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ZVEZE STROKOVNIH DRUŠTEV MEDICINSKIH SESTER, BABIC IN ZDRAVSTVENIH TEHNIKOV SLOVENIJE

REVIEW OF THE NURSES AND MIDWIVES ASSOCIATION OF SLOVENIA



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OBZORNIK ZDRAVSTVENE NEGE

NAMEN IN CILJI

Obzornik zdravstvene nege (Obzor Zdrav Neg) objavlja izvirne in pregledne znanstvene članke na področjih zdravstvene in babiške nege ter interdisciplinarnih tem v zdravstvenih vedah. Cilj revije je, da članki v svojih znanstvenih, teoretičnih in filozofskih izhodiščih kot eksperimentalne, neeksperimentalne in kvalitativne raziskave ter pregledi literature prispevajo k razvoju znanstvene discipline, ustvarjanju novega znanja ter redefiniciji obstoječega znanja. Revija sprejema članke, ki so znotraj omenjenih strokovnih področij usmerjeni v ključne dimenzije razvoja, kot so teoretični koncepti in modeli, etika, filozofija, klinično delo, krepitev zdravja, razvoj prakse in zahtevnejših oblik dela, izobraževanje, raziskovanje, na dokazih podprto delo, medpoklicno sodelovanje, menedžment, kakovost in varnost v zdravstvu, zdravstvena politika idr.

Revija pomembno prispeva k profesionalizaciji zdravstvene nege in babištva ter drugih zdravstvenih ved v Sloveniji in mednarodnem okviru, zlasti v državah Balkana ter širše centralne in vzhodnoevropske regije, ki jih povezujejo skupne značilnosti razvoja zdravstvene in babiške nege v postsocialističnih državah.

Revija ima vzpostavljene mednarodne standarde na področju publiciranja, mednarodni uredniški odbor, širok nabor recenzentov in je prosto dostopna v e-obliki. Članki v Obzorniku zdravstvene nege so recenzirani s tremi zunanjimi anonimnimi recenzijami. Revija objavlja članke v slovenščini in angleščini in izhaja štirikrat letno.

Zgodovina revije kaže na njeno pomembnost za razvoj zdravstvene in babiške nege na področju Balkana, saj izhaja od leta 1967, ko je izšla prva številka Zdravstvenega obzornika (ISSN 0350-9516), strokovnega glasila medicinskih sester in zdravstvenih tehnikov, ki se je leta 1994 preimenovalo v Obzornik zdravstvene nege. Kot predhodnica Zdravstvenega obzornika je od leta 1954 do 1961 izhajalo strokovno-informacijsko glasilo Medicinska sestra na terenu (ISSN 2232-5654) v izdaji Centralnega higienskega zavoda v Ljubljani.

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SLOVENIAN NURSING REVIEW

AIMS AND SCOPE

Published in the Slovenian Nursing Review (Slov Nurs Rev) are the original and review scientific and professional articles in the field of nursing, midwifery and other interdisciplinary health sciences. The articles published aim to explore the developmental paradigms of the relevant fields in accordance with their scientific, theoretical and philosophical bases, which are reflected in the experimental and non-experimental research, qualitative studies and reviews. These publications contribute to the development of the scientific discipline, create new knowledge and redefine the current knowledge bases. The review publishes the articles which focus on key developmental dimensions of the above disciplines, such as theoretical concepts, models, ethics and philosophy, clinical practice, health promotion, the development of practice and more demanding modes of health care delivery, education, research, evidence-based practice, interdisciplinary cooperation, management, quality and safety, health policy and others.

The Slovenian Nursing Review significantly contributes towards the professional development of nursing, midwifery and other health sciences in Slovenia and worldwide, especially in the Balkans and the countries of the Central and Eastern Europe, which share common characteristics of nursing and midwifery development of post-socialist countries.

The Slovenian Nursing Review follows the international standards in the field of publishing and is managed by the international editorial board and a critical selection of reviewers. All published articles are available also in the electronic form. Before publication, the articles in this quarterly periodical are triple-blind peer reviewed. Some original scientific articles are published in the English language.

The history of the magazine clearly demonstrates its impact on the development of nursing and midwifery in the Balkan area. In 1967 the first issue of the professional periodical of the nurses and nursing technicians Health Review (Slovenian title: Zdravstveni obzornik, ISSN 0350-9516) was published. From 1994 it bears the title The Slovenian Nursing Review. As a precursor to Zdravstveni obzornik, professional-informational periodical entitled a Community Nurse (Slovenian title: Medicinska sestra na terenu, ISSN 2232-5654) was published by the Central Institute of Hygiene in Ljubljana, in the years 1954 to 1961.

