnja strinjanja z miti o motnjah hranjenja glede na spol anketirancev/Level of agreement with eating disorder myths by respondents' gender*

|                                                                             | Spol     |            |          |            |          |          |
|-----------------------------------------------------------------------------|----------|------------|----------|------------|----------|----------|
|                                                                             | Moški    |            | Ženska   |            |          |          |
|                                                                             | <i>f</i> | <i>f</i> % | <i>f</i> | <i>f</i> % | $\chi^2$ | <i>p</i> |
| Za motnjami<br>hranjenja zbolijo le<br>ženske.                              | 8        | 11,0       | 7        | 2,2        | 12,058   | < 0,001  |
| Motnje hranjenja so<br>odločitev.                                           | 32       | 43,8       | 53       | 16,9       | 24,949   | < 0,001  |
| Motnje hranjenja so<br>le posameznikovo<br>hrepenenje po<br>pozornosti.     | 16       | 21,9       | 17       | 5,4        | 20,579   | < 0,001  |
| Motnje hranjenja<br>so le obdobje, ki bo<br>minilo samo od sebe.            | 8        | 11,0       | 9        | 2,9        | 9,187    | 0,002    |
| Ljudje z normalno<br>telesno maso ne<br>morejo imeti motenj<br>hranjenja.   | 8        | 11,0       | 10       | 3,2        | 8,026    | 0,005    |
| Motnje hranjenja niso<br>resna motnja.                                      | 7        | 9,6        | 3        | 1,0        | 17,472   | < 0,001  |
| Da ima oseba<br>motnje hranjenja,<br>lahko trdimo že po<br>zunanjem videzu. | 31       | 42,5       | 75       | 24,0       | 10,175   | 0,001    |
| Biti športnik ali<br>zvest zdravi prehrani<br>pomeni, da si zdrav.          | 28       | 38,4       | 75       | 24,0       | 6,269    | 0,012    |
| Motnje hranjenja<br>povzročijo le vplivi<br>družbe in medijev.              | 21       | 28,8       | 51       | 16,3       | 6,069    | 0,014    |
| Na razvoj motenj<br>hranjenja vpliva le<br>genetika.                        | 9        | 12,3       | 7        | 2,2        | 15,175   | < 0,001  |
| Dieta je normalen<br>del življenja<br>posameznika.                          | 39       | 53,4       | 126      | 40,3       | 4,195    | 0,041    |

Legenda/Legend: *F* – frekvenca/frequency, *F* % – odstotek/percentage,  $\chi^2$  – hi-kvadrat preizkus/chi-square test. *p* – verjetnost/significance level

Tabela 2 prikazuje število in delež anketirancev in anketirank, ki so se z zapisanimi miti strinjali. Za preverjanje povezanosti med spolom anketirancev in stopnjo strinjanja z miti o motnjah hranjenja smo uporabili hi-kvadrat test neodvisnosti. Spremenljivka spol je bila obravnavana kot kategorialna (moški, ženska), odgovori na po-

samezne trditve o mitih pa so bili rekodirani v kategorialno obliko (strinja se/ne strinja se). Pri interpretaciji rezultatov upoštevamo, da so bile v nekaterih celicah pričakovane frekvence nižje od priporočenih, kar lahko vpliva na moč testa. Za dodatno interpretacijo rezultatov smo izračunali tudi velikost učinka ( $\phi$ ), pri čemer vrednosti okoli 0,10 pomenijo majhen učinek, okoli 0,30 srednji učinek in okoli 0,50 velik učinek.

Rezultati hi-kvadrat testa so pokazali statistično značilne razlike med spoloma pri vseh trditvah o mitih o motnjah hranjenja. Pri vseh analiziranih mitih so ženske v večjem deležu prepoznale mite o motnjah hranjenja kot moški. Največje razlike med spoloma so se pokazale pri mitu Motnje hranjenja so odločitev. Z mitom se je strinjalo 43,8 % moških in 16,9 % žensk ( $\chi^2 = 24,949$ ,  $df = 1$ ,  $p < 0,001$ ,  $\phi = 0,25$ ), kar predstavlja srednje velik učinek. Statistično pomembna razlika je prisotna tudi pri mitu Motnje hranjenja so le posameznikovo hrepenenje po pozornosti. Z mitom se je strinjalo 21,9 % moških in 5,4 % žensk ( $\chi^2 = 20,579$ ,  $df = 1$ ,  $p < 0,001$ ,  $\phi = 0,23$ ), pri čemer je učinek majhen do srednje velik.

Iz poznavanja mitov Da ima oseba motnje hranjenja, lahko trdimo že po zunanjem videzu (42,5 % moških, 24,0 % žensk,  $\chi^2 = 10,175$ ,  $df = 1$ ,  $p < 0,001$ ,  $\phi = 0,16$ ) in Ljudje z normalno telesno maso ne morejo imeti motenj hranjenja (11,0 % moških, 3,2 % žensk,  $\chi^2 = 8,026$ ,  $df = 1$ ,  $p = 0,005$ ,  $\phi = 0,14$ ) je razvidno, da moški kažejo slabše razumevanje motenj hranjenja kot duševne motnje, a so bile velikosti učinkov pri obeh mitih majhne.

Nekoliko večji delež moških (čeprav tudi zelo nizek) v primerjavi z ženskami motnje hranjenja vrednoti kot manj resno motnjo, kar je razvidno iz poznavanja mita Motnje hranjenja niso resna motnja. Z mitom se je strinjalo 9,6 % moških in 1,0 % žensk ( $\chi^2 = 17,472$ ,  $df = 1$ ,  $p < 0,001$ ,  $\phi = 0,21$ ), kar predstavlja majhen do srednje velik učinek vzorca.

S slabšim poznavanjem mitov Biti športnik ali zvest zdravi prehrani pomeni, da si zdrav (38,4 % moških, 24,0 % žensk,  $\chi^2 = 6,269$ ,  $df = 1$ ,  $p = 0,012$ ,  $\phi = 0,10$ ) in Dieta je normalen del življenja posameznika (53,4 % moških, 40,3 % žensk,  $\chi^2 = 4,195$ ,  $df = 1$ ,  $p = 0,041$ ,  $\phi = 0,10$ ) so moški v primerjavi z ženskami izkazali slabše poznavanje novih oblik motenj hranjenja (ortoreksije in bigoreksije), vendar so bili učinki majhni.

### 3.2 Povezanost med starostjo in poznavanjem mitov

Preučili smo razlike med najmlajšimi (14–15 let) in najstarejšimi anketiranci (18–19 let). S tem smo želeli primerjati poznavanje mitov po končani osnovni šoli in po končani srednji šoli. Glede na starost anketirancev so se statistično pomembne razlike (preverjeno s hi-kvadrat testom) pokazale le pri dveh mitih: Ljudje z motnjami hranjenja nikoli ne ozdravijo, s katerim se je strinjalo 5,8 % najmlajših in 17,9 % najstarejših anketirancev ( $\chi^2 = 5,465$ ,  $df = 1$ ,  $p = 0,019$ ,  $\phi = 0,12$ ), in Da ima oseba motnje hranjenja, lahko trdimo že po zunanjem videzu, s katerim se je strinjalo 38,0 % najmlajših in 17,9 % najstarejših anketirancev ( $\chi^2 = 5,362$ ,  $df = 1$ ,  $p = 0,021$ ,  $\phi = 0,12$ ). Oba mita kažeta majhen učinek velikosti.

### 3.3 Povezanost stopnje izobrazbe staršev in poznavanja mitov

Zaradi nizkih frekvenc nekaterih vrednosti spremenljivke smo le-te združili v dve skupini: anketirance s starši z osnovnošolsko ali srednješolsko izobrazbo (32,1 %) in anketirance s starši z visokošolsko oz. srednješolsko izobrazbo ali znanstvenim magistriranjem oz. doktoratom (67,9 %). Pri analizi rezultatov se med skupinama anketirancev glede na stopnjo izobrazbe staršev niso pokazale statistično pomembne razlike pri nobenem izmed mitov.

### 3.4 Povezanost osebne izkušnje in poznavanja mitov

Pri analizi rezultatov so se statistično pomembne razlike pokazale le pri poznavanju mita Motnje hranjenja so odločitev. Z mitom se je strinjalo 10,8 % anketirancev, ki so se spopadali z motnjami hranjenja, in 30,1 % anketirancev, ki se ne/niso spopadali z motnjami hranjenja ( $\chi^2 = 5,542$ ,  $df = 1$ ,  $p = 0,019$ ,  $\phi = 0,12$ ). Tako sklepamo, da osebna izkušnja ni statistično povezana s poznavanjem mitov o motnjah hranjenja. Velikost učinka je bila majhna, zato rezultati kažejo na omejeno povezanost osebne izkušnje s poznavanjem mitov o motnjah hranjenja.

### 3.5 Vir znanja o motnjah hranjenja

**Tabela 3**

*Vir znanja o motnjah hranjenja/The source of knowledge about eating disorders*

| <i>Vir znanja</i>        | <i>f</i> | <i>f%</i> |
|--------------------------|----------|-----------|
| Družinsko okolje         | 40       | 10,4      |
| Prijatelji               | 22       | 5,7       |
| Šola                     | 142      | 36,8      |
| Družbena omrežja         | 73       | 18,9      |
| Splet                    | 76       | 19,7      |
| Od zdravstvenih delavcev | 12       | 3,1       |
| Drugo                    | 21       | 5,4       |

Tabela 3 prikazuje, v kolikšnem deležu dijaki pri pridobivanju znanja o motnjah hranjenja uporabljajo posamezne vire. Največji delež (36,8 %) anketirancev je znanje o motnjah hranjenja pridobil v šoli. Prav tako je veliko anketirancev znanje pridobilo na družbenih omrežjih (18,9 %) in spletu (19,7 %).

## 4 Razprava

Čeprav so se pri nekaterih mitih pokazale statistično pomembne razlike med skupinami, so bile velikosti učinkov večinoma majhne do zmerne, kar nakazuje, da so bile razlike med skupinami prisotne, vendar ne izrazite. Rezultate raziskave je treba interpretirati ob upoštevanju možnosti družbeno zaželenega odgovarjanja, saj so anketiranci pri vprašanjih o motnjah hranjenja lahko izbirali odgovore, ki so skladni s socialno sprejemljivimi stališči.

S prvim raziskovalnim vprašanjem smo dobili vpogled, kako dobro (v primerjavi s tujimi raziskavami) celjski srednješolci poznajo mite o motnjah hranjenja. Ugotovili smo, da so celjski srednješolci v primerjavi z mladimi anketiranci v nemški raziskavi, ki je prav tako preučevala poznavanje mitov o motnjah hranjenja, izkazali boljše znanje (Feldhege idr., 2022). Podobno kot v tej raziskavi so naši anketiranci najboljše prepoznali mite, ki se navezujejo na znanje o zdravljenju motenj hranjenja (Feldhege idr., 2022). V naši raziskavi so anketiranci najslabše prepoznali mite, ki se navezujejo na poznavanje dejavnikov, ki vplivajo na razvoj motenj hranjenja (miti 2, 4, 9), mit, povezan s prepoznavo bolnika glede na zunanjo podobo (mit 10), in mita, ki se navezujeta na novi obliki motenj hranjenja, ortoreksijo in bigoreksijo (mita 9 in 15). Za slabše poznavanje teh mitov lahko delno krivimo medije, ki v večini prikazujejo le bolnike z anoreksijo nervozo (Feldhege idr., 2022), premalo pa ozaveščajo družbo o novih oblikah motenj hranjenja. Ob tolikšni promociji fitnesa, gibanja in zdrave prehrane, kot je prisotna v današnjem času, nam primanjkuje ozaveščanja o posledicah, do katerih lahko pripelje zvestoba zdravemu življenjskemu slogu. Pri tem opozarjamo, da je treba upoštevati spolno strukturo vzorca, saj so ženske predstavljale večino udeležencev (81,1 %). Ker so te v raziskavi izkazale višjo stopnjo prepoznavanja mitov o motnjah hranjenja kot moški, lahko skupni rezultati odražajo nekoliko višjo raven poznavanja mitov, kot bi se pokazala v spolno bolj uravnoteženem vzorcu. Spolna neuravnoteženost vzorca zato omejuje predvsem posploševanje ugotovitev o splošni ravni poznavanja mitov med mladostniki, medtem ko razlike med spoloma (kot ugotavljamo v nadaljevanju) še vedno kažejo na pomembno smer za nadaljnje raziskovanje in preventivno delo.

Drugi cilj raziskave je bil ugotoviti, kako različne spremenljivke (spol, starost, stopnja izobrazbe staršev, osebna izkušnja z motnjami hranjenja) vplivajo na poznavanje mitov. Spol se je izkazal kot tista spremenljivka, ki statistično pomembno vpliva na poznavanje mitov. Pri tem so moški anketiranci izkazali slabše poznavanje mitov kot ženske: motnje hranjenja prepoznajo kot krivdo posameznika, ne pa kot splet genetskih, bioloških, vedenjskih, psiholoških in socioloških dejavnikov, na katere posameznik nima vpliva; menijo, da lahko motnje hranjenja prepoznamo že po zunanjem videzu in s tem kažejo na slabše razumevanje motenj hranjenja kot duševne motnje; motnje hranjenja vrednotijo kot manj resno motnjo; in slabše poznajo novi obliki motenj hranjenja – ortoreksijo in bigoreksijo.

Ti rezultati sovpadajo z mnogimi tujimi raziskavami (Mond in Arrighi, 2011; Feldhege idr., 2022; Vander Wal in Thelen, 1997), ki v svojih ugotovitvah navajajo področja motenj hranjenja, pri katerih moški izkazujejo očitno slabše znanje kot ženske, saj mladim moškim primanjkuje informacij o odnosih in prepričanjih do bolnikov z motnjami hranjenja (Mond idr., 2010). Več avtorjev poudarja pomembnost izobraževanja predvsem moških (Feldhege idr., 2022; Cotton idr., 2006, Kaneka in Motohashi, 2007), saj je pri njih stigma prisotna v večji meri kot pri ženskah (Austen in Griffiths, 2018).

Pri ostalih preučevanih spremenljivkah (starost, stopnja izobrazbe staršev in osebna izkušnja z motnjami hranjenja) smo ugotovili, da je njihov vpliv na poznavanje

mitov o motnjah hranjenja omejen oziroma nekonsistenten. Pri starosti so se namreč statistično pomembne razlike pokazale le pri dveh mitih, kar kaže, da starost ni bila dosledno povezana s poznavanjem mitov o motnjah hranjenja. Podobne ugotovitve navedajo tudi nekatere tuje raziskave, ki poročajo o omejeni povezanosti starosti z znanjem in stigmo do bolnikov z motnjami hranjenja (Gratwick-Sarll idr., 2014; Feldhege idr., 2022). Stopnja izobrazbe staršev se v naši raziskavi ni pokazala kot pomembnejši dejavnik razlik v poznavanju mitov, kar je lahko povezano tudi z dejstvom, da je relativno majhen delež anketirancev znanje o motnjah hranjenja pridobil v družinskem okolju (10,4 %) (glej tabelo 3). Tudi pri osebni izkušnji z motnjami hranjenja se statistično pomembne razlike niso pokazale pri večini analiziranih mitov. Posamezniki z osebno izkušnjo sicer lahko bolje poznajo simptome, povezane z lastno motnjo hranjenja, ni pa nujno, da imajo širše znanje o drugih oblikah motenj hranjenja ali o vseh dejavnikih, ki vplivajo na njihov razvoj (Healthline, 2017). Poleg tega se razvoj motenj hranjenja med posamezniki razlikuje, kar lahko vpliva na razumevanje same motnje.

S tretjim raziskovalnim vprašanjem smo dobili vpogled v vire, od katerih celjski srednješolci prejmejo znanje o motnjah hranjenja. Največji delež anketirancev je znanje pridobil v šoli. V primerjavi z italijansko raziskavo (Napolitano idr., 2019), kjer je znanje o motnjah hranjenja v šoli pridobilo le 6,2 % anketirancev, je ta delež visok. Tako želimo poudariti, da ima šola v slovenskem prostoru veliko družbeno moč in predstavlja okolje, ki lahko najbolj učinkovito in zanesljivo ozavešča in izobražuje mlade o motnjah hranjenja. Vedno več mladih znanje išče tudi na spletu, saj jim ta zagotavlja anonimnost in hiter dostop, in družbenih omrežjih, ki so med mladimi v vedno pogostejši uporabi.

## 5 Zaključek

Motnje hranjenja so družbeno obremenjujoč problem. Včasih je predvsem zaradi mitov težko prepoznati posameznika v svoji okolici, ki za motnjo trpi, kar potrjujejo tudi rezultati tujih in pričujoče raziskave. Naša raziskava je ena redkih, ki je preučevala poznavanje mitov mladih na področju motenj hranjenja v Sloveniji. V raziskavi izpostavljamo najpogostejše mite o motnjah hranjenja, ki so po mnenju nekaterih avtorjev med ljudmi najbolj razširjeni.

Čeprav rezultatov raziskave ne moremo posplošiti na celotno slovensko populacijo, lahko rečemo, da smo na izbranem vzorcu celjskih srednješolcev ugotovili, da mladi večinoma prepoznajo mite o motnjah hranjenja. Celjski srednješolci so izkazali boljše poznavanje mitov kot nemški vrstniki. Še vedno pa je nekaj mitov, ki so med celjskimi srednješolci slabše prepoznani. To so miti, ki se navezujejo na poznavanje dejavnikov, ki vplivajo na razvoj motenj hranjenja, prepoznavo bolnika glede na zunanjo podobo in mita, ki se navezujeta na novi obliki motenj hranjenja, ortoreksijo in bigoreksijo. Slabše poznavanje mitov se je pokazalo tudi pri moških srednješolcih. Pri ostalih preučevanih dejavnikih med celjskimi srednješolci ni bilo razlik. Ugotovili smo tudi, da največji delež celjskih srednješolcev znanje o motnjah hranjenja pridobi v šoli, ki ima pomembno vlogo pri podajanju zanesljivih informacij.

Naše ugotovitve o razširjenosti mitov med mladostniki in vlogi šole kot ključnega vira informacij je smiselno povezati z obstoječimi preventivnimi programi v Sloveniji. V zadnjih letih so se razvile različne pobude, ki so usmerjene v preprečevanje in zgodnje prepoznavanje motenj hranjenja, kot sta svetovalnici *Muza* in *Introspekta*. Preventivne vsebine na področju motenj hranjenja so vključene tudi v širši Nacionalni program duševnega zdravja – MIRA, ki spodbuja krepitve duševnega zdravja in zmanjševanje stigme v populaciji mladih. Posebno pozornost pa velja nameniti tudi izobraževalnim programom za starše, ki poudarjajo pomen zgodnjega prepoznavanja simptomov in vpliva družinskega okolja na razvoj motenj hranjenja. Poleg nevladnih iniciativ ima pomembno vlogo tudi Center za mentalno zdravje Psihiatrične klinike Ljubljana, kjer deluje specializirana enota za obravnavo motenj hranjenja pri mladostnikih in odraslih.

Vključitev naših ugotovitev v okvir obstoječih preventivnih in svetovalnih programov kaže, da je Slovenija že razvila osnovno mrežo podpore, vendar ostajajo vrzeli, predvsem pri ciljno usmerjenih intervencijah za moške mladostnike in pri ozaveščanju o novih oblikah motenj hranjenja (npr. ortoreksija, bigoreksija). Na tej podlagi bi bilo smiselno nadgraditi obstoječe programe z vsebinami, ki naslavljajo ravno tista področja, kjer smo zaznali slabše poznavanje mitov. V zaključku poudarjamo, da je razširjanje znanja na področju motenj hranjenja in izkoreninjenje mitov pomembno, saj nepoznavanje mitov in pomanjkanje znanja na področju motenj hranjenja poveča posameznikovo stigmatizacijo do bolnika z motnjo hranjenja. Zaradi stigmatizacije bolniki svojo bolezen skrivajo pred družbo in jo zadržijo zase, zaradi česar narašča tudi delež nediagnosticiranih bolnikov.

V nadaljevanju bi bilo raziskavo smiselno razširiti na ostale pokrajinske enote Slovenije in vanjo zajeti tudi preostale starostne skupine. Pomembno bi bilo preveriti, kakšno znanje imajo na tem področju starši mladih, katerih vloga je med drugim tudi, da motnje hranjenja prepoznajo pri svojih otrocih, v domačem okolju pa lahko oblikujejo prava prepričanja in odnose do bolnikov. Pri interpretaciji rezultatov je treba upoštevati več omejitev raziskave. Raziskava je temeljila na priložnostnem vzorcu celjskih srednješolcev, zato rezultatov ni mogoče posploševati na širšo populacijo mladostnikov v Sloveniji. Omejitev predstavlja tudi uporaba samoocenjevalnega vprašalnika, saj obstaja možnost družbeno zaželenega odgovarjanja. Vprašanja o strinjanju z miti so bila oblikovana dihotomno (odgovora da/ne), kar lahko omejuje zajem kompleksnejših stališč ali neodločnosti pri odgovorih. Ker raziskava temelji na presečnem raziskovalnem načrtu, rezultatov ni mogoče interpretirati vzročno-posledično. Poleg tega so bile v nekaterih celicah pri uporabi hi-kvadrat testa pričakovane frekvence nižje od priporočenih vrednosti, kar lahko vpliva na zanesljivost rezultatov. Raziskava je bila izvedena v skladu z etičnimi načeli raziskovanja. Sodelovanje v raziskavi je bilo prostovoljno in anonimno, anketiranci pa so bili pred izpolnjevanjem vprašalnika seznanjeni z namenom raziskave in možnostjo, da sodelovanje kadar koli prekinajo. Ker raziskava obravnava občutljivo področje motenj hranjenja in vključuje mladoletne udeležence, smo posebno pozornost namenili varovanju zasebnosti in zaupnosti podatkov. Zbrani podatki so bili uporabljeni izključno za raziskovalne namene.

Ana Rotovnik Omerzu, Larisa Mastnak

## **The Prevalence of Myths About Eating Disorders Among Secondary School Students in Celje**

*The human body has always been socially and culturally defined. Beauty standards are shaped within each culture; in today's Western societies, the ideal female body is typically characterised by a small waist, wide hips, and large breasts, while the ideal male body is associated with muscularity. The pressure to attain such ideals is intensifying due to the increasingly widespread use of social media. Adolescents are particularly vulnerable to this pressure, as their bodies undergo substantial biological changes during puberty. The desire to control these changes can, often unconsciously, lead to harmful behaviours that may result in the development of eating disorders.*

*Eating disorders are complex mental disorders caused by an individual's internal distress (Altum Health, 2024). They manifest themselves as changes in (eating) behaviour, such as overeating, vomiting, starvation, abuse of laxatives or diuretics (Serneck, 2010), social withdrawal (Pandel Mikuš, 2003), fear of eating or the consequences of eating certain foods (Center of Discovery Eating Disorder Treatment, 2023), and excessive physical activity (Serneck, 2010). The signs can be similar to those of addiction (American Psychiatric Association, 2023) and can threaten the personal and family functioning of the individual with the disorder (Feldhege et al., 2022). Eating problems become eating disorders when most thoughts, internal conflicts, and feelings of guilt begin to revolve around food (Serneck, 2010). Patients typically have low self-esteem and self-respect, and may also be overly concerned with their appearance and body weight (Pandel Mikuš, 2003). More than 70% of patients with eating disorders often have other mental disorders in addition to eating disorders (Keski-Rahkonen & Mustelin, 2016). Today, as many as 70 million people worldwide suffer from eating disorders (Fernandez-Aranda et al., 2023). The most common eating disorders include anorexia nervosa, bulimia nervosa, and binge eating disorder (Le LK et al., 2017). Their mortality rate is among the highest of all mental disorders – as many as 5% of patients with anorexia nervosa die (Meczekalski et al., 2013). Due to the rise in social media use (The Recovery Village, 2023; Newport Academy, 2023), the emergence of diet culture, and the emphasis on individual responsibility for health (healthism) (Brytek-Matera, 2023), easier access to information (and misinformation) about nutritional advice (Pope et al., 2000), changes in social beauty ideals (towards a muscular physique) (Murray et al., 2016), and the massive boom in the health food and fitness industry (Navigating the Maze, 2024) have also led to the development of new forms of eating disorders, namely orthorexia and bigorexia.*

*As well as worldwide, the prevalence of eating disorders among young Slovenians is rising rapidly. Therefore, we investigated the recognition of myths about eating disorders among secondary school students in Celje. The aim of the study was to examine how well secondary school students in Celje recognise the myths about eating disorders and how this correlates with different variables (gender, age, parents' edu-*

cational level, and personal experience.). We were also interested in where secondary school students in Celje acquire their knowledge about eating disorders. Data were collected using a quantitative method – an online survey designed based on a German questionnaire (Feldhege et al., 2022). We tested the knowledge of the myths with 15 statements about eating disorders, which were obtained from a German study (Feldhege et al., 2022) and various websites (UR Medicine, 2023; Eating Recovery Center, 2020; Rachael Hartley Nutrition, 2018; Oliver-Pyatt, 2023; Johns Hopkins Medicine, 2023). To determine where the Celje high school students acquire their knowledge about eating disorders, we offered them a choice of six different sources (family environment, friends, school, social networks, the internet, healthcare professionals) and an “other” option. The data were analysed using IBM SPSS 22. The sample consisted of 386 secondary school students aged 14 to 19.

Our study addressed three research questions:

- Which myths about eating disorders are the most prevalent among secondary school students in Celje?
- How do variables such as gender, age, parents’ educational level and personal experience correlate with the recognition of myths about eating disorders?
- From which sources do secondary school students in Celje acquire their knowledge about eating disorders?

The first aim of the study was to examine which myths about eating disorders are the most prevalent among the secondary school students in Celje. The findings indicate that the recognition of the most common myths about eating disorders among the secondary school students in Celje is high, contradicting the results of some foreign studies (Feldhege et al., 2022). The students demonstrated a particularly strong awareness regarding the treatment of eating disorders and the fact that these are serious mental illnesses. However, they were less aware of the factors contributing to their development, as well as of orthorexia and bigorexia, and tended to associate eating disorders primarily with physical appearance. The media can be partly blamed for the lack of knowledge in these areas, as it mostly shows only patients with anorexia nervosa (Feldhege et al., 2022) and does not raise enough awareness in society about new forms of eating disorders. With so much promotion of fitness, exercise, and healthy eating these days, we lack awareness of the possible consequences of maintaining a too strict healthy lifestyle.

Secondly, we investigated how different variables (gender, age, parents’ educational level and personal experience) correlate with the recognition of the myths about eating disorders. Gender emerged as the only variable that showed a statistically significant impact on the knowledge about the myths. The male respondents were more likely than the female respondents to associate eating disorders with a personal choice and individual’s craving for attention, considering them as the individual’s fault, rather than a complex disorder caused by various external factors (genetic, biological, behavioural, psychological and sociological), over which the individual has no control. They were also more likely to claim that the individuals with normal bodyweight cannot have eating disorders, indicating that we could recognise the individuals

with eating disorders by their appearance. They underestimated the seriousness of the condition and were more ignorant about orthorexia and bigorexia. These findings are supported by many foreign researchers (Mond & Arrighi, 2011; Feldhege et al., 2022; Vander Wal & Thelen, 1997) concluding that men demonstrate significantly poorer knowledge than women about eating disorders, especially because they lack the information about relationships and have certain beliefs about patients with eating disorders (Mond et al., 2010). Several authors emphasize the importance of educating men in particular (Feldhege et al., 2022; Cotton et al., 2006, Kaneka and Motohashi, 2007), as they are more stigmatized than women (Austen & Griffiths, 2018).

Other variables did not appear to be statistically significant. Several studies examining the impact of age on the knowledge and stigma toward the patients with eating disorders have found similar results (Gratwick-Sarll et al., 2014, Feldhege et al., 2022). The level of education of parents did not prove to be a factor influencing the knowledge of myths, as the proportion of the respondents who acquired the knowledge in a family environment (including parents) in our study was relatively small (10.4%). Personal experience is also not related to the knowledge of the myths about eating disorders. Even after the patients with a disorder are diagnosed, they are familiar with the symptoms characteristic of their eating disorder, but they do not necessarily know the symptoms characteristic of other types of eating disorders (Healthline, 2017). Based on experience, they also cannot know all the factors that can cause eating disorders. The development of the disorder itself varies from person to person.

The third aim of the study was to examine from which sources the secondary school students in Celje acquire their knowledge about eating disorders. The largest proportion of the respondents reported that they had acquired their knowledge about eating disorders in school (36.8 %). Compared to an Italian study (Napolitano et al., 2019), where only 6.2% of the respondents acquired the knowledge about eating disorders at school, this percentage was high. We would therefore like to emphasize that the schools in Slovenia have a considerable social power and represent an environment that can most effectively and reliably raise awareness and educate young people about eating disorders. Based on this, we encourage educational institutions to integrate diverse activities and educational programs about the subject. In recent years, various prevention programs have already been developed in Slovenia (such as the Muza and Introspekta counselling centres) focusing on the prevention and early detection of eating disorders. Preventive content in the field of eating disorders is also included in the broader National Mental Health Program – MIRA, which promotes mental health and reduces the stigma among young people. Based on the results of our research, it would make sense to upgrade the existing programs with content that addresses precisely those areas where we have identified a lack of knowledge about the myths (especially focusing on the male population).

In conclusion, we emphasize that spreading knowledge about eating disorders and eradicating the myths is important, as the ignorance regarding the myths and the lack of knowledge about eating disorders increase the individual's stigmatization of patients with eating disorders (Feldhege et al., 2022; Rodgers et al., 2015). Due to the

*stigmatisation, patients hide their illness from society and keep it to themselves, which also increases the proportion of undiagnosed patients (Austen & Griffiths, 2018).*

### *Izjava o dostopnosti raziskovalnih podatkov*

Članek temelji na raziskovalnih podatkih, ki se hranijo v arhivu avtorja in niso javno dostopni; dostopni so pri avtorju na podlagi utemeljene prošnje.

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# Psi pomočniki kot podpora samostojnosti, zdravju in socialni participaciji oseb z invalidnostjo

*Izvirni znanstveni članek*

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**KLJUČNE BESEDE:** podpora tehnologija, delovna terapija, vključevanje, zdravje, dobro počutje

**POVZETEK** – Osebe z invalidnostjo se pogosto soočajo z omejitvami pri vključevanju v vsakodnevne dejavnosti. Psi pomočniki so pomembna podpora pri izboljšanju samostojnosti, varnosti in zdravja ter dobrega počutja. Namen raziskave je bil spoznati izkušnje oseb s psom pomočnikom pri vključevanju v za osebo z invalidnostjo pomembne dejavnosti (okupacije). Izvedena je bila kvalitativna opisna raziskava z devetimi poglobljenimi polstrukturiranimi intervjuji. Udeleženci so bili izbrani z namenskimi vzorčenjem. Posnети intervjuji so bili dobesedno prepisani in analizirani s kvalitativno vsebinsko analizo. Izkušnje oseb z invalidnostjo so bile povezane z lažjim vključevanjem v vsakodnevne dejavnosti, večjo samostojnostjo pri izvedbi njim pomembnih dejavnosti, večjo telesno aktivnostjo, občutkom socialne sprejetosti ter podporo duševnemu zdravju. Udeleženci so hkrati opisovali tudi izzive, povezane z neozaveščenostjo javnosti, omejitvami pri vključevanju v javno okolje, vedenjskimi težavami psa in finančnimi obremenitvami. Ugotovitve poudarjajo potrebo po večjem ozaveščanju javnosti in strokovni podpori lastnikom psov pomočnikov.

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**KEYWORDS:** assistive technology, occupational therapy, inclusion, health, well-being

**ABSTRACT** – People with disabilities often encounter limitations when participating in everyday activities. Assistance dogs have been shown to provide important support in enhancing independence, safety, health, and well-being. The purpose of this study was to explore the experiences of people with assistance dogs in engaging in daily activities (occupations). A qualitative descriptive study was conducted using nine in-depth semi-structured interviews. The participants were selected through purposive sampling. The recorded interviews were transcribed verbatim and analysed using qualitative content analysis. The results indicate that assistance dogs increased independence, facilitated the performance of activities important to people with disabilities, increased physical activity, reduced stigma, and improved owners' mental well-being. The challenges identified included low public awareness, rejection in public spaces, behavioural problems of the dog, and financial burdens. The findings highlight the need for increased public awareness and professional support for assistance dog owners.

## 1 Uvod

Okupacije predstavljajo vsakodnevne dejavnosti, ki imajo za posameznika osebni in družbenokulturni pomen ter podpirajo njegovo vključevanje v družbo (American Occupational Therapy Association (AOTA), 2020). Osebam z invalidnostjo telesne ali okoljske omejitve pogosto otežujejo vključevanje v vsakodnevne dejavnosti, socialno participacijo in izvajanje njim pomembnih okupacij (Tough idr., 2017). Delovni terapevti pri omogočanju vključevanja v okupacije uporabljajo različne oblike podporne tehnologije, med katere uvrščamo tudi psa pomočnika (Akyurek in Bumin, 2017; Lamontagne idr., 2020). Pes pomočnik lahko osebam z invalidnostjo pomaga

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pri izvajanju vsakodnevnih dejavnosti, mobilnosti, socialni participaciji in vključevanju v širše okolje. Delovni terapevti pomembno sodelujejo v procesu pridobitve psa pomočnika – ocenjujejo izvedbo aktivnosti in okupacij, svetujejo, pomagajo pri prilagoditvah ter spremljajo vključevanje osebe in psa v vsakdanje življenje (Čižman Štaba idr., 2019; Winkle idr., 2012). Podporna tehnologija, ki jo osebe z invalidnostjo uporabljajo za vključevanje v okupacije (Akyurek in Bumin, 2017; De Witte idr., 2018), vključuje tudi pse pomočnike (Lamontagne idr., 2020), kar pomembno prispeva k razvoju stroke (Chan idr., 2022).

Glede na pozitivne učinke psov na posameznika in njihovo sposobnost učenja so jih ljudje začeli uriti za različne naloge. Tako so se pojavili psi pomočniki (angl. assistance dogs), ki pozitivno vplivajo na človekovo blaginjo, saj zmanjšujejo negativne vplive bolezni, pomagajo pri premagovanju okoljskih ovir ter posamezniku olajšajo sodelovanje v vsakodnevnih dejavnostih. Povečujejo varnost, spodbujajo socialne interakcije ter izboljšujejo splošno počutje (Audrestch idr., 2015). Psi pomočniki omogočajo izvedbo vsakodnevnih opravil, povečujejo samostojnost v mobilnosti, navezovanju stikov, nadzoru okolja ter opravljajo naloge, kot sta pritisk na gumb za pomoč ali odpiranje vrat (Hubert idr., 2013; Rintala idr., 2008).

Definicija in terminologija psov pomočnikov se razlikujeta po svetu, tako kot tudi nudenje pomoči, predpisi šolanja, certifikati in registracija (Yamamoto, 2019). V tujini assistive dogs zajemajo pse vodnike, pse za gluhe, pse za prepoznavanje spremenjenih zdravstvenih stanj (avtizem, epilepsija, diabetes) ter pse za gibalno ovirane osebe. Pse pomočnike in pse vodnike uvrščamo med delovne pse (Crowe idr., 2014), ki imajo z lastnikom dovoljen vstop na javna mesta in sredstva javnega prevoza. V Sloveniji velja 13. člen Zakona o zaščiti živali (2021), ki določa, da ti psi ne potrebujejo nagobčnika, morajo pa biti na povodcu.

V Združenih državah Amerike je dostop oseb s psi pomočniki urejen z Americans with Disabilities Act (ADA), v Kanadi z Rights of People with Disabilities. V Sloveniji pa področje urejata Zakon o izenačevanju invalidov (ZIMI) in Pravilnik o psih pomočnikih (Uradni list RS, št. 5/18), ki natančno določa pogoje za pridobitev psa pomočnika ter delo izvedencev in izvajalcev šolanja. Pravilnik je v celoti stopil v veljavo 1. maja 2018, izdalo pa ga je Ministrstvo Republike Slovenije za delo, družino, socialne zadeve in enake možnosti (MDDSZ) na podlagi 22.c do 22.g člena ZIMI (Uradni list RS, št. 94/10). MDDSZ krije vse stroške šolanja psa in priprave osebe z invalidnostjo na življenje s psom pomočnikom.

Za razliko od psov pomočnikov pa pse vodnike slepih (prisotni od leta 1982) financira Zavod za zdravstveno zavarovanje Slovenije in so v Zakonu o zdravstvenem varstvu in zdravstvenem zavarovanju (ZZ-VZZ) ter Pravilih OZZ opredeljeni kot medicinski pripomoček (Kačič, 2018). V tujini se za pse pomočnike pogosto uporablja termin service dogs, ki označuje pse, namenjene osebam z invalidnostjo za pomoč pri vsakodnevnih opravilih.

Primerjava z evropskimi podatki European Guide Dog Federation (EGDF, 2023) je pokazala, da je število izšolanih psov pomočnikov v državah EU zelo različno. Največ psov je bilo izšolanih v Veliki Britaniji (320), sledile so Nizozemska (217), Franci-

ja (84) in Švica (72). V Sloveniji je bil leta 2023 izšolan en pes, dva sta bila v procesu šolanja. Razlike so posledica širše opredelitve psa pomočnika v tujini, kjer vključujejo tudi pse za pomoč pri odkrivanju alergenov ali zaznavanju sprememb zdravstvenega stanja (diabetes, epilepsija), kar potrjujeta tudi Yamamoto in Hart (2019).

Ugotovitve nakazujejo potrebo po dopolnitvi pravilnika in razmisleku o razširitvi možnosti pridobitve psa pomočnika na osebe z različnimi zdravstvenimi težavami, ki vplivajo na izvedbo vsakodnevnih aktivnosti. Na URI Soča se strokovnjaki pogosto srečujejo z vprašanjem, zakaj je kandidatov malo. Med razlogi se kažejo nepoznavanje postopka, strah pred odgovornostjo ter finančno breme. Prav tako osebe z invalidnostjo pogosto niso seznanjene s številnimi možnostmi, ki jih prinaša življenje s psom pomočnikom, kar je bil tudi razlog za izvedbo raziskave v okviru diplomskega dela na Zdravstveni fakulteti.

Vsebinsko in način vložitve vloge določa 4. člen Pravilnika o psih pomočnikih (Uradni list RS, št. 5/18). Vloga se vloži na kateri koli upravni enoti ali elektronsko. Upravna enota (UE) pridobi izvedenska mnenja URI Soča in izvedenca z delovnega področja s psi, ki ocenijo psihofizično stanje invalidne osebe in njeno bivalno okolje. Ob pozitivni oceni UE izda vrednotnico za financiranje šolanja psa pomočnika, ki jo lahko oseba z invalidnostjo unovči v roku enega meseca pri izvajalcih, izbranih na javnem razpisu MDDSZ. Od leta 2018 do konca leta 2025 so prejeli 30 vlog; štiri so bile zavrnjene zaradi neprimernih bivalnih razmer ali pretežke telesne okvare. Povprečno so bili izšolani trije psi na leto, kar je manj od predvidenega.

Invalidnost v današnjem času predstavlja vse večji zdravstveni in socialni problem (Tough idr., 2017). Osebe z invalidnostjo imajo zaradi telesnih ali duševnih okvar ter neprilagojenega okolja omejeno ali onemogočeno polno vključevanje v družbo (Tough idr., 2017), pogosto pa naletijo na stigo in okoljske ovire (Futeran idr., 2022; Mikołajczyk-Lerman in Potoczna, 2019). Posledično prihaja do socialne izolacije in izgube možnosti za sodelovanje v njim pomembnih okupacijah (Brea idr., 2012; Tough idr., 2017). Raziskave potrjujejo, da psi pomočniki ugodno vplivajo na telesno, duševno in socialno zdravje oseb z invalidnostjo, izboljšujejo kakovost življenja, samozavest, varnost, razpoloženje in socialno vključenost (Crowe idr., 2014; Hall idr., 2017; Rintala idr., 2008; Shoesmith idr., 2024; Yamamoto in Hart, 2019).

Pes pomočnik osebam z invalidnostjo omogoča ponovno izvajanje aktivnosti in okupacij ter ustvarjanje novih vzorcev njihove izvedbe (Winkle idr., 2011). S svojimi spretnostmi podpira vse, kar ljudje počnejo, da lahko skrbijo zase, uživajo življenje in prispevajo k družbi (Hubert idr., 2013; Winkle idr., 2011). Vpliva tudi na duševno zdravje, zmanjšuje depresijo, anksioznost, občutek osamljenosti ter olajša komunikacijo z drugimi (Futeran idr., 2022; Winkle idr., 2011).

Kljub naraščajočemu številu raziskav o psih pomočnikih v tujini je v slovenskem prostoru malo raziskav, ki bi raziskovale izkušnje oseb pri življenju s psom pomočnikom. Posebej primanjkuje kvalitativnih raziskav, ki bi omogočile globlji vpogled v vsakodnevne izkušnje oseb z invalidnostjo.

Namen raziskave je bil spoznati izkušnje oseb s psom pomočnikom pri vključevanju v vsakdanje okupacije in odgovoriti na raziskovalno vprašanje: Kakšne so izkušnje oseb, ki živijo s psom pomočnikom pri vključevanju v različne dejavnosti?

## 2 Metode

Izvedena je bila kvalitativna raziskava s pomočjo poglobljenih polstrukturiranih intervjujev (Chand, 2025). Udeleženci so sodelovali prostovoljno, vodilo za intervju so predstavljala ključna vprašanja, pripravljena na osnovi pregleda relevantne literature in usmerjena v raziskovanje izkušenj oseb z invalidnostjo pri življenju s psom pomočnikom ter njihovega vključevanja v vsakdanje dejavnosti (primer vprašanja: »Kako vaš pes pomočnik vpliva na vaše vsakodnevne aktivnosti?«). Intervjuji so bili izvedeni konec leta 2023, sedem v živo in dva preko spletne platforme Zoom, trajali so od 45 do 90 minut.

Po odobritvi Komisije za medicinsko etiko Slovenije (0120-3/2024/3) so bila pri raziskovanju upoštevana etična načela Kodeksa etike delovnih terapevtov Slovenije (Zbornica delovnih terapevtov Slovenije, 2018). Kriteriji za vključitev v raziskavo so bili: polnoletnost, lastništvo psa pomočnika najmanj eno leto ter sposobnost sodelovanja v intervjuju in deljenja izkušenj, povezanih z življenjem s psom pomočnikom. Udeleženci so pred izvedbo prejeli pojasnilo, podpisali izjavo o sodelovanju in imeli možnost postaviti dodatna vprašanja (Busetto idr., 2020). Posnetki intervjujev so omogočali dobresedne prepise, pri čemer vsebina ni bila spreminjana (Kordeš in Smrdu, 2015; Mesec, 1998). Analiza je temeljila na kvalitativni vsebinski analizi: kodiranju, oblikovanju podkategorij in kategorij (Lyhne in Bjerrum, 2025; Mesec, 1998).

V raziskavi je sodelovalo 9 oseb, starih od 24 do 68 let z diagnozami mišična distrofija, cerebralna paraliza, spinalna mišična atrofija, Friedrichova ataksija, tetraplegija. Izbrani so bili z namenskim vzorčenjem v sodelovanju z zvezo paraplegikov Slovenije, Združenjem multiple skleroze Slovenije in Društvom distrofikov Slovenije, kar je omogočilo detektiranje posameznikov z izkušnjami, vezano na raziskovalno vprašanje (Palinkas idr., 2015). Zaradi varovanja osebnih podatkov so udeleženci anonimizirani kot INT 1–INT 9.

## 3 Rezultati

Z vsebinsko analizo so bile oblikovane štiri kategorije: izkušnje prilagajanja v prvem letu sobivanja s psom pomočnikom, težave v prvem letu lastništva, dolgoročne izkušnje sobivanja s psom pomočnikom in dolgoročne negativne izkušnje sobivanja s psom pomočnikom. Kategorije sestavlja 14 podkategorij s pripadajočimi kodami, prikazano v tabeli 1.

**Tabela 1***Kodirna shema/Coding scheme*

| <i>Kategorije</i>                                              | <i>Podkategorije</i>                          | <i>Kode</i>                                                                                                                     |
|----------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Izkušnje prilagajanja v prvem letu sobivanja s psom pomočnikom | Vsakdanje delovanje                           | Oblačenje<br>Jutranje vstajanje in presedanje<br>Toaleta<br>Večerna rutina<br>Pranje perila<br>Nakupovanje<br>Hitrejša izvedba  |
|                                                                | Telesna aktivnost                             | Bolj aktiven<br>Več sprehodov<br>Težave s stigmo                                                                                |
|                                                                | Samostojnost                                  | Pomoč pri vstajanju ob padcu<br>Občutek varnosti<br>Samostojno opravljanje dela/<br>izobraževanja<br>Pomoč pri pobiranju stvari |
|                                                                | Socialna vključenost                          | Vključevanje v širše okolje<br>Občutek varnosti<br>Samozavest                                                                   |
| Težave v prvem letu lastništva                                 | Težave pri vključevanju s psom v javno okolje | Ne sprejemanje psa<br>Žaničevanje<br>Nevednost javnosti o vlogi psa<br>pomočnika<br>Težave pri vstopu v javne ustanove          |
|                                                                | Omejena aktivnost intervjuvank                | Stres<br>Pes kot breme drugim<br>Omejitve prostora aktivnosti                                                                   |
|                                                                | Težavno vedenje psa                           | Težave pri poslušnosti<br>Izsiljevanje psa                                                                                      |
| Dolgoročne izkušnje sobivanja s psom pomočnikom                | Duševno zdravje                               | Zmanjšanje stopnje depresije,<br>anksioznosti, osamljenosti<br>Motiviranost                                                     |
|                                                                | Aktivno življenje                             | Redna fizična aktivnost<br>Premor<br>Trening psa                                                                                |
|                                                                | Socialna vključenost                          | Ni sprememb<br>Preprostejše vključevanje<br>Pozitiven odziv družbe                                                              |
|                                                                | Sprememba življenja                           | Pomembnost psa v življenju<br>Ustaljen urnik<br>Potrpežljivost                                                                  |
| Dolgoročne negativne izkušnje sobivanja s psom pomočnikom      | Pomanjkljivo ozaveščena javnost               | Dotikanje psa<br>Nespoštovanje bližine<br>Omejen dostop v javno okolje<br>Vloga DT pri ozaveščanju                              |
|                                                                | Nesprejemljivo vedenje psa                    | Vlečenje<br>Lajanje<br>Neposlušnost<br>Iskanje pomoči                                                                           |
|                                                                | Finančno breme                                | Veterinarska obravnava<br>Nakup hrane<br>Nakup pasje opreme, prehrane                                                           |

V nadaljevanju so predstavljeni ključni vsebinski poudarki posameznih kategorij, podprti s citati udeležencev. Vsi citati so zapisani v ženski slovnični obliki zaradi dodatne zaščite identitete udeležencev v raziskavi.