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Editorial/Uvodnik

Spiritual and existential care in nursing homes

Duhovno-eksistencialna oskrba v domovih za starejše

Gørill Haugan^{1, *}

Spiritual-existential questions are defined as the fundamental questions of human life, e.g., what makes life worth living and how to cope with the finality of life. Difficulties in finding answers to such questions can result in existential suffering and distress (Grech & Marks, 2017). The European Association for Palliative Care (EAPC, 2022) defines spirituality as *"the dynamic dimension of human life that relates to the way persons (individual and community) experience, express and/or seek meaning, purpose and transcendence, and the way they connect to the moment, to self, to others, to nature, to the significant and/or the sacred"*. Accordingly, in the face of life-changing events (such as birth, trauma, ill health, loss, high age, serious illness) or sadness, spiritual care acknowledges and responds to the human spirit. It may include the need for meaning, for self-worth, for self-expression, for faith support, perhaps for rites, prayers or sacraments, or simply the need for an empathetic listener. Therefore, spiritual care begins with encouraging human contact through compassionate relationships and moves in the direction of what is needed (McSherry et al., 2020).

Nursing is based on a holistic understanding of human health which includes a physical, mental, social, and spiritual/existential dimension. Controlled by the brain, these different dimensions are in constant interaction and form an integrated whole of physical, mental, social, and spiritual/existential aspects (Seligman, 2006, 2012). Accordingly, patients are unique and indivisible physical-psycho-social-spiritual entities in which the body, soul and spirit are integrated and constantly interact with each other. That is, human experiences, expectations, thoughts, and feelings are at the same time spiritual, emotional and physiological states or biochemical conditions in the body that affect the body and thereby also the entire person (Pace-Schotta et al., 2019). Research shows that most diseases, ailments and suffering develop

through interactions)between the spirit, the soul (the mind; our thoughts, feelings and experiences) and the body. Patients' emotions are biochemical bodily realities. Candace Pert (1999), an internationally renowned scholar in the field of stress, shows that the brain communicates with the immune system using "messenger cells", i.e., neuropeptides or transmitters. What is more, all our immune cells are immediately informed of how the brain interprets emotions (e.g., fear, anger, sadness). Several studies show that the count of a certain type of white blood cells termed "natural killer cells" increases during cognitive therapy and different methods of relaxation and visualisation (Haugan, 2021). This process has been described as "bits of the brain floating around the body" (Pert 1999). As explained by Haugan (2021), our emotions and thoughts "float around the body" in the form of protein molecules (peptides) through countless biochemical and physiological processes.

Therefore, rather than mere changes in mood, positive attitude and optimistic expectations are actual biological facts, and optimism has a significantly favourable effect on human health (Seligman, 2006, 2012; Keyes, 2002, 2007, 2014). Recent studies also show that the perception of meaning in life is essential for the maintenance of not only mental and emotional but also physical and functional well-being (Haugan 2014a,b; Mwilambwe-Tshilobo et al., 2019). One of such studies exploring human holistic existence shows that the perceptions of meaning and loneliness have a direct impact on the brain function in older adults (Mwilambwe-Tshilobo et al., 2019), thereby advancing our knowledge of the phenomena of meaning and loneliness. While operating through emotions and experiences, these phenomena also represent physical states that take place in the intrinsic network of the human brain (Mwilambwe-Tshilobo et al., 2019). Health-promoting interventions, adapted to the

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individual's needs and circumstances, therefore affect the entirety of the patient's being (body, mind and spirit). Consequently, phenomena such as anxiety, depression, pain, fatigue and nausea can also be affected through nursing care that addresses the human spirit.

We are currently facing a major transformation in the world's population, with many people around the world reaching very old age. While increased life expectancy is a positive development, it also means that many people have to live with functional and chronic comorbidities and various disabilities, and that many also require long-term care in a nursing home (NH). Moving into an NH is accompanied by numerous losses, illnesses, disabilities, loss of function and social relationships, and the inevitability of life's ending, all of which deepen one's vulnerability and distress. Loneliness and depression have been identified as risks to the emotional well-being of older people (Routsaldo et al., 2006; Savikko, 2008). The NH population is characterised by advanced age, frailty, concurrent diagnoses, mortality, disability, powerlessness, dependency, vulnerability, poor general health and high symptom burden (Haugan, 2014a; Rinnan et al., 2022), which implies a highly existential state of living (Hoben et al., 2016). Consequently, existential issues such as the finality of life, social isolation, loneliness and meaninglessness are indicative of existential suffering among NH residents (Sanderson & Scherbov, 2010; Drageset & Haugan, 2021). In general, NH residents face losses, disease, severe symptom and grief, and spend much of time in passive activities such as doing nothing, sleeping and waiting, which can lead to feelings of boredom, loneliness, meaninglessness, and indignity (Brownie & Horstmannshof, 2011; Slettebø et al., 2017). Moreover, the NH life is institutionalised and as such represents the loss of social relationships, privacy, meaning-in-life, and connectedness (Haugan, 2014b; Barca et al., 2009). Yet, the focus on palliation and spiritual/existential care in NHs has been scarce.