### *3.1 Izkušnje prilagajanja v prvem letu sobivanja s psom pomočnikom*

Udeleženke so opisale, da pes pomočnik pomembno prispeva k izvajanju osnovnih in širših dnevnih aktivnosti, kot so oblačenje, toaleta, pranje perila in nakupovanje. Poudarile so, da jim omogoča večji občutek varnosti, prihranek časa in energije ter ponovno samostojnost med izvedbo aktivnosti. »Moj dan je zjutraj vsak enak ... mi pomaga, da se posedem na voziček ... in če asistentka zamudi, jaz lahko obavam neke stvari.« (INT. 5) Izpostavljeno je bilo tudi: »Kmalu po tem, k sm ga dobila, sem spet začutila željo po tem, da grem u trgovino ... to me je osrečevalo.« (INT. 3) Intervjuvanka je opisala pomoč pri gospodinjstvih opravilih: »Pomaga mi dat cunje u stroj in potem v sušilca.« (INT. 9) Intervjuvanka so poudarile tudi hitrejša izvajanje aktivnosti. »Določene stvari, od kar jo imam, naredim hitreje.« (INT. 2)

Psi pomočniki so motivirali udeleženke k rednim izhodom in bolj aktivnemu življenjskemu slogu »Zdaj gremo veliko v naravo ... prisiljena sem, ampak v dobro prisiljena.« (INT. 1) »... počutila sem se kot druga oseba, že zaradi manj stigme.« (INT. 6) »... imam veliko bolj aktiven prosti čas ... tudi če kdaj nisem pri volji.« (INT. 8) »Dokler je nisem imela, nism šla ven ... z njo sem morala pa hoditi.« (INT. 7) S pomočjo psov pomočnikov se je zmanjšala tudi stigma. »Ko sem prvič prišla z njim v javnost, je to izginilo.« (INT. 8) »Psička je razbila tisto zadržanost ljudi do oseb na vozičku.« (INT. 9)

Povečala se je samostojnost pri delu in vsakodnevnih aktivnostih. »Če mi kaj pade na tla, ona meni to pobere in jaz lahko delam naprej.« (INT. 4) »Če sem jaz padla iz vozička ... brez njega bi tam ležala.« (INT. 5)

### *3.2 Težave v prvem letu lastništva*

Kljub koristim so se pojavile težave z vključevanjem v okolje, omejitvami v aktivnostih in z vedenjem psa. Pogosti so bili zavrnitve vstopa, zahteve po nagobčniku in nepoznavanje pravic. »... varnostnik me je opozoril, da pes ne sme biti v trgovini ...« (INT. 3) »So klical na LPP, če je normalno, da se pes s trolo vozi.« (INT. 4) »Pes vodnik za slepe lahko, pes pomočnik pa ne sme it v galerijo.« (INT. 5)

Stres je povzročalo iskanje ravnotežja med lastnimi obveznostmi in skrbjo za psa. »Skrb za psa le ni mačji kašelj ... s počitnic smo se vrnili prej.« (INT. 6) »Na začetku sem ga vedno vozila sabo, npr. fitness, posledično sva bila oba vidno pod stresom, ker noben ni vedel, kako se bo odvijalo ...« (INT. 8) »Na koncertih je začel lajati, zato zdaj hodiva le na odprte prireditve.« (INT. 3)

Pojavljale so se vedenjske težave (pobiranje predmetov, lajanje, vlečenje). »... kljub šolanju je vse pobrala s tal ...« (INT. 2) »Model je močen in ful fizičen pes, zato me je tud že potegnil u blato, ker je stekel za enim psom ...« (INT. 5)

### 3.3 Dolgoročne izkušnje sobivanja s psom pomočnikom

Večletno sobivanje s psom je pozitivno vplivalo na duševno zdravje, aktivnost, socialno vključenost in splošno kakovost življenja. Udeleženke so poročale o manj osamljenosti, boljši samopodobi in manj depresivnih epizodah. »Jaz sem zanjo popolna, edinstvena.« (INT. 2) »... dvigne me, ko sem malo bolj na tleh ...« (INT. 7) »... od kar jo imam, je življenje manj depresivno ... manj stresa ...« (INT. 4) »Dala mi je ful motivacije, da ustanem zjutri.« (INT. 7) »Bil je tle zame in me je uzdignu nazaj, k sm bla na najglobjem dnu.« (INT. 5)

Udeleženke so postale bolj aktivne in ohranjale so rutino rednih sprehodov in treningov. »... dež ali pa slabo vreme me ne ustavi.« (INT. 7) »Midve greve ven večkrat na dan.« (INT. 3) »Prej sm naredila manj kot 1000 kilometrov na leto, zdaj več kot 2000.« (INT. 7) »... ko greva na sprehod, na koncu obvezno narediva še trening ...« (INT. 5)

Pes pomočnik olajša socialne stike in zmanjša zadržanost ljudi. »Pes je ... "en ice breaker" ...« (INT. 7) »Zaradi nje več ljudi pristopi do nas.« (INT. 4) »... ko pa imaš ti psičko ... imaš odprta vrata, komunikacija steče lažje.« (INT. 9)

Pes je prinesel rutino, podporo in občutek smisla. »... moje življenje je boljše ... S svojo pomočjo mi je pokazala novo življenje.« (INT. 6) »... dajal mi je občutek, da nisem sama.« (INT. 3) »Navadla me je rutine.« (INT. 1) »Naučil me je potrpljenja.« (INT. 8)

### 3.4 Dolgoročne negativne izkušnje sobivanja s psom pomočnikom

Življenje s psom pomočnikom lahko povzroči težave z nizko ozaveščenostjo javnosti, vedenjskimi izzivi psa in finančnimi obremenitvami. Javnost še vedno pogosto ne pozna pravic psov pomočnikov. »... po večini so še vedno nepodučeni ...« (INT. 6) »... to ni v zakonu, da gre pes lahko s tabo vse povsod ...« (INT. 5)

Stalni stroški hrane, zavarovanja in pregledi pri veterinarju ter izredni izdatki ob boleznih so visoki. »Hitro lahko pride do finančne stiske ...« (INT. 7) »... kemoterapije, operacija ... so kar bili stroški.« (INT. 4)

## 4 Razprava

Namen raziskave je bil raziskati izkušnje oseb z invalidnostjo pri življenju s psom pomočnikom ter njihovo vključevanje v dejavnosti vsakdanjega življenja. Rezultati so pokazali, da so udeleženci pomembno izpostavljali fizično podporo psa pomočnika, med drugim odpiranje vrat, pobiranje predmetov, oporo pri preseganju in pomoč ob padcu. Opažali so tudi večjo telesno aktivnost ter pogostejše izvajanje dejavnosti, povezanih z vsakdanjimi opravili, delom in izobraževanjem. Takšne ugotovitve so skladne z raziskavami Herlache-Pretzer idr. (2017) in Lundqvist idr. (2020), ki opisujejo ponovno vključevanje v osnovne ter širše dnevne aktivnosti, pri katerih pes pomočnik nadomešča pomoč druge osebe.

Udeleženci so pogosto opisovali, da so zaradi psa pomočnika razvili redno rutino sprehodov in bolj aktivno preživljanje prostega časa, kar so podobno ugotovili tudi Hall idr. (2017) ter Rodriguez idr. (2020). Pomemben poudarek je bil tudi na duševnem zdravju – pes je bil opisan kot stabilen spremljevalec, vir motivacije in občutek opore. Ugotovitve so skladne z raziskavami, ki navajajo, da prisotnost psa pomočnika zmanjšuje osamljenost, dviguje samopodobo ter podpira občutek povezanosti (Herlache-Pretzer idr., 2017; Isaacson in Hellman, 2023; Rodriguez idr., 2020).

Rezultati raziskave potrjujejo, da pes pomočnik okrepi občutek samostojnosti in varnosti udeležencev, zato ti manj potrebujejo pomoč osebnih asistentov ali družinskih članov. To je v skladu z ugotovitvami Hall idr. (2017), Gravrok idr. (2020) ter Crowe idr. (2017; 2018), ki navajajo, da lastniki pogosteje in z manj zadržanosti vstopajo v različna okolja, lažje navezujejo socialne stike in se počutijo bolj vključeni v družbo. Udeleženci so v raziskavi izpostavljali predvsem ponovno izvajanje njim pomembnih dejavnosti ter občutek, da imajo zaradi psa pomočnika nad njimi ponovni nadzor. Podobno poročajo tudi Rintala in sodelavci, ki opisujejo izvajanje vsakodnevnih aktivnosti, kot so prinašanje predmetov, pobiranje stvari in odpiranje vrat, v domačem in širšem okolju (Herlache-Pretzer idr., 2017).

Udeleženci so poudarjali, da je bila izvedba dejavnosti zaradi psa pomočnika fizično manj zahtevna, saj jim ni bilo treba nevarno segati k tlom ali do višjih polic. Pes pomočnik je na ustrezno povelje izvedel nalogo (poberi, prinesi, odpri), kar je omogočilo energetsko varčnejšo izvedbo, manjšo utrudljivost ter večjo vzdržljivost. Takšen način izvedbe je omogočil, da je obdržal nadzor nad aktivnostjo in sam odločal, kdaj bo vključil psa in kdaj ne. To je v skladu z razumevanjem samostojnosti kot delovanja po lastni presoji brez spodbude drugega (Fran, n.d.).

Tako kot v raziskavi Yamamoto in Hart (2019) smo tudi v naši raziskavi ugotovili, da sta poleg fizične varnosti pomembna občutek psihične varnosti in zmanjšanje strahu pred vključevanjem v širše okolje. Psi pomočniki so naučeni spremljati osebe z invalidnostjo, ki uporabljajo medicinske pripomočke, in nuditi oporo ali klic na pomoč pri padcu ali spremembi zdravstvenega stanja, kar krepi občutke zanesljivosti in pripravljenosti na nepredvidene situacije.

Pogost razlog za ne vključevanje v širše okolje je stigmatizacija. Lindsay in Thiagarajah (2020) ugotavljata, da psi pomočniki lastnikom omogočajo sprejemanje sebe ter zmanjšujejo občutke samostigmatizacije. Udeleženci v naši raziskavi so opisovali več pozitivnih interakcij z ljudmi ter več občutkov sprejetosti, kar je bilo manj izrazito, ko so se v okolje vključevali brez psa pomočnika. Tovrstne izkušnje so skladne z ugotovitvami Rodriguez idr. (2020) in Herlache-Pretzer idr. (2017), ki navajajo zmanjšanje depresivnih obdobij, manj stresa ter večjo motiviranost pri izvajanju vsakodnevnih aktivnosti.

Pozitiven vidik so udeleženci povezovali tudi s telesnim zdravjem. Zaradi potreb psa so se pogosteje gibali, kar je skladno z ugotovitvami Hall idr. (2017), ki navajajo, da lastniki psov pomočnikov v prostem času preživijo več časa v gibanju. Poleg sprehodov pa so udeleženci poročali o številnih načrtovanih in nenačrtovanih oblikah gibanja, kot so nega psa, priprava hrane, nakupovanje opreme, igra ter spontani dotiki.

Po Rodriguez idr. (2020) je splošno počutje močno povezano s količino in kakovostjo gibanja, kar se je odražalo tudi v naših ugotovitvah.

Kljub številnim pozitivnim vidikom pa so udeleženci poročali tudi o negativnih izkušnjah. Lundqvist idr. (2020) izpostavljajo slabo ozaveščenost javnosti, kar potrjujejo tudi naši pridobljeni podatki – mnogi ljudje psa pomočnika obravnavajo kot hišnega ljubljencega, ga želijo božati in ne poznajo pravil obnašanja do psa pomočnika. Rodriguez idr. (2020) ter Pugh idr. (2024) opisujejo podobne situacije zavračanja v javnih prostorih in nejasnosti zakonodaje, kar so udeleženci zaznali tudi v Sloveniji. Udeleženci so opisovali tudi težave z vedenjem psa ter situacije, ko psa niso mogli vzeti s seboj ali mu niso mogli zagotoviti dovolj gibanja, kar je v skladu z ugotovitvami Assistance Dogs International (n.d.) in Herlache-Pretzer idr. (2017).

Finančno breme (hrana, oprema, veterinarski pregledi) je predstavljalo dodaten izziv, tako kot navajajo Lundqvist idr. (2020). Pri reševanju težav so se udeleženci pogosto obračali na vaditelje in strokovnjake, kar je skladno z ugotovitvami, da je takšna podpora ključna pri preprečevanju zapletov (Herlache-Pretzer idr., 2017; Lundqvist idr., 2020).

Raziskava ima več prednosti. Temelji na neposrednih opisih izkušenj lastnikov psov pomočnikov, vnaprejšnji dogovor o času in kraju intervjuja pa je omogočil poglobljene odgovore. Rezultati osvetljujejo pomen vloge delovnih terapevtov pri informiranju in pripravi uporabnikov. Kot omejitev raziskave je opredeljena omejena količina relevantne literature, ki je predstavljala izhodišče za oblikovanje vodilnih vprašanj.

Rezultati pomembno dopolnjujejo razumevanje življenja osebe z invalidnostjo s psom pomočnikom v slovenskem kontekstu. V prihodnje bi bilo smiselno razširiti vzorec, raziskati pričakovanja prihodnjih lastnikov ter vključiti tudi vidik delovnih terapevtov (prisotnost delovnih terapevtov pri spremljanju in prilagajanju procesa učenja skozi celotno obdobje do pridobitve psa pomočnika).

Ugotovitve raziskave so pokazale tako pozitivne kot negativne izkušnje življenja s psom pomočnikom. Negativne so bile manj pogoste in so se nanašale predvsem na utrujenost zaradi skrbi za psa ter težave pri vključevanju v javnost zaradi nepoznavanja zakonodaje ali neprimerne pristopa ljudi. To poudarja potrebo po dodatnem ozaveščanju javnosti o pravih ravnanjih s psi pomočniki.

Psi pomočniki z izvajanjem namenskih povelj omogočajo osebam z invalidnostjo višjo stopnjo samostojnosti, varnosti in ponovne vključenosti v vsakodnevne dejavnosti. Poleg fizične podpore pa prinašajo pomembne koristi tudi na področju duševnega in telesnega zdravja ter vključevanja v družbo.

Raziskava predstavlja enega prvih kvalitativnih vpogledov v izkušnje oseb s psom pomočnikom v slovenskem prostoru. Ugotovitve prispevajo k boljšemu razumevanju dnevne rutine oseb z invalidnostjo ter pomena psa pomočnika kot oblike podporne tehnologije.

## 5 Zaključek

Osebe z invalidnostjo, ki imajo psa pomočnika, so poročale o številnih izkušnjah, povezanih z izvajanjem vsakodnevnih dejavnosti v domačem in širšem okolju. Lastništvo psa je pri udeležencih privedlo do pojava novih dejavnosti, ki so zajemale prosti čas, delo in izobraževanje. Poudarili so večjo vključenost v okolje, družabnost in motivacijo za sodelovanje v skupnosti. Nekateri so ponovno začeli izvajati dejavnosti, ki so jih pred prejetjem psa opustili. Poleg tega so opisovali večjo varnost in samostojnost pri opravilih, saj pogosto niso več potrebovali prisotnosti osebnega asistenta ali družinskega člana. To je prispevalo k občutku večje samostojnosti, ohranjanja samopodobe in več telesne aktivnosti.

Ugotovitve raziskave prinašajo pomembne informacije za strokovnjake, kot so delovni terapevti, socialni delavci, psihologi in drugi zdravstveni delavci, ki sodelujejo z osebami z invalidnostjo. Pridobljeni podatki o izkušnjah lastnikov psov pomočnikov omogočajo boljše razumevanje postopka pridobitve psa ter življenja z njim, kar je lahko koristno pri pripravi prihodnjih uporabnikov.

*Špela Mihevc, Nataša Ogrin Jurjevič, Simona Urbiha*

### **Assistance Dogs as Support for Independence, Health, and Social Participation of Persons with Disabilities**

*People are inherently occupational beings who engage in a wide range of activities and occupations throughout their daily lives. Occupations are activities that hold personal and sociocultural meaning for individuals and contribute to their identity, health, and well-being. In contemporary society, animals – particularly dogs – have increasingly become part of everyday life, moving from outdoor environments into shared living spaces with humans. This close coexistence has been shown to contribute positively to both physical and mental health, as animals are continuously present and provide emotional, motivational, and functional support.*

*Due to their learning abilities and positive influence on human well-being, dogs have been systematically trained to perform specific tasks that support people with disabilities. Assistance dogs are a form of assistive technology that helps mitigate the negative effects of illness or disability, overcome environmental barriers, and facilitate engagement in daily occupations. Their presence has been associated with increased safety, enhanced independence, encouragement of social interaction, and improved overall well-being. Assistance dogs are trained to perform tasks such as retrieving objects, opening doors, pressing emergency buttons, supporting transfers, and assisting in situations involving falls or medical emergencies.*

*The definition and categorisation of assistance dogs vary internationally, as do training standards, certification systems, and legal frameworks governing their use.*

*In Slovenia, assistance dogs are legally recognised and regulated through national legislation, which defines eligibility criteria, training requirements, and access rights to public spaces. Since the full implementation of the relevant regulation in 2018, the Ministry of Labour, Family, Social Affairs and Equal Opportunities has covered the costs associated with the training of assistance dogs for eligible individuals. Despite this legal framework, the number of trained assistance dogs in Slovenia remains relatively low compared to other European countries.*

*Disability represents a growing public health and social challenge. Individuals with disabilities often face physical, social, and environmental barriers that limit their full participation in society. These barriers frequently result in social isolation, restricted engagement in meaningful occupations, and reduced quality of life. Existing research consistently demonstrates that assistance dogs have a positive impact on the physical, mental, and social health of people with disabilities, contributing to improved independence, self-confidence, safety, and social inclusion.*

*Occupational therapists play an important role in the process of acquiring and integrating an assistance dog into daily life. Their responsibilities include assessing occupational performance, advising on environmental adaptations, supporting skill development, and monitoring the long-term integration of the dog – handler partnership. Assistance dogs are increasingly recognised within occupational therapy as a form of assistive technology that supports participation in meaningful occupations and contributes to the advancement of professional practice.*

*The aim of this study was to explore the experiences of people living with an assistance dog in relation to their engagement in everyday occupations. Using the qualitative content analysis of semi-structured interviews, the study sought to answer the research question: What are the experiences of people who live with an assistance dog when engaging in various daily activities?*

*A qualitative descriptive research design was employed. Data were collected through nine in-depth semi-structured interviews conducted at the end of 2023. Seven interviews were carried out face-to-face, while two were conducted via an online platform. The participants were recruited using purposive sampling in cooperation with the national disability organisations, ensuring the inclusion of individuals with a relevant lived experience. Ethical approval was obtained, and all participants provided informed consent prior to their participation. The interviews were audio-recorded, transcribed verbatim, and analysed using the qualitative content analysis, including coding, development of subcategories, and formation of overarching categories.*

*The study included nine participants, aged between 24 and 68 years. To protect anonymity, the participants were coded as INT 1-INT 9, and all interview excerpts were presented in the feminine grammatical form.*

*The analysis resulted in four main categories: (1) positive experiences during the first year of assistance dog ownership, (2) challenges during the first year, (3) long-term positive experiences, and (4) long-term negative experiences.*

*During the first year of ownership, the participants reported significant improvements in daily functioning, increased independence, higher levels of physical activity, and a greater social participation. Assistance dogs facilitated both basic and instrumental activities of daily living, reduced physical strain, and saved time and energy. The participants emphasised that the dog enabled them to manage tasks independently, even when personal assistants were unavailable. Regular outings and walks increased physical activity and reduced feelings of stigma in public spaces. The participants also described an increased confidence and a reduced fear of negative social reactions. The challenges during the initial period included limited public awareness of assistance dog rights, frequent denial of access to public spaces, demands for muzzles, and misunderstandings by staff and the general public. The participants also reported stress related to the balancing of their personal responsibilities with the care of the dog, particularly during travel or leisure activities. Behavioural challenges of the dogs, such as barking or picking up objects, were also noted despite formal training.*

*Long-term experiences revealed substantial benefits for mental health, social inclusion, and overall quality of life. The participants described reduced loneliness, fewer depression symptoms, increased self-esteem, and a stronger sense of purpose. The dog was perceived as a constant companion, source of emotional support, and motivation. Regular routines involving walking and training were maintained over time, contributing to a sustained physical activity. Assistance dogs also facilitated social interaction by acting as a social catalyst, making communication with others easier and more spontaneous.*

*Long-term negative experiences primarily involved ongoing public unawareness, occasional behavioural issues, and financial burdens. The participants highlighted the high costs associated with food, equipment, insurance, and veterinary care, particularly in cases of illness. Despite these challenges, negative experiences were reported less frequently than positive ones.*

*The findings align with international research demonstrating that assistance dogs support independence, safety, and participation while also enhancing psychosocial well-being. The study confirms that assistance dogs enable energy-efficient task performance, reduce reliance on personal assistance, and support self-determined engagement in occupations. Beyond physical assistance, the dogs contribute to psychological security and reduce fear associated with participation in broader environments.*

*Despite their benefits, the study highlights persistent systemic challenges, particularly insufficient public awareness and unclear implementation of legal rights. These findings underscore the need for targeted public education, improved professional support, and ongoing involvement of occupational therapists throughout the assistance dog acquisition and integration process.*

*This study represents the first qualitative investigation in Slovenia focusing directly on the role of assistance dogs in everyday occupational engagement. Although limited by a small sample size and the exploratory nature of qualitative research, the findings provide a valuable insight into the lived experiences and offer a foundation*

*for future research. Expanding the sample, including prospective users and professionals, and examining long-term outcomes are recommended.*

*In conclusion, assistance dogs play a crucial role in enabling people with disabilities to re-engage in meaningful daily activities, enhance independence, and improve physical, mental, and social well-being. While challenges remain, particularly regarding public awareness and financial burden, assistance dogs represent a powerful and multifaceted form of support that significantly contributes to occupational participation and quality of life.*

### *Izjava o dostopnosti raziskovalnih podatkov*

Članek temelji na raziskovalnih podatkih, ki se hranijo v arhivu avtorja in niso javno dostopni; dostopni so pri avtorju na podlagi utemeljene prošnje.

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# Zdravstveni dispečer kot člen verige preživetja pri zunajbolnišničnem srčnem zastoju: pregled literature

*Pregledni znanstveni članek*

UDK 616-083.98:616.12-008-315

**KLJUČNE BESEDE:** zunajbolnišnični srčni zastoj, dispečersko podprto oživljanje, temeljni postopki oživljanja, nujna medicinska pomoč

**POVZETEK** – Zunajbolnišnični srčni zastoj je pomemben javnozdravstveni problem z nizko stopnjo preživelosti. Zdravstveni dispečer ima ključno vlogo v verigi preživetja z zgodnjim prepoznavanjem srčnega zastoja in vodenjem laikov pri dispečersko podprtem oživljanju. Izveden je bil sistematični pregled literature v bazah PubMed, SpringerLink, ProQuest in Web of Science, objavljene v obdobju med letoma 2020 in 2025. Od 257 zadetkov je bilo v končno analizo vključenih 10 prispevkov, ki so bili analizirani s kvalitativno vsebinsko analizo. Identificirane so bile tri tematske kategorije: prepoznavanje in obravnavanje zunajbolnišničnega srčnega zastoja, medosebna dinamika zdravstvenega dispečerja in klicatelja ter sistemski dejavniki kakovosti dispečerske obravnave. Zdravstveni dispečer ni le logistični koordinator, temveč aktiven člen, ki neposredno vpliva na izid bolnika. Učinkovitost zahteva usklajeno delovanje klinično-operativnih, medosebnih in sistemskih dejavnikov, kontinuirano usposabljanje ter psihosocialno podporo zdravstvenih dispečerjev.

*Review article*

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**KEY WORDS:** out-of-hospital cardiac arrest, dispatcher-assisted cardiopulmonary resuscitation, basic resuscitation procedures, emergency medical care

**ABSTRACT** – Out-of-hospital cardiac arrest is a significant public health problem with a low survival rate. The medical dispatcher plays a key role in the chain of survival with an early recognition of the cardiac arrest and by leading the way in dispatcher-assisted resuscitation. A systematic review of the literature was conducted using the databases PubMed, SpringerLink, ProQuest in Web of Science, published between 2020 and 2025. Of the 257 searches, 10 articles were included in the final analysis and were analyzed using the qualitative content analysis. Three thematic categories were identified: recognition and treatment of the out-of-hospital cardiac arrest, interpersonal dynamics of the medical dispatcher and the caller, and systemic factors of the quality of dispatcher treatment. The medical dispatcher is not only a logistical coordinator, but an active link that directly influences the patient's outcome. Effectiveness requires a coordinated action of the clinical-operational, interpersonal and systemic factors, continuous training and psychosocial support of medical dispatchers.

## 1 Uvod

Srčni zastoj (SZ) je stanje, pri katerem pride do nenadnega, nepričakovanega prenehanja učinkovite mehanske aktivnosti srca. Klinično ga prepoznamo po nezavedi in odsotnosti normalnega dihanja, odsotni pa so tudi znaki krvnega obtoka. SZ je življenjsko nevarno stanje, ki brez takojšnje pomoči vodi v smrt (Rakić idr., 2024). Lokacijsko se SZ deli na SZ v bolnišnici ter SZ zunaj bolnišnice (Vo idr., 2024; Wilkinson idr., 2024). Zunajbolnišnični srčni zastoj (ZBSZ) je pomemben javnozdravstveni problem, saj evropska letna incidenca primerov ZBSZ, ki jih obravnavajo ekipe nujne

medicinske pomoči (NMP), znaša 55 primerov na 100.000 prebivalcev (Baldi idr., 2025), ta pa naj bi še naraščala (Khalili idr., 2024). Po podatkih Evropskega sveta za oživljanje (ERC) je SZ tretji najpogostejši vzrok smrti (Gräsner idr., 2021). Preživetje po ZBSZ ostaja nizko in se med evropskimi državami giblje med 3,4 in 15,6 % (Baldi idr., 2025).

Razumevanje dejavnikov, ki vplivajo na preživetje, je z leti pripeljalo do vpeljave koncepta verige preživetja. To je ERC prvič predstavil pred 20 leti in jo z vsako posodobitvijo smernic posodobi in revidira tako, da odraža najnovejša dognanja (Semeraro idr., 2025). Veriga preživetja je sestavljena iz štirih členov: preprečevanje SZ in zgodnja prepoznava z aktiviranjem ekip NMP; pravočasnega začetka temeljnih postopkov oživljanja (TPO) ter uporaba avtomatskega eksternega defibrilatorja (AED); izvajanje dodatnih postopkov oživljanja in oskrba po vrnitvi spontanega krvnega obtoka; dolgoročno okrevanje in kakovost življenja preživelih (Greif idr., 2025). Razumevanje vloge posameznih členov preživetja, med katerimi ima zdravstveni dispečer posebno mesto pri aktivaciji prvih ukrepov, je izhodišče za pregled njegove vloge pri obravnavi ZBSZ (Perera idr., 2023; Semeraro idr., 2025; Buaprasert idr., 2024).

TPO so opredeljeni kot izvajanje učinkovitih stisov prsnega koša ter učinkovitega predihavanja (Smyth idr., 2025). Ob prepoznani nezvesti pri nenadno obolenem je treba aktivirati reševalno službo. Pri tem je potrebno neprekinjeno izvajanje kardiopulmonalnega oživljanja, pri odrasli osebi v razmerju 30 stisov prsnega koša in 2 vpiha (Oliveira idr., 2025). Pomembni element TPO predstavlja tudi čimprejšnja uporaba AED, kadar je ta na voljo. AED je prenosna naprava, ki omogoča ob ustrezni namestitvi prepoznavo defibrilatornih srčnih ritmov in brez posebnega medicinskega znanja uporabnika pravočasno defibrilacijo (Cabañas idr., 2025; Smyth idr., 2025). Dostopnost AED v javnem prostoru in njegova uporaba sta neposredno povezani s preživetjem po ZBSZ (Kovoor idr., 2025).

Zdravstveni dispečer je usposobljen zdravstveni delavec v dispečerskem centru, ki sprejema klice, prepoznavna urgentna stanja in koordinira odziv NMP. Njegova vloga pri ZBSZ ni zgolj napotitev ustrezne ekipe NMP, temveč obsega hitro prepoznavo SZ med telefonskim pogovorom ter vodenje klicatelja pri izvajanju TPO po telefonu, kar imenujemo dispečersko podprto oživljanje (angl. dispatch-assisted cardiopulmonary resuscitation, DA-CPR) (Smyth idr., 2025; Mohar, 2024). Zdravstveni dispečer je torej ključni sistemski element, ki premosti vrzel do prihoda ekipe NMP, s posredovanjem navodil klicatelju, ki neposredno ukrepa na kraju dogodka (Perera idr., 2023).

## 2 Metode

Izvedli smo pregled obstoječe znanstvene in strokovne literature, ki je obsegala preučevano tematiko. Pri tem smo upoštevali smernice PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) (Page idr., 2021).

## 2.1 Namen in cilji

Namen pregleda literature je analizirati vlogo zdravstvenega dispečerja v verigi preživetja pri zunajbolnišničnem srčnem zastoju. Cilj raziskave je preučiti vlogo zdravstvenega dispečerja pri obravnavi suma na zunajbolnišnični srčni zastoj, ovrednotiti pomen zgodnjega prepoznavanja stanja, proces dispečersko podprtega oživljanja ter komunikacijskih veščin, hkrati pa identificirati dejavnike, ki vplivajo na izboljšanje učinkovitosti njegovega delovanja v verigi preživetja. Tako smo si postavili tudi raziskovalno vprašanje: Kako delovanje zdravstvenega dispečerja vpliva na izid zunajbolnišničnega srčnega zastoja?

## 2.2 Metode pregleda

Za identifikacijo relevantnih virov smo uporabili deskriptivni raziskovalni pristop, utemeljen na sistematičnem pregledu literature. Iskanje literature je bilo izvedeno v mednarodnih podatkovnih bazah PubMed, SpringerLink, ProQuest in Web of Science, pri tem pa smo uporabili sintakso: (»emergency medical dispatcher« OR »medical dispatcher« OR »emergency dispatcher« OR »dispatcher«) AND »chain of survival« AND (»cardiac arrest« OR »out-of-hospital cardiac arrest« OR »out of hospital cardiac arrest«). Postopek iskanja je potekal fazno v obdobju med decembrom 2025 in januarjem 2026. Kriteriji vključevanja in izključevanja so prikazani v tabeli 1.

**Tabela 1**

*Vključitveni in izključitveni kriteriji/Inclusion and exclusion criteria*

| Kriterij      | Vključitveni kriterij                                                                | Izključitveni kriterij                            |
|---------------|--------------------------------------------------------------------------------------|---------------------------------------------------|
| Tema          | Delovanje zdravstvenega dispečerja pri obravnavi zunajbolnišničnega srčnega zastoja. | Vsebinska neustreznost.                           |
| Časovni okvir | 2020–2025.                                                                           | Objavljena pred letom 2020.                       |
| Jezik         | Slovenski, angleški.                                                                 | Drugi jeziki.                                     |
| Dostop        | Polno dostopna besedila.                                                             | Nepopolno dostopna besedila, disertacije in teze. |

Izbor ustreznosti literature je potekal v treh zaporednih fazah. V prvi fazi smo opravili pregled naslovov identificiranih člankov ter iz nadaljnje obravnave izključili tiste, ki niso bili skladni z raziskovalnim namenom. V drugi fazi je sledila analiza izvlečkov preostalih člankov, pri čemer smo izločili vsebinsko neustrezne članke. V tretji fazi smo članke, ki so izpolnjevali merila iz druge faze, celovito pregledali v polnem besedilu. Za zagotavljanje znanstvene rigoroznosti in metodološke kakovosti pregleda literature smo upoštevali tudi hierarhijo dokazov po Polit in Beck (2021). Izbor literature je izvedel en raziskovalec po vnaprej določenih vključitvenih in izključitvenih kriterijih.

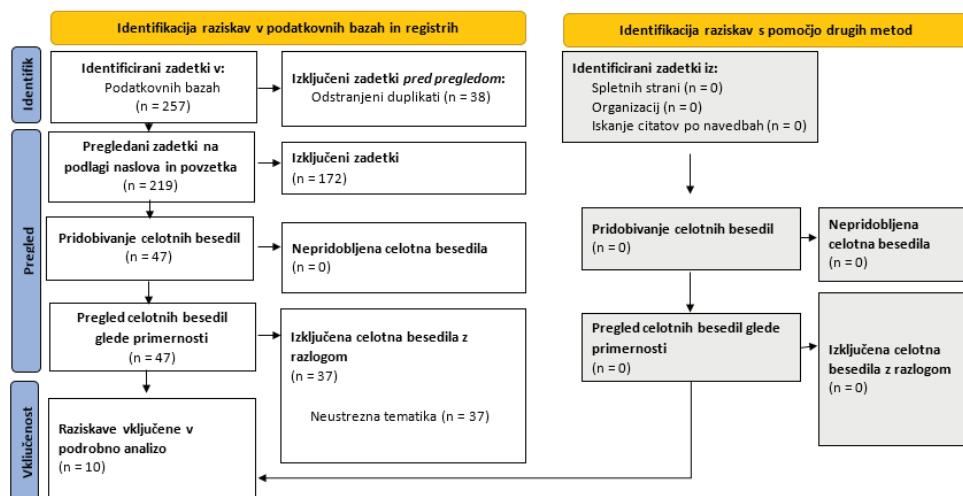
## 2.3 Rezultati pregleda

Potek iskanja in izbire literature smo prikazali s pomočjo diagrama PRISMA na sliki 1. Skupno smo identificirali 257 zadetkov. Pred pregledom smo odstranili 38

dvojnikov, zato smo na podlagi naslova in izvlečka pregledali 219 zapisov. S tem smo izločili 156 zadetkov in v celoti prebrali 63 izvlečkov. S prebiranjem izvlečkov smo izključili 16 prispevkov ter v celoti prebrali 47 člankov. Po prebiranju člankov smo izločili 37 člankov ter jih v končno analizo vključili 10. Vključeni viri so podrobneje predstavljeni v tabeli 3.

### Slika 1

PRISMA diagram pregleda literature/PRISMA flow chart of literature review



## 2.4 Ocena kakovosti pregleda in opis obdelave podatkov

Raven dokazov vključenih virov smo ovrednotili z uporabo hierarhije dokazov po Polit in Beck (2021), kar omogoča razvrstitev glede na metodološko kakovost in zanesljivost posameznih raziskav. Pri razvrstitvi smo upoštevali tip raziskovalne zasnove ter njeno znanstveno raven, rezultati pa so prikazani v tabeli 2.

Iz vključenih virov smo s sistematično ekstrakcijo pridobili podatke o avtorjih in letu objave, vrsti raziskave, vsebinskem poudarku ter glavnih ugotovitvah v povezavi z zdravstvenim dispečerjem kot členom verige preživetja. V končno analizo so bili vključeni izključno viri z jasno vsebinsko skladnostjo z raziskovalnim vprašanjem.

Analizo smo izvedli z uporabo kvalitativne vsebinske analize po šeststopenjskem postopku s tehniko kodiranja po Kordeš in Smrdu (2015). Kodiranje je potekalo ročno, brez uporabe programske opreme za kvalitativno analizo. Članki so bili sistematično razvrščeni v vsebinske kategorije, prikazane v tabeli 4.

**Tabela 2***Hierarhija dokazov/Hierarchy of evidence*

| Nivo   |                                                                                                    | Število člankov | Avtorji                                                         |
|--------|----------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------|
| Nivo 1 | Sistematični pregled in metaanalize randomiziranih kontrolnih raziskav                             | 1               | Eberhard idr., 2021                                             |
| Nivo 2 | Posamične randomizirane kontrolirane raziskave (RCT)                                               | 0               |                                                                 |
| Nivo 3 | Posamične nerandomizirane intervencijske raziskave (kvazi-eksperimentalne študije)                 | 1               | Gram idr., 2021                                                 |
| Nivo 4 | Posamične prospektivne ali retrospektivne kohortne raziskave                                       | 3               | Sohn idr., 2022; Sanko idr., 2021; Järvenpää idr., 2025         |
| Nivo 5 | Posamična študija s kohortno skupino (»case control« študija)                                      | 0               |                                                                 |
| Nivo 6 | Posamične presečne študije (npr. anketiranje)                                                      | 3               | Hardeland idr., 2021; Tamminen idr., 2020; Rasmussen idr., 2020 |
| Nivo 7 | Posamične kvalitativne raziskave (npr. intervjuji, fokusne skupine)                                | 1               | Perera idr., 2023                                               |
| Nivo 8 | Mnenja strokovnjakov, konsenzna poročila, smernice brez sistematičnega pregleda, poročila primerov | 1               | Imbriaco idr., 2025                                             |

### 3 Rezultati

Na podlagi sistematičnega iskanja in izbirnega postopka je bilo v končno analizo vključenih 10 prispevkov, ki so izpolnjevali vse opredeljene vključitvene kriterije. V nadaljevanju so predstavljeni vsebinski rezultati kvalitativne analize.

**Tabela 3**

*Tabelarični prikaz rezultatov sistematičnega pregleda literature/Tabular presentation of the results of the systematic literature review*

| Avtor          | Leto objave | Raziskovalna metodologija            | Vzorec (velikost in država)                                                                                                                                                           | Ključna spoznanja                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------|-------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hardeland idr. | 2021        | Observacijska multicentrična študija | 716 primerov (600 primerov brez predhodnega oživljanja, 116 primerov z začetim oživljanjem pred klicem), 3 dispečerski centri (København, Danska; Stockholm, Švedska; Oslo, Norveška) | Prepoznavnost ZBSZ med klici brez predhodnih TPO se je med tremi skandinavskimi dispečerskimi centri značilno razlikovala (København 71 %, Stockholm 83 %, Oslo 96 %). Ključni dejavnik za višjo stopnjo prepoznavnosti v Oslu je bila sistematična ocena dihanja, ki jo je dosledno izvajal le Oslo (98 %), medtem ko sta København in Stockholm to naslovila le v 34 % oziroma 7 % primerov. V primerih, ko je TPO že pred klicem v izvajanju, so zdravstveni dispečerji bistveno redkeje podali navodila za stise prsnega koša, kakovost izvajanja stisov med klicem pa so aktivno ocenjevali v 71 % (København), 100 % (Stockholm) in 80 % (Oslo) teh primerov. |

|               |      |                                                             |                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------|------|-------------------------------------------------------------|-----------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imbriaco idr. | 2025 | Scoping pregledna raziskava (sekundarna analiza literature) | 58 vključenih študij iz različnih držav (pretežno Azija, Evropa, Avstralija, Severna Amerika) | Zagotavljanje DA-CPR pogojujejo štiri ravni dejavnikov: zdravstveni dispečer, klicatelj, sistem in skupnost. Poenostavljeni protokoli, simulacijsko usposabljanje in aktivno komunikacijsko vodenje skrajšujejo čas do prepoznave SZ. Jezikovne ovire, čustvena stiska in nezmožnost premestitve pacienta podaljšajo čas do oživljanja. Centralizacija dispečerskih centrov in izobraževanje ranljivih skupin dodatno povečujeta učinkovitost DA-CPR. |
| Sohn idr.     | 2022 | Prospektivna opazovalna kohortna raziskava                  | 13864 pacientov; Republika Južna Koreja                                                       | Dobri nevrološki izidi so bili zabeleženi pri 6,5 % bolnikov brez laičnega oživljanja, 9,9 % s standardnim in 9,6 % z oživljanjem zgolj s stisi. Multivariabilna analiza je pokazala, da sta le kombinacija stisov brez ventilacije in DA-CPR statistično značilno povezana z ugodnimi izidi. Nobena metoda sama zase tega učinka ni izkazala, kar poudarja pomen njune sočasne izvedbe pri obravnavi ZBSZ.                                           |
| Eberhard idr. | 2021 | Sistematični pregled literature                             | 661059 primerov ZBSZ; 14 opazovalnih študij (več držav)                                       | Sistematični pregled kaže, da DA-CPR v primerjavi z odsotnostjo oživljanja značilno izboljša nevrološko intaktno preživetje, a je učinkovitost nekoliko nižja kot pri spontano začetem laičnem oživljanju. Razlike so deloma posledica časovnega zamika in motečih spremljajočih dejavnikov. DA-CPR ostaja ključen mehanizem v primerih, ko laik sam ne začne oživljanja.                                                                             |
| Tamminen idr. | 2020 | Deskriptivna pilotna študija z retrospektivno analizo       | 80 analiziranih klicev; Finska                                                                | Od 80 analiziranih klicev je bilo 64 % potrjenih kot resnični ZBSZ. Najpogostejše sprožilne besede so bile: »ne diha«, »moder«, »zgrudil se je« in »hrope«; beseda »smrči« je bila povezana z lažnim sumom. Nobena posamezna beseda ni dosegla statistične značilnosti za potrditev SZ, kar kaže na kompleksnost verbalne prepoznave.                                                                                                                 |
| Sanko idr.    | 2021 | Retrospektivna opazovalna kohortna raziskava                | 597 klicev; ZDA                                                                               | Uvedba poenostavljenega protokola sprejema klica je pri klicateljih z omejenim znanjem angleščine zvišala delež DA-CPR z 28 % na 69 % ter statistično značilno skrajšala čas do prepoznave SZ in napotitve ekip NMP. Ključni dejavniki izboljšanja so zmanjšanje števila vprašanj, poenostavitev navodil in zgodnje zagotavljanje pomoči.                                                                                                             |

|                |      |                                                                    |                                                                 |                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------|------|--------------------------------------------------------------------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gram idr.      | 2021 | Kvantitativna opazovalna študija                                   | 417 klicev (209 pred intervencijo, 208 po intervenciji); Danska | Po uvedbi izobraževalne intervencije se je občutljivost prepoznavne SZ povečala z 82,3 % na 92,7 %, čas do prepoznavne pa se je skrajšal z mediane 68 na 56 sekund (razlika ni bila statistično značilna). Sprememb v času do začetka stisov prsnega koša ni bilo.                                                                                                                    |
| Järvenpää idr. | 2025 | Prospektivna opazovalna kohortna raziskava                         | 246 pacientov; Finska                                           | Vsaka minuta zamude pri iniciaciji DA-CPR statistično značilno zmanjša verjetnost začetnega defibrilatornega ritma za 23 %. DA-CPR bistveno poveča stopnjo laičnega oživljanja; kakovost izvedbe ni vplivala na izide, kar nakazuje, da je sama prisotnost dispečerske podpore pomembnejša od tehnične natančnosti.                                                                   |
| Perera idr.    | 2023 | Polstrukturiran intervju z induktivnim pristopom                   | 10 zdravstvenih dispečerjev; Avstralija                         | Zdravstveni dispečer s komunikacijo usmerja laike pri TPO in s tem določa učinkovitost prvega člena verige preživetja. Identificirane so bile štiri tematske kategorije: časovna kritičnost, sprejem klica, upravljanje klicatelja in psihološka zaščita zdravstvenega dispečerja. Poudarjeni sta kompleksnost odločanja v realnem času ter potreba po empatiji in sistemski podpori. |
| Rasmussen idr. | 2020 | Opazovalna deskriptivna raziskava z mednarodno primerjalno analizo | 50 držav članic ILCOR                                           | Zdravstveni dispečer protokol dopolnjuje z izkustveno intuicijo, aktivnim poslušanjem in kritičnim mišljenjem. Vzpostavljane klicateljevega sodelovanja pri TPO je ključni operativni izziv. Izpostavljena sta institucionalna zanemarjenost psihosocialnega bremena zdravstvenega dispečerja ter pomanjkanje mednarodne standardizacije protokolov.                                  |

S pomočjo kvalitativne vsebinske analize smo identificirali 19 kod, ki smo jih razvrstili v 3 osrednje tematske kategorije: prepoznavanje in obravnava zunajbolnišničnega srčnega zastoja, medosebna dinamika zdravstvenega dispečerja in klicatelja, sistemski dejavniki kakovosti dispečerske obravnave srčnega zastoja. Kategorije, pripadajoče identificirane kode ter avtorji so prikazani v tabeli 4.

**Tabela 4**

*Vsebinske kode po kategorijah/Content codes by category*

| Kategorija                      | Kode                                                                                                                                                                                                                                                                                                                                           | Avtorji                                                                                                                                      |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| Prepoznavanje in obravnava ZBSZ | Ocena dihanja kot ključni element prepoznavne ZBSZ; sprožilne besede klicateljev pri sumu na ZBSZ; čas do prepoznavne ZBSZ in vpliv na izid; čas do prvega stisa prsnega koša; DA-CPR z uporabo algoritmov in AED kot dejavnik preživetja; ostajanje zdravstvenega dispečerja na liniji do prihoda ekipe NMP; variabilnost prepoznavanja ZBSZ. | Hardeland idr., 2021; Gram idr., 2021; Järvenpää idr., 2025; Tamminen idr., 2020; Sohn idr., 2022; Eberhard idr., 2021; Rasmussen idr., 2020 |

|                                                           |                                                                                                                                                                                                                                                                                                                                                        |                                                                                                      |
|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Medosebna dinamika zdravstvenega dispečerja in klicatelja | Komunikacijske veščine zdravstvenega dispečerja pri vodenju klicatelja; čustvena stiska klicatelja kot ovira za izvajanje TPO; jezikovne in kulturne ovire klicatelja; čustvena obremenitev zdravstvenega dispečerja med klicem; motiviranje in usmerjanje klicatelja med izvajanjem TPO; protokol kot strukturirana opora ter izkušnje kot dopolnilo. | Perera idr., 2023; Rasmussen idr., 2020; Imbriaco idr., 2025; Sanko idr., 2021; Hardeland idr., 2021 |
| Sistemske dejavniki kakovosti dispečerske obravnave SZ    | Poenostavitev dispečerskega protokola; variabilnost kakovosti med dispečerskimi centri; izobraževanje in usposabljanje zdravstvenih dispečerjev; programi zagotavljanja kakovosti; sistemska podpora in debriefing zdravstvenega dispečerja; vpliv centralizacije dispečerskih centrov na izide.                                                       | Sanko idr., 2021; Imbriaco idr., 2025; Hardeland idr., 2021; Gram idr., 2021; Rasmussen idr., 2020   |

Analiza je razkrila tri medsebojno prepletene ravni delovanja zdravstvenega dispečerja pri obravnavi ZBSZ. Na klinično-operativni ravni sta pravočasna prepoznavna in takojšnje DA-CPR ključna dejavnika preživetja (Eberhard idr., 2021; Sohn idr., 2022). Na medosebni ravni komunikacijske veščine (Hardeland idr., 2021; Rasmussen idr., 2020), obvladovanje čustvenih in jezikovnih ovir ter empatično vodenje klicatelja (Imbriaco idr., 2025; Sanko idr., 2021) določajo učinkovitost intervencije v realnem času. Na sistemski ravni pa standardizacija protokolov (Imbriaco idr., 2025; Sanko idr., 2021), kontinuirano usposabljanje in programi za zagotavljanje kakovosti tvorijo strukturni okvir (Gram idr., 2021; Rasmussen idr., 2020), znotraj katerega zdravstveni dispečer deluje. Izid uspešnosti obravnavanega ZBSZ je rezultat usklajenega delovanja vseh treh identificiranih kategorij hkrati.

## 4 Razprava

Izhodišče pregleda je bilo odgovoriti na vprašanje, kako delovanje zdravstvenega dispečerja vpliva na izid ZBSZ. Na podlagi analize je mogoče zaključiti, da ima zdravstveni dispečer merljivo in ključno vlogo v verigi preživetja, ne zgolj kot logistični člen, temveč kot aktiven klinični akter, ki neposredno določa ključne časovne in akcijske dejavnike preživetja (Hussain in Soldera, 2025; Žadło idr., 2025).

Vključene raziskave so metodološko heterogene. Edini sistematični pregled (Eberhard idr., 2021) predstavlja metodološko najmočnejši vir, kvalitativna študija (Perera idr., 2023) pa ga pomembno dopolnjuje z izkustvene perspektive zdravstvenega dispečerja. Geografska omejenost na skandinavske države, Južno Korejo in ZDA zmanjšuje prenosljivost ugotovitev v slovenski kontekst. Dodatna omejitev je enoosebna selekcija literature, ki povečuje tveganje pristranskosti.

Osrednja in najpomembnejša ugotovitev pregleda je izrazita povezava med časom do prepoznavne SZ ter končnim izidom bolnika (Nguyen idr., 2024), kar potrjuje tudi ugotovitev Eberhard idr. (2021), da DA-CPR statistično značilno povečuje ver-

jetnost nevrološko intaktnega preživetja v primerjavi z odsotnostjo laičnega oživljanja. Eberhard idr. (2021) sicer ugotavljajo, da spontano začeto laično oživljanje pred klicem izkazuje višjo učinkovitost kot DA-CPR, začeto med samim klicem. Časovna komponenta je v literaturi konsistentno opredeljena kot ključni dejavnik preživetja, saj se verjetnosti preživetja zmanjšuje z vsako minuto brez izvajanja TPO (Semeraro idr., 2025). Rezultati študije Järvenpää idr. (2025) kažejo, da vsaka minuta zamude pri začetku DA-CPR zmanjša verjetnost prisotnosti defibrilatornega srčnega ritma za 23 %. Podatek potrjuje, da ima zdravstveni dispečer v realnem času ključno vlogo pri ohranjanju električne stabilnosti miokarda. Iz tega izhaja tudi prispevek Elhussain s sodelavci (2023), ki je obravnaval vlogo javno dostopnih AED. Ta je ugotovil, da pravočasno posredovanje očividcev in takojšnja dostopnost AED aktivno pripomoreta k izboljšanju izidov pri ZBSZ. Defibrilacija s pomočjo AED je namreč učinkovita zgolj pri šokabilnih srčnih ritmih, vendar pa ti s časom neizogibno preidejo v nešokabilne srčne ritme (Stieglis idr., 2025a). Preživetje bolnikov s šokabilnim srčnim ritmom je skoraj 3,7-krat višje kot pri nešokabilnih ritmih (Han idr., 2024). Pri tem ima zdravstveni dispečer dvojno vlogo. Sprva zagotovi zgodnji začetek DA-CPR, nato pa očividca še usmerja k lokaciji najbližje javno dostopnega AED. V tem kontekstu pomembno vlogo dopolnjujejo tudi prvi posredovalci, ki ob zgodnji aktivaciji dispečerskega centra prispevajo k izvajanju kakovostnih TPO ter uporabe AED in tako nadgradijo učinkovitost verige preživetja (Fink in Mohar, 2023). Zaslediti je možno tudi, da dispečerska služba zdravstva razpolaga z interno preverjeno bazo AED, vendar zaradi neustrezne zakonske pomanjkljivosti na državni ravni lastniki AED niso obvezani k vpisu v bazo lokacij in dostopnosti AED (Mohar, 2024). Kljub relativno dobri dostopnosti AED v Sloveniji njihova uporaba ostaja nizka, saj v praksi pogosto niso uporabljeni v zadostni meri (Petravić idr., 2024). Mohar (2024) navaja, da se zdravstveni dispečer o napotitvi očividca po AED odloči le v primeru, ko je na kraju prisotnih več očividcev, pri tem pa Stieglis idr. (2025b) dodajajo, da je najbolj idealno, če je lokacija AED maksimalno 500 metrov v eno smer od mesta dogodka ZBSZ.

Pomemben vidik poteka DA-CPR je tudi čustveno stanje klicatelja. Tuffley idr. (2023) so ugotovili, da čustvena stiska klicatelja statistično značilno ne zmanjša verjetnosti začetka stisov prsnega koša. Ugotovitev je z vidika klinične prakse spodbudna, saj nakazuje, da usposobljeni zdravstveni dispečer z ustreznim komunikacijskim pristopom uspešno vodi klicatelja k izvajanju TPO tudi v visoko stresnih okoliščinah. Hkrati pa rezultati nakazujejo na trend daljšega časa do začetka stisov prsnega koša pri čustveno obremenjenih klicateljih. Nasloviti je treba tudi širšo sistemsko dimenzijo kakovosti dispečerske obravnave. Mednarodne primerjalne analize registrov ZBSZ v zadnjem desetletju nakazujejo na trend naraščanja stopnje laičnega oživljanja, kar avtorji povezujejo z vzpostavitvijo strukturiranih nacionalnih programov DA-CPR in standardizacijo dispečerskih protokolov (Bray idr., 2021). Imbriaco idr. (2025) pri tem ugotavljajo, da je smiselno poenostaviti protokole in zmanjšati število vprašanj, da se lahko skrajša čas do prepoznavne SZ. V tem kontekstu imajo registri ZBSZ ključno vlogo, saj omogočajo sistematično spremljanje kakovosti obravnave, primerjavo med sistemi ter vrednotenje vpliva sistemskih intervencij na izide, vključno s preživetjem (Siddiqui idr., 2024).

Prestavljene ugotovitve skupaj nakazujejo, da vloga zdravstvenega dispečerja v verigi preživetja presega ozko opredeljene operativne funkcije in zahteva sistemski pristop k razvoju in vzdrževanju funkcije. Učinkovitost zdravstvenega dispečerja ne vpliva zgolj na posamezne veščine ali znanje, temveč na preplet kliničnih, komunikacijskih in organizacijskih dejavnikov, ki delujejo medsebojno sočasno. Tako je ključnega pomena, da se prepoznavnost ZBSZ, ki je eden najpomembnejših izzivov v obravnavi nujnih klicev, obravnava s celostnimi ukrepi, od izboljšave dispečerskih protokolov do ciljno usmerjenega usposabljanja (Dainty idr., 2024), kar poudarja tudi Tamminen idr. (2020) z ugotovitvami o kompleksnosti verbalne prepoznavne ZBSZ preko sprožilnih besed. Ocena dihanja in prepoznavnost agonalnega dihanja ostajata najpogostejši oviri pri pravočasni identifikaciji ZBSZ med klicem, pri čemer pa sta kot ključna dejavnika izboljšanja identificirana tako komunikacijska usposobljenost zdravstvenega dispečerja kot tudi implementacija strukturiranih protokolov (Juul Grabmayr idr., 2024). Hardeland idr. (2021) pa kljub temu ugotavljajo variabilnost sistematične ocene dihanja med posameznimi dispečerskimi centri. Vzporedno pa sta poudarjeni tudi visoka psihološka obremenitev zdravstvenega dispečerja in potreba po ustrezni psihosocialni podpori (Osório idr., 2025). Zagotavljanje učinkovitega delovanja zdravstvenega dispečerja v verigi preživetja je tako neločljivo povezano z vzpostavitvijo strukturirane psihosocialne podpore in formaliziranega debriefinga v dispečerskem centru.

Ključni teoretični prispevek pregleda literature je sinteza treh medsebojno prepletenih ravni delovanja zdravstvenega dispečerja pri obravnavi ZBSZ – klinično-operativne, medosebne in sistemske ravni. V obstoječi literaturi večinoma niso bile obravnavane celostno in hkrati, temveč so se dosedanje raziskave bolj osredotočale na posamezne vidike. Ta pogled vzpostavlja konceptualni model, ki ponazarja, da uspešnost obravnave ZBSZ ni odvisna zgolj od individualnih kompetenc zdravstvenega dispečerja ali kakovostnega protokola, temveč od usklajenega delovanja vseh treh ravni sočasno. Zlasti se je izkazalo, da zdravstveni dispečer v verigi preživetja ne nastopa zgolj kot logistični koordinator, temveč kot aktiven klinični član, katerega delovanje neposredno določa izid bolnika (Järvenpää idr., 2025; Perera idr., 2023). Ugotovitve nakazujejo, da posamezna raven sama po sebi ne zadošča, temveč šele usklajeno delovanje s sistemsko podporo zdravstvenega dispečerja prinaša merljive klinične učinke (Imbriaco idr., 2025; Sohn idr., 2022). Dodatno je pregled literature umestil psihosocialno obremenitev zdravstvenega dispečerja v neposreden klinični kontekst. Institucionalna zapostavljena psihološka bremena niso zgolj vprašanje poklicne blaginje, temveč dejavniki, ki posredno vplivajo na kakovost obravnave klica in ne nazadnje preživetje bolnika.

## 5 Zaključek

Pregled literature je potrdil, da zdravstveni dispečer ni le logistični koordinator, temveč aktiven klinični člen verige preživetja, katerega delovanje neposredno določa

bolnikov izid. Ključna ugotovitev je, da učinkovitost obravnave ZBSZ ni odvisna od posameznega dejavnika, temveč od usklajenega delovanja treh prepletenih ravni: klinično-operativne, ki se kaže s pravočasno prepoznavo in aktivacijo DA-CPR; medosebne, ki se izraža v komunikacijskih veščinah, upravljanju čustvene stiske klicatelja; ter sistemske, ki se kaže s standardizacijo protokolov, kontinuiranim usposabljanjem in psihosocialno podporo zdravstvenemu dispečerju.

Ugotovitve pregleda literature imajo neposredne implikacije na področje zdravstvene nege. V slovenskem sistemu dispečerske službe zdravstva so zdravstveni dispečerji medicinske sestre oziroma zdravstveniki, kar pomeni, da je vloga, opisana v pregledu, neposredno vezana na poklicno prakso zdravstvene nege. Iz tega izhaja, da morajo izobraževalni programi za zdravstvene delavce, ki se usposablajo za delo v dispečerskem centru, poleg kliničnih kompetenc sistematično vključevati tudi razvoj komunikacijskih veščin za vodenje klicatelja v visoko stresnih okoliščinah. Visoka raven kompetentnosti zdravstvenega dispečerja ni enkratno dosežena, temveč zahteva kontinuirano strokovno usposabljanje, podprto s sistematičnim vrednotenjem klicev in strukturiranim debriefingom po zahtevnih intervencijah.

Izhajajoč iz tega bi prihodnje raziskave morale sistematično nasloviti vsako od identificiranih ravni. Na klinično-operativni ravni so potrebne randomizirane kontrolne raziskave, ki bi primerjale učinkovitost različnih modelov usposabljanja zdravstvenih dispečerjev ter njihov neposredni vpliv na čas prepoznave ZBSZ in preživetje. Na medosebnostni ravni bi bilo smiselno razviti in validirati standardizirane lestvice za merjenje komunikacijske učinkovitosti zdravstvenega dispečerja ter psihosocialnega bremena, ki ga prinaša obravnava nujnih klicev. Na sistemski ravni pa so potrebne longitudinalne analize učinkov centralizacije dispečerskih centrov ter vpliva implementacije tehnoloških rešitev pri prepoznavi ZBSZ v realnem času na kakovost dispečerske obravnave.

*Matevž Pucelj*

### **Emergency Medical Dispatcher as a Link in the Chain of Survival in Out-Of-Hospital Cardiac Arrest**

*Out-of-hospital cardiac arrest remains one of the most important public health challenges of our time. The annual European incidence is 55 cases per 100.000 population, and survival rates in European countries range from only 3.4% to 15.6% (Baldi et al., 2025). According to the European Resuscitation Council, cardiac arrest is the third most common cause of death (Gräsner et al., 2021). Understanding the factors that affect survival has introduced the concept of the chain of survival into emergency medicine, which is continuously updated and revised (Semeraro et al., 2025). A key but often overlooked link in this chain is the emergency medical dispatcher, who is a trained health worker in the medical dispatch centre. He or she not only coordinates*

the emergency medical teams upon call, but also recognizes cardiac arrest during a telephone conversation and guides the caller in performing the basic resuscitation procedures. This process is called dispatcher-assisted cardiopulmonary resuscitation (Smyth et al., 2025; Mohar, 2024). The emergency medical dispatcher thus bridges the critical gap between the call and the arrival of the emergency medical team and directly influences the patient's outcome (Perera et al., 2023).

A systematic literature review was conducted according to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines (Page et al., 2021). The search was conducted in the PubMed, SpringerLink, ProQuest and Web of Science databases between December 2025 and January 2026. We used the following search syntax: emergency medical dispatcher OR medical dispatcher OR emergency dispatcher OR dispatcher AND chain of survival AND cardiac arrest OR out-of-hospital cardiac arrest OR out of hospital cardiac arrest. The inclusion criteria were content relevance, full text accessibility, topicality, and publications in Slovenian or English were taken into account. Out 257 identified hits, 10 articles were included in the final analysis after a systematic elimination of unsubstantiated and duplicate sources. The methodological quality of the sources was evaluated using the hierarchy of evidence according to Polit and Beck (2021), and the analysis was performed using the qualitative content analysis method with the coding technique according to Korděš and Smrdu (2015).

The analysis identified 19 content codes, grouped into three thematic categories: recognition and management of the out-of-hospital cardiac arrest; interpersonal dynamics between the emergency medical dispatcher and the caller; systemic factors of dispatcher quality. Within the first category, the findings on the variability of out-of-hospital cardiac arrest recognition across medical dispatch centres stood out. Hardeband et al. (2021) found in a comparative Scandinavian study that the proportion of recognized cases of out-of-hospital cardiac arrests across three medical dispatch centres ranged from 71% to 96%, with systematic respiratory assessment being the key factor in the difference. Gram et al. (2021) showed that an educational intervention increased the sensitivity of cardiac arrest recognition from 82.3% to 92.7% and reduced the time to recognition from a median of 68 to 56 seconds. Järvenpää et al. (2025) found that each minute of delay in initiating dispatcher-assisted cardiopulmonary resuscitation significantly reduced the likelihood of a defibrillable rhythm by 23%. Eberhard et al. (2021) confirmed that the dispatcher-assisted cardiopulmonary resuscitation significantly improved neurologically intact survival compared to no cardiopulmonary resuscitation. Sohn et al. (2022) showed that the combination of the dispatcher-assisted cardiopulmonary resuscitation and chest compressions alone was significantly associated with favourable neurological outcomes. In the context of interpersonal dynamics, Tamminen et al. (2020) analyzed the callers' trigger words and found that no single word on its own was a statistically reliable indicator of out-of-hospital cardiac arrest, suggesting the complexity of verbal recognition. Sanko et al. (2021) showed that protocol adaptation increased the rate of dispatcher-assisted cardiopulmonary resuscitation for callers with limited English proficiency from 28% to

69%. Perera et al. (2023) conducted interviews with medical dispatchers to highlight the importance of empathetic leadership, a combination of structured protocols and communication skills, and the emotional burden of medical dispatchers when handling emergency calls. At the systemic level, Rasmussen et al. (2020) found a marked lack of protocol standardization and institutional neglect of the psychosocial burden of the emergency medical dispatcher in an international comparative analysis of 50 countries. Imbriaco et al. (2025) identified four levels of factors that influence the quality of the dispatcher-assisted cardiopulmonary resuscitation in a large-scale review study: emergency medical dispatcher, caller, system, and community, and concluded that the centralization of dispatch centres and simplification of protocols significantly contribute to improving outcomes.

The literature review clearly shows that the medical dispatcher is not just a logistical coordinator, but rather an active clinical link in the chain of survival, whose performance directly determines the patient's outcome (Järvenpää et al., 2025; Perera et al., 2023). The key finding is that the effectiveness of the operation does not depend on a single variable, but on the coordinated operation of three interconnected levels: clinical-operational, interpersonal and systemic. Only their simultaneous operation brings measurable clinical effects (Imbriaco et al., 2025; Sohn et al., 2022). Every minute of delay in starting the dispatcher-assisted cardiopulmonary resuscitation reduces the probability of the presence of a defibrillable heart rhythm by 23% (Järvenpää et al., 2025). The emergency medical dispatcher plays a dual role in this: he or she ensures an early start of the dispatcher-assisted cardiopulmonary resuscitation and, at the same time, directs the bystander to the location of the nearest publicly available automated external defibrillator.

Defibrillation is effective only in shockable rhythms, which inevitably turn into non-shockable ones over time – survival in a shockable rhythm is almost 3.7 times higher. In the Slovenian context, it is particularly highlighted that the automated external defibrillator owners are not legally obliged to register it in the location database, which reduces the effectiveness of the database (Mohar, 2024). Tuffley et al. (2023) found that the emotional distress of the caller did not statistically significantly reduce the likelihood of initiating chest compressions – which is clinically encouraging as it suggests that a trained emergency medical dispatcher with an appropriate communication approach can successfully guide the caller even in high-stress situations. However, the results suggest a trend towards longer time to initiation of compressions in the emotionally distressed callers. International comparative analyses indicate a trend of increasing lay resuscitation rates, which the authors link to the establishment of structured national dispatcher-assisted cardiopulmonary resuscitation programs and standardization of dispatch protocols (Bray et al., 2021). The out-of-hospital cardiac arrest registries play a key role in this for systematic quality monitoring and comparison between systems (Siddiqui et al., 2024). The psychological burden of emergency medical dispatchers is not only a matter of professional well-being, but also a factor that indirectly affects the quality of call handling and patient survival.

*The institutional neglect of this issue is highlighted as a systemic deficiency (Osório et al., 2025; Rasmussen et al., 2020).*

*Methodological limitations of the review include the geographical limitation of the sources mainly to Scandinavian countries, South Korea and the USA, which limits the direct transferability of the findings to the Slovenian context. The selection of sources was carried out by a single researcher, which carries a risk of bias.*

*The findings of the literature review have direct implications for the field of nursing profession. In the Slovenian medical dispatch system, the emergency medical dispatchers are nurses, which means that the role described in the review is directly linked to the professional practice of nursing. It follows that the educational program for health professionals training to work in a medical dispatch centre should systematically include, in addition to clinical competencies, the development of communication skills for managing callers in high-stress situations. A high level of emergency medical dispatcher competence is not achieved once. It requires continuous professional training, supported by systematic call evaluation and structured debriefing after demanding interventions. Based on this, future research should systematically address each of the identified levels. At the clinical-operational level, randomized control studies are needed to compare the effectiveness of different emergency medical dispatcher training models and their direct impact on the time to recognition of the out-of-hospital cardiac arrest and survival. At the interpersonal level, it would be reasonable to develop and validate standardized scales for measuring emergency medical dispatcher communication effectiveness and the psychosocial burden of handling emergency calls. At the systemic level, longitudinal analyses of the effects of medical dispatch centres' centralization and the impact of implementing technological solutions for real-time identification of the out-of-hospital cardiac arrest on the quality of dispatchers' handling are needed.*

### *Izjava o dostopnosti raziskovalnih podatkov*

Članek temelji na raziskovalnih podatkih iz že obstoječih in javno dostopnih virov (besedilni viri, podatkovne baze), ki so navedeni v razdelku »Literatura«.

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# The Role of the Nurse Anesthetist in Reducing the Environmental Footprint of Anesthesia Practice: A Literature Review

*Review article*

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**KEYWORDS:** anaesthesia, environmental impact, nurse anaesthetists, sustainable healthcare

**ABSTRACT** – Sustainable anaesthesia practice is recognised as a key element in reducing the healthcare system's environmental footprint, with nurse anaesthetists playing a central role in applying the measures that protect both the patients and the environment. The literature review conducted in July 2025 through PubMed, Web of Science, and Scopus included open-access studies in English, published between 2020 and 2025. 19 studies were analysed. Evidence shows that nurse anaesthetists can reduce the environmental impact by implementing low-flow techniques, transitioning to total intravenous anaesthesia (TIVA), rationally using reusable equipment, reducing and properly segregating waste, and educating teams. Identified practice models include nurse-led services and reorganised outpatient procedures, which cut resource use and strengthened the nursing role. The main barriers are lack of education, limited resources, and weak institutional support. Integrating these strategies into the curricula, national guidelines, and hospital protocols could accelerate sustainable anaesthesia in Croatia.

*Pregledni znanstveni članek*

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**KLJUČNE BESEDE:** anestezija; anesteziološke medicinske sestre; okoljski vpliv; trajnostno zdravstvo

**POVZETEK** – Trajnostna anesteziološka praksa je prepoznana kot ključen element pri zmanjševanju okoljskega odtisa zdravstvenega sistema, pri čemer imajo anesteziološke medicinske sestre osrednjo vlogo pri izvajanju ukrepov, ki hkrati varujejo paciente in okolje. Julija 2025 je bila izvedena pregledna raziskava v bazah PubMed, Web of Science in Scopus, ki je vključevala prosto dostopne angleške študije, objavljene med letoma 2020 in 2025. Analiziranih 19 študij. Dokazi kažejo, da lahko anesteziološke medicinske sestre zmanjšajo vpliv na okolje z uvedbo tehnik nizkega pretoka, prehodom na popolno intravensko anestezijo, racionalno uporabo večkratne opreme, zmanjšanjem in pravilnim ločevanjem odpadkov ter z izobraževanjem ekip. Kot uspešni modeli so bile prepoznane storitve pod vodstvom medicinskih sester ter reorganizacija ambulantnih posegov, ki so zmanjšale porabo virov in okrepile vlogo medicinskih sester. Glavne ovire so pomanjkanje izobraževanja, omejeni viri in šibka institucionalna podpora. Vključevanje teh strategij v kurikule, nacionalne smernice in bolnišnične protokole bi lahko pospešilo trajnostno anestezijo na Hrvaškem.

## 1 Introduction

Anaesthesiology, as one of the most dynamic and technically advanced branches of modern medicine, is indispensable to surgical care, but also makes a significant contribution to the negative environmental impact of the healthcare system (Harfaoui et al., 2024; Mathis et al., 2022). Operating rooms consume up to six times more energy per square meter compared to other hospital departments, while greenhouse gas emissions from inhalational anaesthetics, especially desflurane and nitrous oxide (N<sub>2</sub>O), far exceed the emissions of carbon dioxide on a molecular level (Cappiel-

lo, 2024). For example, the global warming potential (GWP) of desflurane is about 2,540, meaning that one hour of its use has a climate effect equivalent to driving a car approximately 300,370 km (Zoghbi et al., 2022). In addition, significant amounts of waste are generated due to the use of single-use equipment, plastic products, packaging, and surplus medications that are often disposed of as medical waste (Bhutta, 2021). The combination of increasingly frequent procedures, sophisticated equipment, and unsustainable clinical routines positions anaesthesiology among the largest waste generators in the hospital system.

In the past decade, the concept of sustainable anaesthesia has been developing with growing intensity, involving the introduction of environmentally friendly clinical practices that ensure complete patient safety (McGain et al., 2020; White et al., 2022). The fundamental principles include rational selection of inhalational anaesthetics with lower GWP, use of low fresh gas flow techniques to reduce consumption, replacement of disposable instruments with reusables whenever possible, optimisation of drug and infusion use, digitisation of medical documentation, proper waste segregation, and systematic consumption monitoring through the so-called green internal audits (Cappellini & Schirru, 2024; Samad et al., 2025). These approaches are increasingly being incorporated into the strategic goals of healthcare institutions, especially in countries developing national plans for a transition toward a sustainable healthcare system.

In achieving these changes, nurse anaesthetists have a crucial and multi-dimensional role. As professionals who continuously monitor patients' vital functions, manage complex medical devices, prepare medications and consumables, they identify daily opportunities to rationalize consumption and reduce waste (Gasciauskaite et al., 2023). Nurses most often decide which materials will be opened and used, and can suggest the use of reusable equipment, participate in applying the optimal flow of oxygen and anaesthetic gases during procedures, and identify clinical practices that unnecessarily burden the environment. Their ability to monitor consumption, document usage, and communicate effectively with the rest of the team makes them natural leaders of sustainable clinical practice in anaesthesiology (Lindholm et al., 2023).

Beyond the operational role, nurse anaesthetists also have an important function in educating other members of the healthcare team, from students and interns to experienced colleagues. By conducting internal educational activities, developing guidelines, and actively participating in hospital initiatives focused on environmental conservation, nurses can significantly contribute to fostering a culture of ecological responsibility (Swerdlow et al., 2020). In collaboration with anaesthesiologists, biomedical engineers, environmental protection specialists, and waste management personnel, their professional role extends beyond operational responsibilities. A growing number of international publications and professional associations emphasize the need for active involvement of nurses in the design and implementation of strategies for environmentally responsible anaesthesia and sustainable operating theatres.

Despite numerous initiatives and increasing awareness of the health impacts of climate change, the scientific literature that systematically analyzes the role of nurses

in sustainable anaesthesia practice is still limited (Luque-Alcaraz et al., 2022). The lack of clear and standardized guidelines, the weak representation of sustainability topics in educational programs, the low visibility of the nursing profession's contributions, and the absence of tools for a systematic evaluation of all aspects of sustainable practice represent significant barriers to broader implementation (Capella et al., 2025; Skraastad et al., 2025). In Croatia, despite the increasing awareness of the environmental impact of healthcare, there are currently no national guidelines or structured educational programs specifically addressing sustainable anaesthesia practice, which highlights the importance of recognising the role of nurse anaesthetists in this field. It is therefore necessary to identify the existing knowledge sources, analyze examples of good practice, and develop concrete recommendations that formally recognize and empower the role of nurses in the process of "green transition" in anaesthesia care.

This review paper aims to analyze the available scientific literature, published in the last five years, regarding the role of nurses in sustainable anaesthesia practice. The paper focuses on identifying concrete measures that nurses can undertake to reduce the environmental footprint of anaesthesia procedures, including resource optimisation, team education, waste reduction, and implementation of "green audit" tools. Additionally, the goal is to recognize the existing challenges and provide recommendations for the future development of systematic sustainable practices in anaesthesiology, with an emphasis on the nursing role.

## 2 Methodology

The scientific literature search was conducted in July 2025 using three databases: PubMed, Web of Science, and Scopus. It focused exclusively on the research and review papers examining sustainable anaesthesia in the context of nursing practice to include the most relevant clinical and professional sources. The following types of publications were considered: quantitative and observational studies, qualitative studies, review articles, strategic papers, quality improvement reports, and continuing education modules. Publications classified as expert opinion, commentary, letters to the editor, conference abstracts, protocols, or papers without sufficient analytical value were excluded from the synthesis. In order to avoid methodological mixing, the included studies were classified according to study design and analysed within separate categories.

The search was carried out using predefined keywords and logical operators, including combinations of "sustainable anaesthesia", "nurse" and "nurse anaesthetist", with consistent use of these terms across all three databases. The keywords had to be present in the title, abstract, or keywords of an article to ensure thematic relevance to the topic. In the first step of the selection, the PubMed database identified a total of 86 records, Web of Science 128 records, and Scopus 34 records, making a total of 248 records found during the initial search phase.

After combining the results from all three databases, duplicate records were removed. This step was performed in Zotero, which automatically identifies and flags

duplicate references. After verification and removal of duplicates, 222 unique records remained, forming the initial corpus for further analysis.

In the next selection phase, additional inclusion criteria were applied to ensure methodological consistency and quality of the literature (Table 1). We included only works published from January 2020 to mid-2025, which ensured a coverage of the recent scientific insights. Furthermore, a condition for inclusion was free access to the full text (open access) to enable a transparent and thorough content analysis. Additionally, a language criterion was applied, considering only works written in English, in line with the aim of reviewing international literature.

Applying these criteria, in accordance with PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, enabled a structured and repeatable selection process. After the full-text review, 59 papers were excluded from further analysis based on the clearly defined reasons:

- 14 papers were not focused on the topic of anaesthesia, placing them outside the primary scope of this research.
- 21 papers did not contain environmental or sustainability components, which were a key requirement for inclusion.
- 11 papers did not involve nurses at all or did not include nurses working in anaesthesia departments, therefore not meeting the nursing perspective criterion.
- 7 papers dealt with the topic of anaesthesia, but had no connection to sustainable practice.
- 6 papers belonged to subject areas outside the interest of this study, such as dermatology, nutrition, and medical ethics.

After applying all criteria and evaluating the full content, a total of 19 papers were included in the final synthesis and qualitative analysis. These papers form the basis for presenting the findings in the next chapter.

**Table 1**

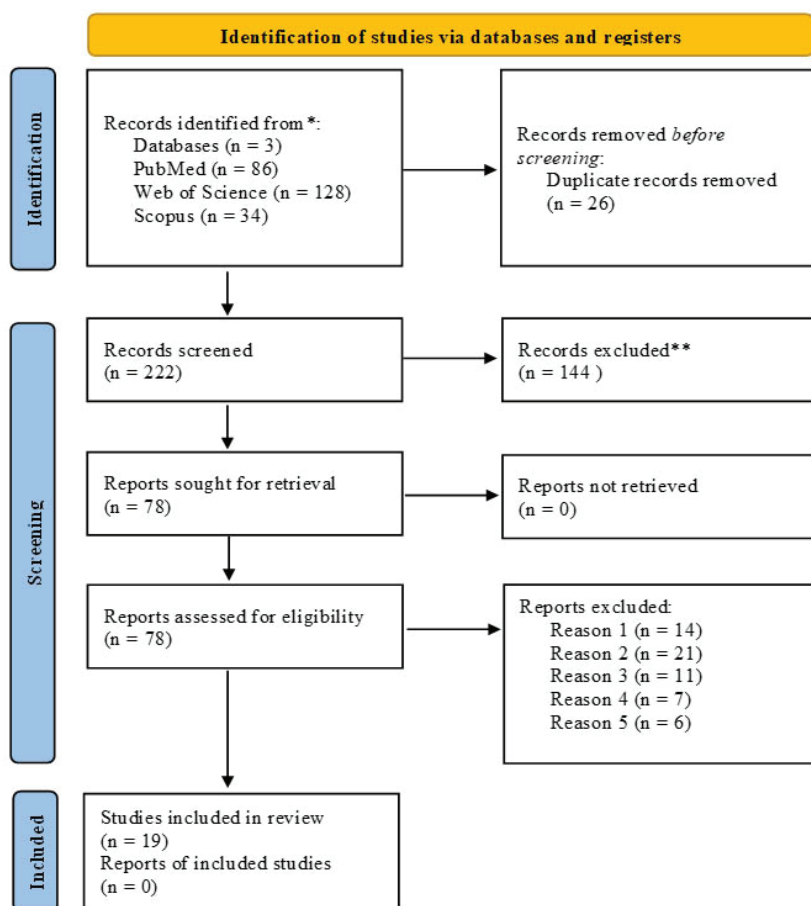
*Inclusion and exclusion criteria/Vključitveni in izključitveni kriterij*

| <i>Inclusion criteria</i>                                                                                                                                                     | <i>Exclusion criteria</i>                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Studies published from January 2020 to July 2025                                                                                                                              | Studies published before 2020                                                                                                          |
| Studies written in English                                                                                                                                                    | Studies in languages other than English                                                                                                |
| Studies with accessible abstract or full text                                                                                                                                 | Studies without an available abstract or full text                                                                                     |
| Studies addressing sustainable (green) anaesthesia practice                                                                                                                   | Studies dealing exclusively with technical, pharmacological, or veterinary aspects of anaesthesia                                      |
| Studies explicitly including the role of nurses or nurse anaesthetists                                                                                                        | Studies that do not involve nursing practice or an interdisciplinary clinical context                                                  |
| Types of works: quantitative and observational studies, qualitative studies, review articles, strategic papers, quality improvement reports, and continuing education modules | Expert opinions, commentaries, letters to the editor, conference abstracts, protocols, and papers without sufficient analytical value. |
| Focus on resource optimisation, waste reduction, low-flow techniques, team education                                                                                          | Studies not related to environmental impact or sustainability in practice                                                              |

The schematic flow of the search and selection process is presented in the PRISMA flow diagram (Figure 1), and the characteristics of the included studies are summarized in Table 2. The included papers vary in design (clinical trials, observational studies, review articles, and continuing education modules) and encompass experiences from different parts of the world (Europe, North America, Africa, Asia). To improve methodological clarity, the included papers were grouped according to study design and type of evidence. The synthesis is therefore presented in three categories: quantitative and observational studies, qualitative studies, and review, strategic, and educational papers. Expert opinions and commentaries were not included as a separate evidence category.

**Figure 1**

*PRISMA flow chart/Shema poteka PRISMA*



\* Records identified from the selected databases (PubMed, Web of Science, and Scopus).

\*\* Records excluded after title and abstract screening.

### 3 Results

To perform the review and identify relevant scientific literature, a systematic approach was used by searching the three most commonly used and relevant databases in the field of biomedicine and health sciences: PubMed, Web of Science, and Scopus. According to the defined criteria, a total of 19 papers were ultimately included in the review.

#### *Review, Strategic, and Educational Papers*

Several review, strategic, and educational papers emphasize the need to implement sustainable practices in anaesthesia, surgery, and nursing to reduce the healthcare sector's environmental footprint. In anaesthesiology, the so-called "5R" rule – reduce, reuse, recycle, rethink and research – is highlighted as the foundation for reducing the environmental impact of anaesthesia (Beloeil & Albaladejo, 2021), with an emphasis on the need for a multidisciplinary collaboration of the entire medical team.

The Austrian guidelines for "green" anaesthesia (Hammer et al., 2024) and a recent review of the achievements and challenges of sustainability in anaesthesia and intensive care (Bouvet et al., 2023) provide a number of concrete strategies, from a more rational use of anaesthetics to the optimisation of energy consumption. Both publications particularly stress the importance of continuous staff education and stronger institutional support for successful implementation of sustainable initiatives.

#### *Quantitative and Observational Studies*

Several quantitative and observational studies indicate that the healthcare workers' awareness of the environmental effects of their practice remains insufficient. A nationwide cross-sectional survey conducted in France by Tordjman et al. (2022) proposed concrete nursing measures for reducing medical waste, using more environmentally friendly materials, and improving education on sustainability in the operating room. A survey of the anaesthesia personnel in California, USA (Shah et al., 2023) revealed a low level of knowledge about the environmental consequences of using inhalational anaesthetics, while a similar study among the anaesthesiologists in South Africa (Giuricich et al., 2024) showed that most respondents do not follow sustainable guidelines in daily practice.

#### *Qualitative Studies*

Qualitative studies provided a deeper insight into the barriers to a sustainable anaesthesia practice. Gasciauskaite et al. (2023) identified a lack of sustainability education, limited resources, and insufficient institutional support as key obstacles to implementing "green" initiatives. Yezu et al. (2025) underscored that nurse anaesthetists are essential for the sustainable access to anaesthesia in rural areas with a shortage of physicians, while Sjöberg et al. (2023) emphasized the importance of improvisation, professional responsibility, and sustainable care in international humanitarian missions.

### *Quality Improvement and Nurse-Led Service Models*

In Canada, a continuing education module was developed with an emphasis on “reduce, reuse, recycle” strategies and the use of life cycle analysis of products (Petre & Malherbe, 2020). During the COVID-19 pandemic, in England, a nurse-led “see and treat” model was established for urgent plastic trauma care. This model enabled 98% of patients to be managed surgically within a single day and without complications, thereby reducing repeat visits, patient travel, and generation of medical waste (Flanagan & Janes, 2023). The innovation was retained after the pandemic as an example of sustainable practice in surgical care.

A number of papers address more sustainable approaches in anaesthesia practice, focusing on reducing anaesthetic gas emissions and medical waste. A prospective study in Turkey confirmed that using low-flow anaesthesia, compared with the standard technique, significantly reduces greenhouse gas emissions and anaesthetic costs, with no adverse impact on patient outcomes (Sen et al., 2025). In line with these findings, some authors advocate a wider use of total intravenous anaesthesia (TIVA) instead of inhalational anaesthetics and a switch to reusable equipment wherever possible to further decrease medical waste (Mishra et al., 2024; Samad et al., 2025).

Environmental sustainability is considered in contexts beyond anaesthesia itself. An analysis of the carbon footprint of intensive care in Turkey (Ozkan, 2025) showed that intensive care units significantly contribute to a hospital’s overall emissions, implying that everyday clinical routines, including nursing care, need to be directed toward reducing resource consumption. A review of specific “green” initiatives in surgery, anaesthesia, and pathology (Asfaw et al., 2021) emphasizes that many sustainable practices, aside from reducing the environmental footprint, simultaneously lead to financial savings for healthcare institutions, and it offers seven concrete recommendations on how to connect environmental and economic sustainability.

Finally, the literature highlights the important role of nurses in initiating and carrying out sustainable changes. Examples include a health policy study from South Africa, which underscores that nurse anaesthetists are essential for a sustainable access to anaesthesia in rural areas with a shortage of physicians (Yezu et al., 2025), as well as the experiences of nurse anaesthetists on international humanitarian missions, which confirm that improvisation and personal responsibility are crucial for providing care in conditions of extremely limited resources (Sjöberg et al., 2023).

However, alongside these positive examples, the literature also notes numerous barriers to the wider adoption of sustainable practices. The most common barriers cited are insufficient staff knowledge and awareness, lack of material resources, and lack of institutional support (Almukhtar et al., 2024; Gasciauskaite et al., 2023). Overcoming these obstacles requires systemic support, from continuous education to the development of clear guidelines and policies that encourage sustainable behaviour. For instance, Nigeria has developed a national strategy for sustainable surgery that identifies nurses as key agents of change, emphasizing education and rational use of resources (Seyi-Olajide et al., 2021). Overall, the available evidence suggests that sustainable practices in anaesthesiology and surgery bring multiple benefits: besides

reducing the environmental footprint of healthcare activities, they can improve process efficiency, enhance patient safety, and in the long term reduce healthcare system costs.

**Table 2**

*Overview of the included studies on the role of nurses in the sustainable anaesthesia practice/Pregled vključenih raziskav o vlogi medicinskih sester v trajnostni anesteziološki praksi*

| <i>Authors, year</i>      | <i>Study type</i>     | <i>Aim</i>                                                                                                                | <i>Country</i> | <i>Key findings</i>                                                                                                |
|---------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------------------------------------------------------------------------------|
| Tordjman et al., 2022     | Cross-sectional study | Analyze sustainable nursing practices and provide guidelines to reduce environmental footprint in care                    | France         | Suggests concrete practices to reduce waste, use eco-friendlier materials, and educate nurses                      |
| Shah et al., 2023         | Quantitative analysis | Investigate the level of knowledge of anaesthesia personnel about the environmental effects of inhalational anaesthetics  | USA            | Revealed a low level of awareness and the need for education and changes in clinical practice                      |
| Sjöberg et al., 2023      | Qualitative study     | Examine nurse anaesthetists' experiences on international missions                                                        | Sweden         | Emphasized the importance of sustainability, improvisation, and responsibility in the context of limited resources |
| Seyi-Olajide et al., 2021 | Descriptive report    | Present national strategies for sustainable surgery and the role of nurses                                                | Nigeria        | Nurses recognized as key to sustainable surgery, with emphasis on education and rational use of resources          |
| Yezu et al., 2025         | Qualitative study     | Investigate the role of nurse anaesthetists in the sustainability of the healthcare system                                | South Africa   | Nurse anaesthetists are crucial for sustainable anaesthesia availability in rural areas                            |
| Ozkan, 2025               | Quantitative analysis | Calculate the carbon footprint of ICUs (intensive care units)                                                             | Turkey         | Highlights the significance of ICU carbon emissions and implies the need to change nursing practice                |
| Almukhtar et al., 2024    | Systematic review     | Investigate barriers and facilitators to sustainable behaviour in operating rooms using the Theoretical Domains Framework | UK             | Knowledge, resources, and social influence are key barriers; intention is the main driver for implementation       |
| Asfaw et al., 2021        | Narrative review      | Present examples of green initiatives in surgery, anaesthesia, and pathology                                              | USA            | Emphasizes the importance of an intersectoral approach and education of healthcare professionals                   |

|                            |                                   |                                                                                                                 |              |                                                                                                                                                                                                                    |
|----------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Beloeil & Albaladejo, 2021 | Narrative review                  | Present initiatives to reduce the environmental impact of anaesthesia                                           | France       | Advocates the 5R rule (reduce, reuse, recycle, rethink, research) and the need for multidisciplinary collaboration                                                                                                 |
| Bouvet et al., 2023        | Literature review                 | Analyze achievements and challenges of sustainability in anaesthesia and intensive care                         | France       | Calls for standardization of practices and stronger institutional support                                                                                                                                          |
| Gasciauskaite et al., 2023 | Qualitative study                 | Examine anaesthesia providers' perceptions of sustainable practice                                              | Lithuania    | Identified barriers including lack of education and institutional support                                                                                                                                          |
| Giuricich et al., 2024     | Descriptive study                 | Assess knowledge and practice of sustainable anaesthesia                                                        | South Africa | Found low knowledge among anaesthesiologists; most practices not aligned with sustainable guidelines                                                                                                               |
| Hammer et al., 2024        | Qualitative study                 | Present Austrian guidelines for sustainable anaesthesia                                                         | Austria      | Offers concrete strategies and highlights the importance of education                                                                                                                                              |
| Kampman & Weiland, 2023    | Strategic review                  | Analyze the economic impact of sustainable anaesthesia                                                          | Netherlands  | Provided 7 concrete recommendations and noted cost savings with sustainable practices                                                                                                                              |
| Mishra et al., 2024        | Narrative review                  | Analyze the benefits and implications of switching to intravenous anaesthesia to reduce environmental footprint | India        | Highlights the negative impact of inhalational anaesthetics; advocates transitioning to TIVA and using reusable equipment to reduce emissions and waste                                                            |
| Petre & Malherbe, 2020     | Continuing education module       | Inform anaesthesiologists about sustainable practice in Canada                                                  | Canada       | Focuses on "reduce, reuse, recycle" strategies; highlights the importance of life cycle analysis (LCA)                                                                                                             |
| Samad et al., 2025         | Strategy overview                 | Present approaches to minimize the environmental impact of anaesthesia                                          | Pakistan     | Recommendations include education, use of low-flow systems, and substitution of anaesthetic gases                                                                                                                  |
| Sen et al., 2025           | Experimental study                | Compare the impact of low-flow vs. standard anaesthesia on emissions                                            | Turkey       | Low-flow anaesthesia significantly reduces emissions and costs                                                                                                                                                     |
| Flanagan & Janes, 2023     | Quality improvement (prospective) | Develop a sustainable nurse-led "see and treat" model for plastic trauma during the COVID-19 pandemic           | England      | Nurse-led service enabled same-day procedures for 98% of patients with no complications. Carbon footprint was reduced (less waste and travel). The model was retained post-pandemic as a new sustainable practice. |

## 4 Discussion

### 4.1 Main Findings and Alignment with the Guidelines

This narrative review covered 19 recent papers, published between 2020 and 2025, which explore sustainable anaesthesia practice from a nursing perspective. The results confirm that nurses, especially nurse anaesthetists, have a key role in implementing strategies aimed at reducing the environmental footprint of perioperative and intensive care. In most of the analyzed studies, interventions such as reducing anaesthetic gas consumption (using low fresh gas flows and avoiding unnecessary use of nitrous oxide), substituting volatile anaesthetics with intravenous techniques, using reusable equipment instead of single-use, rational waste management, and conducting education and optimisation protocols (such as Enhanced Recovery After Surgery, ERAS programs) were highlighted. These measures not only contribute to environmental preservation, but also improve resource use efficiency and patient safety.

The findings are consistent with the international guidelines of the European Society of Anaesthesiology and Intensive Care (ESAIC) and the World Federation of Societies of Anaesthesiologists (WFSA), which call for the integration of sustainable practices into the daily work of anaesthesia teams. In 2023, the ESAIC adopted the Glasgow Declaration on Sustainability, and in 2024, it published a consensus document with practical recommendations in four key areas: reducing direct anaesthetic emissions, optimising energy consumption, sustainable management of supply chains and waste, and promoting staff well-being and sustainable transport (Buhre, 2023). The recommendations include choosing anaesthetic agents with low global warming potential, applying low-flow anaesthesia, avoiding desflurane and nitrous oxide where possible, implementing the 5R strategy, optimising operating room ventilation systems, and encouraging the use of reusable equipment.

Examples from the literature, such as the study by Tordjman et al. (2022) and the review by Beloeil & Albaladejo (2021), confirm the effectiveness of the strategies aimed at reducing waste and emissions in the clinical setting. The study by Sen et al. (2025) and the review by Mishra et al. (2024) provide measurable evidence that the use of low-flow anaesthesia and a shift to TIVA can significantly reduce greenhouse gas emissions and anaesthetic agent consumption, while maintaining patient safety and the quality of outcomes.

Several of the described interventions contribute to both the environmental and financial sustainability of healthcare institutions. Switching from inhalational anaesthetics to TIVA reduces emissions and the costs of procuring volatile agents, while introducing ultra-low fresh gas flows ( $<0.5$  L/min) further decreases the amount of anaesthetic used. Kampman and Weiland (2023) point out that many “green” measures, such as using reusable equipment, optimising ventilation systems, and reducing waste, also lead to financial savings, which can strongly motivate healthcare institutions to adopt sustainable practices.

#### 4.2 Role of Nurses in Sustainable Practice

The results of the review clearly show that nurses, as direct care providers and managers of resources, are often the drivers of innovation for greater sustainability. Because of their close patient contact and involvement in operational processes, nurses are in an ideal position to spot opportunities to reduce waste and use resources more rationally, for example, by deciding not to open an unnecessary set of instruments or suggesting that a particular patient be managed with TIVA instead of inhalational anaesthesia to cut down on gas emissions. Numerous examples from the literature confirm this role. In the United Kingdom, during the COVID-19 pandemic, Flanagan and Janes (2023) devised and implemented a “see and treat” model for urgent plastic trauma, which resulted in a significant reduction in duplicated visits and overall medical waste. That model, although developed out of a crisis situation, was retained after the pandemic as a permanent innovation that benefits both patients and the environment.

The role of nurse anaesthetists is especially critical in resource-limited settings. Yezu et al. (2025) note that in rural hospitals in South Africa, nurse anaesthetists are crucial for the sustainability of anaesthesia care, because they ensure the continuity of services and provide the training for the local staff, thus reducing the need to transport patients to distant centres (Sjöberg et al., 2023).

In addition to their clinical work, nurses have an important role in education and mentorship. They often educate junior colleagues on the rational use of materials, encourage the team to properly segregate waste, and participate in creating the internal guidelines. The analysis indicates that sustainable initiatives have the greatest chance of success when there is a clearly recognized local champion of change, and in anaesthesia teams, that role is frequently assumed by the nurse anaesthetist.

#### 4.3 Obstacles and Challenges in the Implementation

Despite the recognized benefits, the implementation of sustainable practices in anaesthesiology faces numerous challenges. The most frequently mentioned are related to insufficient knowledge and awareness about the environmental consequences of clinical decisions. Shah et al. (2023) showed that a significant portion of anaesthesia staff in the USA are not familiar with the concept of the carbon footprint of anaesthetics or with existing “green OR” guidelines, while Giuricich et al. (2024) in South Africa found similar results. Inadequate formal education on sustainability, especially among more experienced healthcare workers, further limits the willingness to change (Carvalhais et al., 2025).

A second obstacle is represented by material and infrastructure limitations. Almukhtar et al. (2024) stress that without investment in equipment, such as waste anaesthetic gas capture systems or sterilization capacity for reusable equipment, sustainable practices struggle to take hold. Even when there is staff willingness, a lack of resources, equipment, time, or funding often constrains the implementation of changes.

A third obstacle is the lack of institutional support. Gasciauskaite et al. (2023) highlighted that in institutions where sustainability is not integrated into the quality

management system, implementation depends solely on individual enthusiasm. Resistance to change, scepticism, and fears that sustainable measures could compromise patient safety further complicate implementation, even though most studies, including Sen et al. (2025) confirm that properly executed measures do not adversely affect the quality of care.

#### *4.4 Implications for Practice and Recommendations*

The findings of this review point to several clear guidelines for the practice. Education is paramount, topics of sustainable development should be included in the curricula of nursing and anaesthesia training, as well as in the continuous professional development. Petre and Malherbe (2020) demonstrated that online educational modules and courses can significantly increase the awareness and knowledge of sustainable practices.

The second recommendation is the development of local guidelines and protocols, for example, recommendations to avoid desflurane, to routinely apply low-flow anaesthesia, and to switch to TIVA when clinically justified. The Austrian guidelines described by Hammer et al. (2024) and the proposals by Tordjman et al. (2022) can serve as a foundation for local adaptation.

Thirdly, it is important to introduce the systems for monitoring and feedback, the so-called “green audits,” in which nurses would play a key role in collecting the data on resource consumption and waste. Kampman and Weiland (2023) note that regular monitoring not only identifies the areas for improvement but also motivates teams by providing visible results.

At the institutional and national level, management support and the inclusion of sustainability in strategic plans are crucial for a successful long-term implementation. The national plan for sustainable surgery in Nigeria, described by Seyi-Olajide et al. (2021), is an example of how strategic documents can recognize nurses as principal drivers and leaders of change.

#### *4.5 Limitations of the Review and Future Research*

This review has several limitations. The search was limited to the works in English with full-text availability, which may have led to the omission of the relevant studies in other languages. Focusing on the period 2020–2025 provided an insight into the most recent trends, but older research was outside the scope.

The heterogeneity of the included studies, in terms of methodology and healthcare system context, makes a direct comparison of the results difficult. Furthermore, the relatively small number of papers explicitly examining the role of nurses in sustainable anaesthesia practice means that, in most cases, the nursing perspective had to be inferred from a broader multidisciplinary context.

Future research is needed that would focus specifically on nurse-led interventions, along with the development of standardized indicators for measuring sustainability in anaesthesia. Formalized guidelines dedicated to sustainable anaesthesia practice from a nursing perspective would be a significant step toward a systematic implementation.

Despite the limitations, these findings clearly demonstrate that nurses have both the potential and the responsibility to lead sustainable changes in anaesthesiology. By integrating environmental principles into the daily practice, they can contribute to environmental protection, patient safety, and the long-term sustainability of the healthcare system.

## 5 Conclusion

This integrated overview of recent scientific insights highlights the pivotal role of nurses in sustainable anaesthesia practice, emphasising concrete measures demonstrated in the literature to be both effective and feasible without compromising patient safety. Unlike most previous studies, which examined sustainable anaesthesia primarily from the perspective of physicians or technical solutions, this paper provides a structured synthesis of the available evidence on nursing interventions and highlights their strategic and operational importance in reducing the environmental footprint. The contribution of this review is also in connecting the international guidelines with the practical examples of the implementation, thereby building a bridge between the theoretical recommendations and everyday clinical practice.

The results clearly indicate that nurses, particularly nurse anaesthetists, have the potential to be key leaders of change: not only through the adoption of sustainable techniques, but also through team education, advocacy for changes at the institutional level, and leadership in “green audit” projects. Recognising and formally supporting this role could create opportunities for the development of specific educational modules, national guidelines, and measurement tools that could accelerate the transition toward sustainable anaesthesia in the Croatian healthcare system.

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### **Vloga medicinske sestre anesteziologinje pri zmanjševanju okoljskega odtisa anesteziološke prakse: pregled literature**

*Operacijske dvorane sodijo med energetske najbolj intenzivne in okoljsko obremenjujoče dele vsake bolnišnice. Porabijo bistveno več energije na kvadratni meter kot večina drugih oddelkov, ustvarjajo velike količine reguliranih in nereguliranih odpadkov ter uporabljajo hlapne anestetike in didušikov oksid, ki imajo toplogredni potencial večkrat večji od ogljikovega dioksida. V tem okoljsko zahtevnem okolju imajo anesteziološke medicinske sestre edinstven položaj, da trajnostna načela prenesejo v varno in ponovljivo klinično prakso ob bolnikovi postelji. Pripravljajo in upravljajo opremo ter zdravila, titrirajo sisteme za dovajanje anestezije, v realnem času spremljajo fiziološke parametre, usklajujejo delo s kirurgi in osebjem v dvorani ter pogosto odločajo, kateri potrošni materiali bodo uporabljeni in kateri ne. Te vsakodnevne od-*

ločitve, ponovljene več tisočkrat v bolnišnicah, oblikujejo okoljski odtis perioperativne oskrbe. Čeprav so mednarodne organizacije izdale splošna priporočila za okolju prijaznejšo anestezijo, so praktični ukrepi, ki jih vodijo medicinske sestre na ravni posameznega primera, še vedno pomanjkljivo opisani, številni zdravstveni sistemi pa nimajo nacionalnih smernic in strukturiranega izobraževanja. Na Hrvaškem se zavest o okoljskem vplivu zdravstva povečuje, a trajnostna anestezija še ni sistematično vključena v politike, kurikule ali bolnišnične protokole. Pregled literature zato povzema nedavne dokaze, objavljene med letoma 2020 in 2025, s poudarkom na prispevku medicinskih sester ter predlaga praktične, varne ukrepe za hitro uvedbo v hrvaške bolnišnice, uporabne tudi v širšem regionalnem kontekstu.

Literaturo smo identificirali z usmerjenim iskanjem po bazah PubMed, Web of Science in Scopus julija 2025 z uporabo kombinacij izrazov, povezanih s trajnostjo, anestezijo in zdravstveno nego. Študije so bile vključene, če so bile objavljene med januarjem 2020 in julijem 2025, napisane v angleščini, prosto dostopne v celotnem besedilu in so obravnavale trajnostno anestezijo v kliničnem negovalnem ali interdisciplinarnem kontekstu. Upravičeni dizajni so vključevali randomizirane kontrolirane preizkuse, prospektivne raziskave, opazovalne in kvalitativne študije, sistematične in narativne preglede, strateške preglede, poročila o izboljšanju kakovosti ter module za stalno izobraževanje. Izključeni so bili prispevki, osredotočeni zgolj na tehnične, farmakološke ali veterinarske vidike, povzetki konferenc brez analitične vrednosti ter študije brez sodelovanja medicinskih sester. Od 248 začetno pridobljenih zapisov je bilo po odstranitvi dvojnikov pregledanih 222 enkratnih enot. Po uporabi meril in oceni celotnih besedil je bilo izključenih 59 del, v končno kvalitativno sintezo pa je bilo vključenih 19 študij. Iz teh so se oblikovali sklopi praks, v katerih imajo anesteziološke medicinske sestre odločilno vlogo: optimizacija dovajanja anestetikov, zmanjševanje in ločevanje odpadkov, racionalna izbira in ponovna uporaba opreme, izobraževanje in revizija ter prenova storitev pod vodstvom medicinskih sester.

Optimizacija dovajanja anestetikov se nanaša na neposredne emisije in porabo zdravil, ki izhajajo iz hlapnih sredstev in didušikovega oksida. Tehnike nizkega pretoka svežih plinov zmanjšajo porabo inhalacijskih sredstev brez ogrožanja intraoperativne stabilnosti ali kakovosti prebujanja, če se uporabljajo z nadzorom koncentracije na koncu izdiha in jasnimi varnostnimi mejami. Medicinske sestre so ključne za doseganje teh ciljev, saj sproti uravnavajo pretoke, kalibrirajo vaporizatorje ter vrednotijo globino anestezije glede na klinične znake. Enako pomembna sta opustitev uporabe sredstev z visokim toplogrednim potencialom, zlasti desflurana, in izogibanje rutinski uporabi didušikovega oksida, razen ob dobro utemeljenih indikacijah. Povečana uporaba popolne intravenske anestezije za ustrezne posege se podpira kot učinkovita strategija za zmanjšanje emisij, pri čemer medicinske sestre standardizirajo infuzijske sisteme, pripravljajo zdravila z minimalnimi izgubami, zagotavljajo pravilno nastavitve črpalk ter budno spremljajo vitalne parametre.

Zmanjševanje in ustrezno ločevanje odpadkov na mestu nastanka je drugo ključno področje. Odpadni tokovi v operacijskih dvoranh so heterogeni, nepravilno odlaganje neinfekcijskih materialov med regulirane odpadke pa povečuje stroške in ogljični

odtis. Protokoli, ki jih vodijo medicinske sestre in vključujejo odpiranje potrošnega materiala le po potrebi, racionalizacijo instrumentarija glede na zahteve posega ter jasno označevanje v dvorani, dokazano zmanjšujejo količino neuporabljenih materialov in medicinskih odpadkov. Ker so medicinske sestre odgovorne za pripravo dvorane in cirkulacijo med posegom, lahko sproti nadzorujejo ločevanje, usposabljaajo sodelavce in prepoznavajo ponavljajoče se vire odpadkov.

Tretji sklop se nanaša na izbiro in ponovno uporabo opreme. Kadar standardi nadzora okužb in smernice proizvajalcev to dovoljujejo, imajo večkratne naprave pomembne prednosti pred enkratnimi. Prehod zahteva zanesljive postopke sterilizacije, pravočasno pripravo in zaupanje osebja v varnost. Medicinske sestre pogosto posredujejo med temi zahtevami: poznajo klinične indikacije, predvidijo potrebe posega, sodelujejo s službami za sterilizacijo instrumentov in medicinske opreme in preverijo pripravljenost naprav pri bolniku. Njihove praktične povratne informacije pomagajo pri nabavnih odločitvah, kjer se trajnost ocenjuje skupaj z zmogljivostjo in varnostjo.

Izobraževanje in revizija tvorita četrti sklop. Znanje o okoljskem vplivu anestezioloških odločitev je med osebjem še vedno omejeno. Kratke, na primerih utemeljene učne enote, povezane z vsakodnevnimi poteki dela, skupaj z mislijo na življenjski cikel izdelkov, povečujejo ozaveščenost. Vendar je potrebna tudi povratna informacija. Enostavni revizijski cikli, ki spremljajo porabo anestetikov, pretoke plinov, uporabo didušikovega oksida in količino odpadkov, ekipam omogočajo merjenje napredka. Medicinske sestre pogosto delujejo kot lokalne nosilke teh revizij, zbirajo podatke, pripravljajo grafične prikaze in predstavljajo rezultate sodelavcem.

Končni sklop kaže, da trajnost ni omejena le na tehnične izbire, ampak jo je mogoče vključiti v organizacijo storitev. Omenjen je model »see and treat« pod vodstvom medicinskih sester, uveden za obravnavo travmatskih poškodb v času pandemije COVID-19, ki je zmanjšal ponovne obiske, potovanja pacientov in odpadke ter se obdržal kot trajna praksa.

Identificirane ovire odražajo realnost operacijskih dvoran: pomanjkanje znanja, previdnost izkušenih zdravnikov pri zelo nizkih pretokih plinov ali rutinski uporabi TIVA, časovni pritiski ter materialne omejitve, kot so nezadostne kapacitete sterilizacije ali pomanjkanje sistemov za zajem plinov. Ključen je institucionalni angažma. Ko je trajnost vključena v sistem vodenja kakovosti, imajo pobude medicinskih sester več možnosti za dolgoročno izvajanje.

Za Hrvaško so implikacije neposredne. Brez nacionalnih smernic lahko bolnišnice razvijejo lokalne protokole, ki določajo trajnostne privzete prakse, izobraževanja ter vključitev trajnostnih vsebin v kurikule in stalno izobraževanje. Spremljanje je bistveno: nadzorne plošče, ki prikazujejo mesečno porabo anestetikov, pretoke plinov, količino odpadkov in skladnost z ločevanjem, preoblikujejo trajnost iz ambicije v prakso. Medicinske sestre so primerne, da vodijo takšne procese in povezujejo okoljske koristi z ekonomskimi prihranki.

Omejitve pregleda vključujejo omejitev na angleško govoreče, prosto dostopne objave, heterogenost dizajnov ter redke študije, ki so izrecno obravnavale medicinske

*sestre. Potrebne so prihodnje raziskave z uporabo standardiziranih kazalnikov trajnosti in spremljanjem izidov pacientov.*

*Kljub omejitvam ugotovitve kažejo, da je trajnostna anestezija izvedljiva in klinično varna, če se izvaja z dokazi podprtimi protokoli, stalnim izobraževanjem in transparentnim merjenjem. Medicinske sestre anesteziologinje so v središču te preobrazbe. Njihova stalna prisotnost ob bolniku, upravljanje materialov, izobraževalna vloga in avtoriteta pri revizijah jim dajejo edinstveno moč za zmanjšanje ogljičnega odtisa perioperativne oskrbe brez kompromisov pri varnosti.*

### *Data Availability Statement*

This article is based on research data obtained from existing and publicly available sources (textual sources, databases), which are listed in the References section.

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# Koncept okupacijskega ravnovesja v delovni terapiji – pregled literature

*Pregledni znanstveni članek*

UDC 615.851.3-025.17

**KLJUČNE BESEDE:** okupacijska znanost, okupacijski vzorci, opredelitev koncepta

**POVZETEK** – Okupacijsko ravnanje je temeljni koncept delovne terapije, povezan z zdravjem, blaginjo in vsakodnevnim delovanjem. Izveden je bil splošni pregled literature po smernicah Joanna Briggs Institute. Iskanje je potekalo v bazah CINAHL Ultimate, PubMed in Web of Science. V končno analizo je bilo vključenih 15 člankov, objavljenih med letoma 2017 in 2025. Raziskave obravnavajo okupacijsko ravnanje v kontekstu duševnega zdravja, dela in vsakdanjega življenja, sprememb življenjskega sloga, socialne izključenosti in življenjskih prehodov. Opredeljeno je kot subjektivna, večdimenzionalna in dinamična izkušnja. Delovnoterapevtske intervencije na tem področju vključujejo strukturirane programe, skupinske obravnave, okupacijsko analizo, refleksijo življenjskega sloga in vzpostavljanje rutin. Ugotavljamo, da ima okupacijsko ravnanje v sodobni delovni terapiji pomembno vlogo. Poudarjena je potreba po povezovanju subjektivne izkušnje uporabnika z objektivno strokovno presojo delovnega terapevta ter po nadaljnjih longitudinalnih raziskavah okupacijskega ravnanja kot napovednika zdravja in blaginje.

*Review article*

UDC 615.851.3-025.17

**KEY WORDS:** occupation science, occupation patterns, concept definition

**ABSTRACT** – Occupational balance is a fundamental concept in occupational therapy, relating to health, well-being, and daily functioning. A scoping literature review was conducted following the Joanna Briggs Institute guidelines. The search was conducted in the CINAHL Ultimate, PubMed, and Web of Science databases. Fifteen articles published between 2017 and 2025 were included in the final analysis. The studies address occupational balance in the context of mental health, work and daily life, lifestyle changes, social exclusion, and life transitions. It is defined as a subjective, multidimensional, and dynamic experience. Occupational therapy interventions in this area include structured programmes, group sessions, occupational analysis, lifestyle reflection, and routine establishment. Occupational balance plays an important role in contemporary occupational therapy. The need to combine the user's subjective experience with the occupational therapist's objective professional judgement, and to conduct further longitudinal research on occupational balance as a predictor of health and well-being is emphasised.

## 1 Uvod

Okupacijsko ravnanje (OR) je eden izmed konceptov, ki je v delovni terapiji (DT) prisoten že od samega nastanka stroke. Definiranje in osredotočenost na ta koncept sta se čez leta spreminjala. Osnovna ideja OR je, da »biti dobro« od posameznika zahteva zdravo porazdelitev časa, ki ga nameni različnim področjem vsakodnevnega delovanja (Christiansen idr., 2024). O OR je že leta 1922 govoril Adolf Meyer v zapisu prve filozofije DT, kjer je poudarjal ravnanje porabljenega časa za različna področja človekovega delovanja (Franklin, 1977). Z razvojem DT se je nabor teh področij širil, sama opredelitev koncepta pa se je vsebinsko nadgrajevala. K temu je v osemdesetih letih prejšnjega stoletja pomembno prispeval nastanek okupacijske zna-

nosti. Znotraj te znanosti so koncept raziskovali tako na zdravi populaciji (Håkansson idr., 2011; Wagman idr., 2011) kot na populacijah z različnimi zdravstvenimi omejitvami (Ahlstrand idr., 2018; Eklund in Argentzell, 2016).

Tako kot za številne druge koncepte tudi za koncept OR ni enoznačne definicije. Nekatere definicije se osredotočajo bolj na razporeditev časa, druge pa na izpolnjevanje človekovih potreb (Christiansen, 2024). Wagman idr. (2012) so OR definirali kot posameznikovo dožemanje, da ima »pravo kombinacijo« vsakodnevnih okupacij glede na njihovo število in raznovrstnost. V tej definiciji se OR nanaša na posameznika ter na njegovo zdravje in blaginjo. Kasneje so razmišljali o širitvi koncepta, ki bi vključeval tudi posameznikovo socialno okolje, saj lahko OR ene osebe vpliva na OR ljudi, ki z njo živijo in sodelujejo (Wagman idr., 2015). V literaturi se za »ravnovesje« v človekovem življenju poleg OR uporabljajo še pojmi, kot so življenjsko ravnovesje, ravnovesje v življenjskem slogu ali ravnovesje med delom in zasebnim življenjem (Matuska, 2012; Wagman idr., 2012). Wagman idr. (2012) so v kvalitativni raziskavi ugotovili, da je OR dejansko del življenjskega ravnovesja, zato delovne terapevte (DTh) usmerjajo v nadaljnje raziskovanje podobnosti in razlik med tema konceptoma.

V kvalitativni raziskavi (Yazdani idr., 2018) so DTh poudarili, da je OR koncept, ki ga je težko opredeliti, zlasti »ravnovesje«, ter izpostavili njegov subjektivni vidik in dinamično naravo. Po njihovem mnenju se OR spreminja in ni statično. Tako bazične kot aplikativne raziskave poleg subjektivnega poudarjajo tudi pomen objektivnega vidika OR, kar v praksi prispeva k upoštevanju principa ne škodovanja (Wagman idr., 2015; Yazdani idr., 2018).

Leta 2024 je bila v okviru Zbornice DTh Slovenije oblikovana skupina za okupacijsko znanost, ki si je med drugim zadala cilj informirati DTh in drugo strokovno javnost po vsej Sloveniji ter jim posredovati znanje o izsledkih raziskav, nastalih v okviru svetovne okupacijske znanosti. Ker je koncept OR eden bistvenih v DT in obstajajo dokazi o njegovem pozitivnem vplivu na zdravje in blaginjo (Bejerholm, 2010; Forhan in Backman, 2010; Håkansson idr., 2011), sem se odločila ta koncept poglobljeno raziskati in ga predstaviti širši strokovni javnosti. Zastavila sem si naslednje raziskovalno vprašanje: Kako je koncept OR vključen v prakso DT in raziskave?

## 2 Metode

Izveden je bil pregled literature po smernicah za splošni pregled Joanna Briggs Institute (JBI). Iskanje člankov je bilo opravljeno septembra 2025 v podatkovnih bazah CINAHL Ultimate, PubMed in Web of Science. Za iskanje je bila uporabljena iskalna formula: XB (»occupation\* balance« OR »activit\* balance« OR »life balance« OR »occupat\* pattern balance« OR »role balance«) AND (XB (»occup\* therap\*« OR »occup\* scienc\*« OR OT)). V pregled so bili vključeni viri glede na vsebinsko ustreznost, dostopnost polnega besedila, čas objave (od 2015 do 2025) in jezik (slovenski ali angleški). Podrobneje so vključitveni in izključitveni kriteriji predstavljeni v tabeli 1, proces pregleda člankov pa v diagramu PRISMA (slika 1) (Page idr., 2021). Članki,

vključeni v končni pregled, so bili vsebinsko analizirani po kombiniranem deduktivno-induktivnem pristopu (Miles idr., 2014), sledila je sinteza ugotovitev.

**Tabela 1**

*Vključitveni in izključitveni kriteriji/Inclusion and exclusion criteria*

| <i>Kriterij</i>       | <i>Vključitveni kriterij</i>                              | <i>Izključitveni kriterij</i>                      |
|-----------------------|-----------------------------------------------------------|----------------------------------------------------|
| Koncept               | OR je eden od obravnavanih konceptov.                     | Samo drugi koncepti, druga ravnovesja              |
| Vključeni v raziskavo | DTh, uporabniki DT                                        | Drugi strokovnjaki in njihovi uporabniki           |
| Kontekst              | Kontekst DT ali kontekst okupacijske znanosti             | Konteksti drugih profesij ali znanosti             |
| Vrsta vira            | Kvantitativne in kvalitativne raziskave, strokovni članki | Siva literatura, pregledni članki, poljudni članki |
| Leto objave           | Od leta 2015 do leta 2025                                 | Literatura, starejša od leta 2015                  |
| Jezik                 | Angleščina in slovenščina                                 | Ostali jeziki                                      |

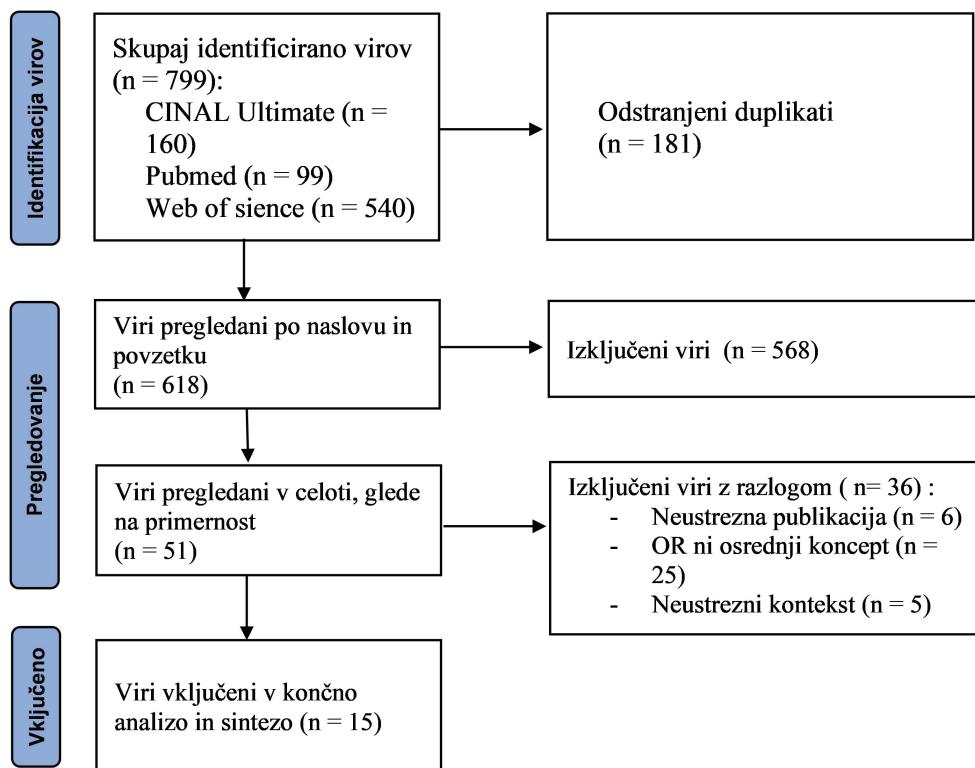
### 3 Rezultati

V končni pregled je bilo vključenih 15 člankov, katerih glavne značilnosti so predstavljene v tabeli 2. V prvi fazi je bila izvedena deduktivna analiza, na podlagi katere so bili članki razdeljeni v pet področij, ki so že znana kot področja, kjer delujejo DTh. V drugi fazi je sledila induktivna analiza, v kateri so bili podrobno vsebinsko analizirani rezultati raziskav, vključenih v končni pregled, kar je predstavljalo osnovo za sintezo oziroma oblikovanje petih vsebinskih tem. Rezultati končne sinteze obeh korakov analize so predstavljeni v tabeli 3.

Izbrani članki so bili objavljeni v obdobju 2017 do 2025, v angleškem jeziku. V člankih so zastopane tako kvantitativne kot kvalitativne raziskave ter raziskave z integracijo kvantitativnih in kvalitativnih metod, izvedene so bile na Švedskem (9), na Danskem (2), v Združenih državah Amerike (2), v Iranu (1) in v Južni Indiji (1).

**Slika 1**

*PRISMA diagram poteka pregleda literature/PRISMA literature review flow diagram*

**Tabela 2**

*Bistvene značilnosti v končno analizo in sintezo vključenih virov/Essential characteristics of the sources included in the final analysis and synthesis*

| Avtor/ji in leto objave | Raziskovalna oblika                                                                                 | Vzorec (udeleženci, velikost, država)                                                                                                    | Ključne ugotovitve                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Eklund idr., 2017       | Kvantitativna – randomizirana kontrolirana raziskava, 16 tednov obravnave in 6-mesečno spremljanje. | 226 oseb z motnjo v duševnem zdravju; 133 prejemnikov programa Balance of Everyday Life (BEL) in 93 prejemnikov standardne DT. (Švedska) | V primerjavi s standardno DT je bila skupina BEL učinkovitejša pri okupacijski vključenosti in ravnovesju. Razlik glede zadovoljstva z vsakodnevnimi okupacijami, samoocene zdravja ter izboljšanja simptomov in funkcioniranja ni bilo ugotovljenih. Skupina BEL je dosegla višjo splošno kakovost življenja. Program BEL se je izkazal kot primeren za skrajšanje časa, ki ga osebe potrebujejo za razvoj vključenosti v okupacije. |

|                             |                                                                      |                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------|----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Kallhed in Mårtensson, 2018 | Kvalitativna raziskava                                               | 8 oseb s kronično bolečino. (Švedska)                                                                                     | DTh bi morali pri obravnavi dajati prednost vključevanju v okupacije in strategijam za obvladovanje bolečine, ne pa bolečini sami. Udeleženci raziskave si prizadevajo za razumno OR in izboljšanje okupacijske uspešnosti. Pri tem uporabljajo tehnike sproščanja in preusmerjanja pozornosti za začasno lajšanje bolečin. Avtorji predlagajo predstavitev zdravega OR prek modela Value and Meaning in Occupations (ValMO).                               |
| Argentzell idr., 2020       | Kvantitativna – randomizirana kontrolirana raziskava                 | 226 oseb z motnjo razpoloženja; 133 prejemnikov BEL in 93 prejemnikov standardne DT. (Švedska)                            | Rezultati niso pokazali statistično pomembne razlike v izboljšanju okrevanja med skupinama BEL in standardne DT. Najmočnejša dejavnika okrevanja sta bila vključenost in obvladanje okupacije, sledila sta zadovoljstvo z okupacijami in simptomi bolezni.                                                                                                                                                                                                  |
| Agosti idr., 2021           | Metoda za razvoj programa (povezava teorija – praksa)                | 4 raziskovalci – koordinacijska skupina, 2 DTh – delovna skupina, 29 preiskovank – pilotna skupina. (Švedska)             | Program BEL izboljšuje počutje žensk in ravnovesje v njihovem vsakodnevem življenju, vendar bi ga bilo treba raziskati tudi z vidika ekonomičnosti. Primeren je za uravnavanje poklicnega in zasebnega življenja.                                                                                                                                                                                                                                           |
| Dhas in Wagman, 2022        | Razvoj teorije; pregled literature in preizkušanje v praksi          | Literatura na temo OR in dva primera iz prakse. (Južna Indija)                                                            | Poudarja pomen zunanjega pogleda (vidika skupnosti) na OR v praksi DT, kar prispeva k harmoničnemu življenju v skupnosti.                                                                                                                                                                                                                                                                                                                                   |
| Christensen idr., 2022      | Kvantitativna presečna raziskava                                     | 429 anketirancev. (Danska)                                                                                                | Pokazale so se razlike glede na spol; v primerjavi z moškimi so ženske v shujševalnih programih pokazale večje zanimanje za vsebine, povezane z oblikovanjem navad in OR. Shujševalni programi naj bi vključevali vsebine, povezane s prehrano, vadbo, oblikovanjem navad, OR in socialnimi odnosi.                                                                                                                                                         |
| Karlsson idr., 2023         | Kvalitativna raziskava, kvalitativna analiza zaključne dokumentacije | 54 oseb, vključenih v Redesigning Daily Occupation (RE-DO) program, povprečna starost 46 let, delovno sposobni. (Švedska) | Udeleženci poudarjajo pomen nadzora nad vsakodnevnim življenjem kot celoto. Osredotočiti se morajo na strukturo dneva, določanje prioritet, socialno interakcijo, postavljanje meja in smisel okupacij. Avtorji poudarjajo večdimenzionalnost OR ter neločljivost zasebnega in poklicnega življenja.                                                                                                                                                        |
| Eklund in Argentzell, 2023  | Kvalitativna raziskava                                               | 13 DTh z izkušnjami na področju duševnega zdravja in 3 managerji. (Švedska)                                               | BEL je zasnovan za analizo vsakodnevnih okupacij in razvoj strategij za izboljšanje. Udeleženci BEL poročajo o izboljšanju na področju okupacij in kakovosti življenja. BEL je primeren za različne uporabnike, vključno z osebami z depresijo, psihozo, ADHD in osebnostnimi motnjami. BEL zahteva usklajenost načel programa in politik vključenih strokovnjakov. Jasna komunikacija in realna pričakovanja managerjev sta bili ključni za uspešnost BEL. |

|                             |                                                                                                |                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Jessen-Winge idr., 2023     | Kvalitativna raziskava                                                                         | 20 zdravstvenih delavcev, različnih strok iz programov za hujšanje – iz 98 občin. (Danska) | <p>Ugotovitve kažejo, da bi obravnava OR lahko okrepila trajnostna prizadevanja za hujšanje. Predlagajo vključevanje okupacij, povezanih s hujšanjem, v vsakdan.</p> <p>Za premostitev težav pri spreminjanju življenjskega sloga in iskanju njemu smiselnih okupacij predlagajo upoštevanje posameznikovih potreb, značilnosti in izkušenj.</p> <p>Izpostavljajo potrebo po obravnavi upravljanja časa in energije v programih hujšanja.</p> |
| Teske idr., 2024            | Integracija kvantitativne in kvalitativne metodologije                                         | 2 nekdanji spolni delavki. (ZDA)                                                           | <p>Raziskava je pokazala, da je program Coping for Living a Healthy Life (CLHL) pri udeleženkah izboljšal OR in okupacijsko kompetentnost.</p> <p>Izpostavile so pozitivne strategije spoprijemanja.</p>                                                                                                                                                                                                                                      |
| Farhadian idr., 2024        | Kvantitativna, kvazi-eksperimentalna raziskava, pre-opost test, 2 meseca spremljanja           | 9 oseb z motnjo odvisnosti od prepovedanih substanc (na zdravljenju). (Iran)               | <p>Raziskava poudarja pomen smiselnih prostočasnih okupacij pri doseganju OR in spodbujanju okrevanja.</p> <p>Vključevanje v prostočasne aktivnosti je prispevalo k boljši kakovosti življenja in zmanjšani potrebi po drogah.</p> <p>Spremljanje po zaključku obravnave je pokazalo upad učinkov.</p>                                                                                                                                        |
| Eklund in Argentzell, 2025  | Kvalitativna raziskava, deduktivna analiza                                                     | 11 oseb, 30–63 let, z motnjo v duševnem zdravju, iz različnih skupin BEL. (Švedska)        | <p>BEL podpira uporabnike pri izboljšanju OR in osebnega okrevanja.</p> <p>Kot učinek BEL so navajali tudi pozitivne spremembe upanja, optimizma, identitete in smisla.</p> <p>Študija poudarja terapevtsko vrednost skupinskih DT-obravnav.</p>                                                                                                                                                                                              |
| Eklund in Gunnarsson, 2025  | Kombinirana presečno longitudinalna (3 mesece) raziskava                                       | 62 uporabnikov DT, 19–63 let. (Švedska)                                                    | <p>DTh predlaga uporabo in raziskovanje specifičnih ocenjevalnih instrumentov za OR.</p> <p>Spodbuja uporabnike k vključevanju v različne okupacije, kar izboljša njihovo OR.</p> <p>V prihodnje predlaga raziskovanje OR kot napovednika zdravja in blaginje.</p>                                                                                                                                                                            |
| Granhölm Valmari idr., 2025 | Metodologija za razvoj instrumenta; pregled literature, fokusne skupine, kognitivni intervjuji | 48 udeležencev; DTh, drugi eksperti, policaji. (Švedska)                                   | <p>Ključne dimenzije instrumenta: OR, kontekst, izbira, angažiranost in dnevne rutine.</p> <p>Instrument je primeren za spodbujanje trajnostnega življenjskega sloga in vzpostavljanje OR med policisti.</p> <p>Instrument je primeren za ocenjevanje in samorefleksijo življenjskega sloga.</p>                                                                                                                                              |
| Presiados in Bulan, 2025    | Kvalitativna, fenomenološka raziskava                                                          | 6 filipinskih DTh, ki so se nedavno izselili v ZDA, z izkušnjami na Filipinih. (ZDA)       | <p>Udeleženci predstavijo kompleksnost vzdrževanja OR med prilagajanjem novim osebnim in profesionalnim okoliščinam.</p> <p>Izpostavijo tri teme: (1) uporaba strokovnih spoznanj za oseбно prilagajanje, (2) sprejemanje neugodja kot katalizatorja za rast in izpolnitev ter (3) vzpostavljanje rutin za podporo OR in stabilnosti.</p>                                                                                                     |

**Tabela 3**

*Sinteza v končni pregled vključenih člankov/Synthesis of the articles included in the final review*

| <i>Tema</i>                                    | <i>Kontekst in populacija</i>                                           | <i>Razumevanje OR</i>                                                    | <i>DT-intervencije za OR</i>                                                       | <i>Vidiki OR za prakso</i>                                        | <i>Izzivi in omejitve</i>                                       | <i>Ključni viri</i>                                                                                                          |
|------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <i>Področje</i>                                |                                                                         |                                                                          |                                                                                    |                                                                   |                                                                 |                                                                                                                              |
| OR in duševno zdravje                          | Motnje v duševnem zdravju (depresija, psihoza, ADHD, osebnostne motnje) | Pravi nabor okupacij, vključenost, kompetentnost, smisel in okrevanje    | BEL, CLHL; skupinske obravnave DT; coping strategije; sprostitvene tehnike         | Objektivni, subjektivni in časovni vidiki; večdimenzionalnost OR  | Trajnost učinkov; OR kot še premalo raziskan napovednik zdravja | Eklund idr., 2017; Argentzell idr., 2020; Eklund in Argentzell, 2023; Eklund in Gunnarsson, 2025; Eklund in Argentzell, 2025 |
| OR, delo in vsakodnevno življenje              | Zaposlene ženske; osebe po vrnitvi na delo; policisti                   | Ravnovesje med delom, zasebnim življenjem in prostim časom               | BEL; analiza okupacij; refleksija življenjskega sloga                              | Kontekst, možnost izbire, angažiranost, rutine, postavljanje meja | Usklajevanje vlog in zahtev                                     | Agosti idr., 2021; Karlsson idr., 2023; Dhas in Wagman, 2022; Granholm Valmari idr., 2025                                    |
| OR in zdrav življenjski slog / kronična stanja | Kronična bolečina; shujševalni programi                                 | OR kot podpora navadam, energijskemu ravnovesju in socialni vključenosti | ValMO; vključevanje zdravju podpornih okupacij                                     | Upravljanje časa in energije                                      | Trajnost učinkov                                                | Kallhed in Mårtensson, 2018; Christensen idr., 2022; Jessen-Winge idr., 2023                                                 |
| OR, socialna izključenost in ranljive skupine  | Prostitucija; odvisnosti                                                | OR kot dejavnik stabilnosti in kompetentnosti                            | CLHL; prostočasne dejavnosti; coping strategije                                    | Rutine in podporno okolje                                         | Dolgotrajnost učinkov                                           | Teske idr., 2024; Farhadian idr., 2024                                                                                       |
| OR v življenjskih prehodih                     | Preseljevanje; spremembe osebnih in poklicnih vlog                      | OR kot dinamičen proces prilagajanja                                     | Vzpostavljanje rutin; sprejemanje neugodja kot katalizatorja za rast in izpolnitev | Kompleksnost in prilagodljivost OR                                | Razvoj kulturno varnih delovnih mest in mentorstva              | Presiados in Bulan, 2025                                                                                                     |

## 4 Razprava

Razprava je predstavljena po temah: (1) kontekst in populacija, (2) razumevanje OR, (3) intervencije DT, ki podpirajo OR, (4) vidiki OR za prakso, (5) izzivi in omejitve.

### 4.1 Kontekst in populacija

OR lahko predstavlja dejavnik zdravja ali bolezni ob okupacijskem neravnovesju. Po drugi strani lahko do okupacijskega neravnovesja pride zaradi bolezni, okvare ali določenih življenjskih situacij in okoliščin (Wagman idr., 2015). V člankih, vključenih v končno analizo, so obravnavali OR v kontekstu motenj duševnega zdravja, in sicer pri osebah z motnjami razpoloženja (Argentzell idr., 2020; Eklund in Argentzell, 2023; Eklund in Gunnarsson, 2025; Eklund idr., 2017), psihozah, ADHD in osebno-

stnih motnjah (Eklund in Argentzell, 2023). V raziskavah, ki obravnavajo OR v kontekstu duševnega zdravja, je OR predstavljen kot ključen dejavnik podpore zdravju, blaginje in osebnemu okrevanju. Raziskave poudarjajo, da porušeno OR lahko prispeva k vzdrževanju ali poglobljanju simptomov duševnih motenj, medtem ko uravnotežen vzorec okupacij deluje kot zaščitni dejavnik (Argentzell idr., 2020; Eklund in Argentzell, 2025; Eklund in Gunnarsson, 2025).

V literaturi se OR pogosto nanaša na ravnovesje med delom in vsakodnevnim življenjem, saj to delovno aktivnim osebam lahko predstavlja izziv (Wagman idr., 2012). V ta pregled so vključeni trije članki, ki so raziskovali OR med delom in vsakodnevnim življenjem. Karlsson idr. (2023) so ravnovesje med delom in vsakodnevnim življenjem raziskovali pri osebah po vrnitvi na delo po bolniškem dopustu, Agosti idr. (2021) pri zaposlenih ženskah, Granholm Valmari idr. (2025) pa pri policistih.

V sodobni DT so nastali programi preoblikovanja življenjskega sloga, ki se izvajajo tako pri zdravi populaciji kot pri osebah z zdravstvenimi omejitvami (Pyatak idr., 2022). V tovrstnih programih je delo pogosto usmerjeno tudi v OR. V tem pregledu literature so predstavljene raziskave oseb s kronično bolečino (Kallhed in Mårtensson, 2018; Christensen idr., 2022) ter oseb, vključenih v shujševalni program. V obeh primerih se je usmerjenost in delo na OR izkazalo za ustrezno.

Teske idr. (2024) so OR raziskovali pri spolnih delavkah, Farhadian idr. (2024) pa pri odvisnikih od prepovedanih drog. Pri obeh populacijah se je OR izkazalo kot dejavnik stabilnosti in kompetentnosti (Farhadian idr., 2024; Teske idr., 2024), zato bi bilo smiselno osredotočenost na OR uporabiti tudi pri podobnih populacijah, na primer pri brezdomcih in drugih oblikah odvisnosti. Z vidika OR so pogosto obravnavana populacija tudi osebe na različnih življenjskih prehodih, kot so osebe, ki so se preselile v novo kulturno okolje (Presiados in Bulan, 2025), osebe na prehodu iz dela v upokožitev in podobno. Življenjski prehod za ljudi pomeni nov življenjski kontekst, ki od njih zahteva prilagoditev, kar pogosto pomeni spremenjene okupacijske vzorce in porušeno OR (Thomas idr., 2025).

#### 4.2 Razumevanje okupacijskega ravnovesja

Na področju duševnega zdravja je v ospredju razumevanje OR kot ustreznega razmerja med različnimi vsakodnevnimi okupacijami, ki posamezniku omogoča občutek smisla, kompetentnosti in zadovoljstva z življenjem (Argentzell idr., 2020; Eklund in Argentzell, 2023; Eklund in Gunnarsson, 2025; Eklund in Argentzell, 2025; Eklund idr., 2017;). V raziskovanju OR med delom in vsakodnevnim življenjem je OR opredeljeno predvsem kot ravnovesje med zasebnim življenjem, delom in prostim časom (Agosti idr., 2021; Karlsson idr., 2023). Na področju »sprememb življenjskega sloga« pa v opredelitev OR vključujejo še energijski vidik – kaj človeka polni in kaj izčrpava, navade – zdrave navade v primerjavi z razvadami ter socialno vključenost oziroma izključenost (Christensen idr., 2022; Jessen-Winge idr., 2023; Kallhed in Mårtensson, 2018). V obdobju življenjskih prehodov, kot je na primer preselitev, se v opredelitvi OR poudarja, da predstavlja dinamičen proces prilagajanja (Presiados idr., 2025). Opredelitev OR je torej precej odvisna od konteksta, v katerem se OR raziskuje ozi-

roma uporabljaja. Wagman idr. (2012) pa v splošni definiciji OR poudarjajo, da gre ne glede na področje dela in raziskovanja vedno za iskanje ravnesja med človekovimi vsakodnevnimi okupacijami oziroma za iskanje ravno prave kombinacije le-teh.

#### *4.3 Delovnoterapevtske intervencije za okupacijsko ravnesje*

V izbranih člankih smo za podporo OR zasledili nekaj standardiziranih programov, kot so BEL (Eklund idr., 2017; Argentzell idr., 2020; Eklund in Argentzell, 2025), CLHL (Teske idr., 2024) in intervencije, ki temeljijo na skupinskih delovnoterapevtskih obravnavah (Eklund in Argentzell, 2025). Za vse te intervencije je značilen poudarek na spodbujanju uporabnikov k vključevanju v raznolike okupacije, uporabi strategij spoprijemanja ter tehnik sproščanja in odvrčanja pozornosti. Model, kot je ValMO, dodatno naslavlja promocijo zdravega OR (Kallhed in Mårtensson, 2018) in je uporaben za programe, osredotočene na promocijo zdravja in preventivo. Raziskave s področja dela in vsakodnevnega življenja navajajo metode, kot sta okupacijska analiza in refleksija življenjskega sloga (Agosti idr., 2021; Dhas in Wagman, 2022; Granholm Valmari idr., 2025; Karlsson idr., 2023), ki sta na uporabnika usmerjeni metode in v skladu s sodobno paradigmo DT (American Occupational Therapy Association [AOTA], 2020). Presiados idr. (2025) so med emigranti ugotovili, da je za ponovno vzpostavitev OR v novem okolju pomembno vzpostaviti vsakodnevno rutino ter neugodje sprejeti kot katalizator za rast in izpolnitev.

#### *4.4 Vidiki okupacijskega ravnesja za prakso*

OR je opredeljeno kot subjektivna izkušnja, vendar so v številnih raziskavah, predvsem na področju duševnega zdravja, za prakso DT poudarili pomen tako objektivnega kot subjektivnega vidika OR (Dhas in Wagman, 2022; Eklund in Argentzell, 2020; Eklund in Gunnarsson, 2025; Eklund in Argentzell, 2025). Na tem področju DTh dela z ljudmi, ki včasih niso zmožni objektivnega vpogleda v lastno delovanje, zato je za njihovo blaginjo pomemben tudi zunanji – objektivni – vidik. Tukaj je pomembna terapevtova strokovna presoja, da zna osebo z motnjo v duševnem zdravju obravnavati v kontekstu ter upoštevati blaginjo tudi uporabnikovega socialnega okolja. Eriksson idr. (2010) so raziskovali, kakšna je optimalna kombinacija okupacij za dobro OR, in ugotovili, da so osebe, ki so 25 % svojega časa namenile aktivnostim, pomembnim predvsem njim, 25 % aktivnostim, pomembnim predvsem drugim, ter 50 % aktivnostim, pomembnim tako njim kot drugim, dosegle najboljše OR. Avtorji te raziskave predlagajo takšno razporeditev kot vzorec za dobro prakso DT. Čas, ki ga oseba v svojem okupacijskem vzorcu nameni določeni vrsti okupacij, je enoznačen, vrsta okupacij pa je lahko opredeljena z različnih vidikov, kot so: kategorije okupacij v OTPF-4 (AOTA, 2020); okupacije, ki jih nekdo opravlja zase ali za druge; jih želi ali mora opraviti; okupacije, ki človeka napolnjujejo ali izčrpavajo; fizične, družabne, intelektualne ter okupacije za počitek oziroma sprostitev in podobno (Wagman in Håkansson, 2014).

#### 4.5 Izzivi in omejitve

Kljub pozitivnim učinkom intervencij ostajajo izzivi, povezani s trajnostjo doseženih sprememb v OR (Eklund in Argentzell, 2025) ter z omejenim številom raziskav, ki bi OR sistematično raziskovale kot napovednik zdravja in blaginje. To odpira prostor za nadaljnje raziskovanje in razvoj dokazov za na dokazih temelječo prakso DT (Eklund in Gunnarsson, 2025). Presiados in Bulan (2025) sta za vzpostavitev in ohranjanje OR pri emigrantih poudarila pomen kulturne varnosti ter mentorskih programov. Priseljenci so v novem okolju pogosto primorani sprejeti nove in neznane okupacije, saj jim te omogočajo sodelovanje v novi družbi in imajo pomembno vlogo pri oblikovanju identitete posameznika. Država gostiteljica jih mora pri tem podpreti z različnimi programi, v to podporo so lahko vključeni tudi delovni terapevti (Bennett idr., 2012).

V Sloveniji se DTh pri uvajanju koncepta OR soočajo z več izzivi, med katerimi je že samo poimenovanje koncepta. Poseben izziv predstavlja prevod izraza »okupacija«. Člani slovenske skupine za okupacijsko znanost zagovarjamo uporabo izraza okupacija, saj je ta sestavni del poimenovanja večine konceptov, razvitih znotraj te znanosti, in bi prevajanje teh izrazov lahko povzročilo nepotrebne nejasnosti. Na nekaterih področjih prakse je že zaznati, da se DTh osredotočajo tudi na OR uporabnikov, vendar ostaja še veliko prostora za razvoj programov, ki bi vključevali OR v obravnavo uporabnikov, prav tako pa tudi na področju raziskovanja.

### 5 Zaključek

Pregled literature je pokazal, da je koncept OR pomemben in vsebinsko dobro umeščen v sodobno DT, vendar se njegovo razumevanje in uporaba razlikujeta glede na kontekst, populacijo in področje prakse. V literaturi se OR povezuje z zdravjem, blaginjo in okrevanjem, zlasti na področju duševnega zdravja, kjer uravnoteženi okupacijski vzorci delujejo kot zaščitni dejavnik, porušeno OR pa lahko prispeva k vzdrževanju ali poglobljanju simptomov.

Ugotovitve kažejo, da je OR v DT razumljeno kot subjektivna, kontekstualno pogojena in dinamična izkušnja, ki se spreminja skozi življenjska obdobja in prehode. Različna področja prakse poudarjajo različne vidike OR, vendar vsa izhajajo iz skupnega razumevanja OR kot iskanja ustreznega ravnovesja med posameznikovimi vsakodnevnimi okupacijami. Intervencije DT, ki podpirajo OR, so večinoma skladne s sodobno, na posameznika osredotočeno paradigmo DT in vključujejo strukturirane programe, skupinske obravnave ter metode, kot so okupacijska analiza, refleksija življenjskega sloga in vzpostavljanje rutin.

Za prakso DT je pomembno povezovati subjektivno izkušnjo OR z objektivno strokovno presojo terapevta, zlasti pri ranljivih populacijah. Literatura poudarja potrebo po nadaljnjih raziskavah, predvsem longitudinalnih študijah, ki bi OR sistematično preučevale kot napovednik zdravja in blaginje. DT ima pri tem pomembno vlogo, saj s svojo osredotočenostjo na okupacijo pomembno prispeva k razumevanju in podpori

OR kot ključnega elementa kakovosti življenja. Tudi v Sloveniji je še veliko prostora za razvoj programov DT, ki bi vključevali OR, kot tudi na področju raziskovanja tega koncepta.

Cecilija Lebar, MSc

## **The Concept of Occupational Balance in Occupational Therapy – A Literature Review**

*Occupational balance (OB) is a foundational concept in occupational therapy (OT) and occupational science, closely linked to health, well-being, and meaningful participations in daily life. Since its early articulation by Adolf Meyer in 1922, the concept has evolved alongside the development of occupational therapy (OT) and occupational science. However, the understanding of OB has evolved considerably over time. Contemporary literature no longer defines it simply as an equal distribution of time across activities, but rather as a multidimensional and dynamic experience reflecting the relationship between different types of occupations, personal values, social roles, environmental demands, and subjective perceptions of meaning and satisfaction. Despite its importance, there is still no universally accepted definition of OB. Some definitions emphasise time use and role distribution, while others highlight the individual's perception of having the "right mix" of occupations in terms of diversity, meaningfulness, and personal relevance. Increasingly, OB is understood as a subjective and context-dependent process that changes throughout the life course.*

*This study aimed to examine how the concept of OB is represented in recent OT research and to analyse how it is conceptualised and applied across different populations and practice contexts. A general literature review was conducted following the methodological recommendations of the Joanna Briggs Institute (JBI) for comprehensive reviews. The literature search was carried out in September 2025 using three international databases: CINAHL Ultimate, PubMed, and Web of Science. The search strategy combined keywords related to OB and related concepts (e.g. life balance, activity balance, role balance) with terms associated with OT and occupational science. The search was limited to the studies published between 2015 and 2025 in English or Slovenian. Empirical studies employing quantitative, qualitative, or mixed-methods designs were included if OB was a central concept of the research. Review articles, theoretical papers without empirical data, and studies conducted outside OT or occupational science contexts were excluded.*

*The selection process followed the PRISMA guidelines. Initially, 799 records were identified across the three databases. After removing 181 duplicates, 618 titles and abstracts were screened for relevance. Most were excluded because OB was not the main concept or the context was outside OT. Fifty-one full-text articles were assessed for eligibility, and 36 were excluded based on predefined criteria, resulting in 15 stu-*

dies included in the final synthesis. The included studies were published between 2017 and 2025, representing a variety of research designs, including randomised controlled trials, quasi-experimental studies, cross-sectional surveys, qualitative studies, mixed-methods pilot studies, and instrument development studies.

The studies were conducted in several countries, most frequently in Sweden, with additional research from Denmark, the United States, Iran, and India. Sample sizes varied considerably, ranging from small qualitative samples exploring lived experiences to large quantitative surveys including several hundred participants. The reviewed studies addressed OB across a wide range of populations, including individuals with mental health conditions, people experiencing chronic pain, participants in weight-loss programmes, individuals recovering from substance abuse disorders, former sex workers, employed populations, police officers, and occupational therapists undergoing migration-related life transitions. After reviewing the content, the articles were initially divided into five areas, and following a detailed content analysis, five themes were formed: (1) context and population, (2) understanding OB, (3) OT interventions that support OB, (4) aspects of OB for practice, (5) challenges and limitations.

The largest group of studies focused on mental health contexts. These studies examined OB among individuals with mood disorders, psychosis, ADHD, and other mental health conditions. Quantitative intervention studies, including cluster randomised controlled trials, evaluated programmes such as *Balancing Everyday Life* (BEL), which aim to help individuals analyse their daily occupations, identify meaningful activities, and develop strategies to achieve a more balanced occupational pattern. Findings indicate that participation in these programmes improves occupational engagement, perceived balance, and quality of life.

Participants also reported an increased sense of meaning, improved daily structure, and greater confidence in managing everyday activities. Although improvements in symptom severity were less consistent across studies, OB was strongly associated with broader indicators of personal recovery, such as hope, identity reconstruction, and perceived competence.

Another group of studies examined OB in relation to work and everyday life. In these studies, OB was primarily discussed as the relationship between work, private life, and leisure activities. Research involving employed women, individuals returning to work after sick leave, and police officers emphasised the complexity of balancing multiple social roles and responsibilities. Participants described OB not as an equal distribution of time but as a personally meaningful and sustainable organisation of everyday life. Factors such as autonomy, choice, opportunities for engagement, and supportive work environments were identified as important contributors to OB. OT interventions in these contexts often involved occupational analysis, reflection on lifestyle patterns, and strategies for managing daily routines and role demands.

Several studies also explored OB within the context of lifestyle change and chronic health conditions. Research involving individuals with chronic pain highlighted the importance of balancing activity and rest, as well as integrating coping strategies that enable continued engagement in meaningful occupations despite physical limi-

tations. Similarly, studies focusing on weight-loss programmes emphasised the role of OB in developing sustainable health behaviours. Participants expressed interest in interventions that address not only diet and exercise but also habits, routines, social relationships, and meaningful daily activities. In these contexts, OB was closely linked to energy management and the identification of occupations that support rather than deplete personal resources.

OB was also examined among socially excluded or vulnerable populations, including individuals recovering from substance use disorders and former sex workers participating in OT programmes. These studies suggested that engagement in meaningful leisure activities and structured daily routines can contribute to improved occupational competence, adaptive coping strategies, and overall well-being. Participants reported that developing new occupations and routines helped them rebuild their identities and create more stable life structures. However, some studies indicated that the positive effects of interventions may decline over time without continued social and environmental support.

A smaller group of studies examined OB during significant life transitions, such as migration and adaptation to new professional environments. These studies highlighted the dynamic nature of OB and emphasised that major life changes often disrupt established routines, roles, and occupational patterns. Participants described OB as a process of ongoing adaptation that involves establishing new routines, renegotiating roles, and finding meaningful ways to participate in the new social and cultural context. The importance of culturally sensitive support systems and mentoring programmes was particularly emphasised in these studies.

Across all thematic areas, OB was consistently described as a multidimensional and context-dependent construct. The reviewed studies highlight that OB involves not only the distribution of time across occupations but also factors such as meaning, engagement, autonomy, social relationships, and environmental context. Importantly, OB was found to include both subjective and objective dimensions.

While individuals' perceptions of balance are central, occupational therapists play an important role in assessing occupational patterns and supporting individuals in developing sustainable daily routines. The findings of this review confirm that OB is an important concept for understanding health and well-being across diverse populations and contexts. Balanced occupational patterns appear to function as a protective factor, while occupational imbalance may contribute to stress, reduced well-being, and the maintenance of health problems. OT interventions that support OB typically focus on enhancing engagement in meaningful occupations, promoting reflective awareness of daily routines, and developing strategies for managing time, energy, and social roles.

A review of the literature has shown that the concept of OB is important and well integrated into contemporary occupational therapy, but its understanding and application vary depending on context, population, and area of practice. Despite the growing body of research, several challenges remain. OB has not yet been widely examined as a predictive factor for health and well-being. Future research should

*therefore focus on longitudinal designs, the development of standardised measurement tools, and the evaluation of OB interventions across diverse cultural and social contexts. Although definitions and applications vary across contexts, the concept consistently highlights the importance of meaningful and sustainable patterns of everyday occupations for health and quality of life. OT, with its focus on participation in daily occupations, plays a central role in promoting OB and supporting individuals in achieving more satisfying and sustainable ways of living. In Slovenia, OTs encounter challenges in introducing the concept of OB, particularly regarding the translation of the term "occupation," which is recommended by the Slovenian Group for Occupational Science. In practice, there is already an OT's focus towards OB among clients, but significant potential remains for programme development and research in this field.*

### *Izjava o dostopnosti raziskovalnih podatkov*

Članek temelji na raziskovalnih podatkih iz že obstoječih in javno dostopnih virov (besedilni viri, podatkovne baze), ki so navedeni v razdelku »Literatura«.

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