Spiritual care is about supporting a person's search and expression of what presently gives their life meaning and purpose. It is also about fostering their connectedness to self, others, nature, and, for some people, a transcendent being such as God. Such connectedness is seen as extremely important for the experience of joy, meaning in life and self-transcendence (Haugan, 2021). Studies show that a sense of belonging (connectedness) is central to the well-being of NH residents (Prieto-Flores et al., 2011a,b; Philips-Salami et al., 2012; Welsh et al., 2012), suggesting that "feelings of support and trust," "searching for meaning and finding answers," and "a perspective beyond death" are crucial to their spiritual well-being (Thauvoye et al., 2019). In NHs, spiritual care takes place through the interaction between the nurse and the patient, through relational qualities that support and strengthen the human spirit. The experience of being respected, understood, listened

to and taken seriously, of being seen and acknowledged as the person you are, fosters a sense of trust and nourishes the resident's spirit and thus also their body, which in turn strengthens their health and well-being (Haugan, 2014b). Excellent nursing care can therefore be defined as the nurse being "present" with the older adult while performing nursing activities. Such nursing combines competence and attitude as inextricably linked aspects of care.

Through the use of structural equation modelling and the Nurse–Patient Interaction Scale (NPIS) (Haugan et al., 2012), recent studies have shown that the way NH residents perceive interactions with their nurses has a significant impact on their perceived levels of loneliness (Drageset & Haugan, 2021), joy-of-life (Haugan et al., 2020), meaning-in-life (Haugan 2014a,b), sense of coherence (Drageset et al., 2020), hope (Haugan, 2014c), self-transcendence (Haugan et al., 2012), and anxiety and depression (Haugan, Innstrand, & Moksnes, 2013). Pleasant interactions which incorporate spirituality have shown a positive correlation in all these areas. In other words, nursing care characterised by being present and respectful, sincere, friendly, sensitive, and responsive to NH residents' feelings of vulnerability, care that shows understanding for patients' needs, that is compassionate to different types of suffering, and that provides emotional support and affirmation (Naden & Eriksson, 2004; Carter 2009; Moss, 2009; Tejero & Marie, 2012) nurtures residents' spirit and consequently also their health and well-being. A qualitatively positive nurse–patient interaction helps patients to feel a sense of trust, safety, comfort, affirmation, value, dignity, and enhanced well-being (Naden & Eriksson, 2004; Carter 2009; Moss, 2009; Tejero & Marie, 2012).

Spiritual care is embedded in the nurse–patient interaction and based on nurses' listening skills and their ability to establish rapport, i.e., to recognise and nurture the true essence of the resident's experience. In any nurse–patient relationship, nurses rely on their ability to pay attention. They need to pay attention to clearly evaluate the situation and to competently and ethically assist the resident. Nurses need to be attentive to minor indications that may provide valuable information, which is also the case when dealing with various physical conditions, such as dressing wounds or dealing with pain, urinary infections or pneumonia. Hence, spiritual care is not additional care, something extra or added to the general nursing care, but care which attends to the patient's spirit while being present with the patient. In short, it is "being in doing" (Baldacchino, 2010).

Slovenian translation/Prevod v slovenščino

Duhovno-eksistencialna vprašanja so temeljna vprašanja človekovega obstoja, npr. kaj daje življenju smisel in kako se soočiti z njegovo končnostjo.

Težave pri iskanju odgovorov na tovrstna vprašanja lahko povzročijo eksistencialno trpljenje in stisko (Grech & Marks, 2017). Evropsko združenje za paliativno oskrbo (EAPC, 2022) opredeljuje duhovnost kot dinamično razsežnost človekovega življenja, ki je povezana z doživljanjem, izražanjem in/ali iskanjem pomena, namena in preseganja ter načinom doživljanja trenutka, sebe, drugih, narave, pomembnega in/ali svetega. Skladno s tem se duhovna oskrba ob ključnih življenjskih dogodkih (kot so rojstvo, travma, bolezen, izguba, visoka starost, resna bolezen) datakne človeškega duha in se nanj odzove. Tovrstna nega odgovarja na potrebo po pomenu, po lastni vrednosti, po samoizražanju, po veri, morda po obredih, molitvah ali zakramentih, ali preprosto na potrebo po empatičnem poslušalcu. Duhovna oskrba se zato prične z navezovanjem človeškega stika skozi sočutne odnose in se razvija v smeri tega, kar je v danem trenutku potrebno (McSherry et al., 2020).

Zdravstvena nega temelji na celostnem razumevanju človekovega zdravja, ki vključuje telesno, duševno, socialno in duhovno-eksistencialno razsežnost. Te različne dimenzije, ki jih nadzirajo možgani, so v nenehni interakciji in tvorijo integrirano celoto fizičnih, mentalnih, socialnih in duhovnih/eksistencialnih vidikov (Seligman, 2006, 2012). V skladu s tem se tudi pacienti dojema kot edinstvene in nedeljive fizično-psiho-socialno-duhovne entitete, znotraj katerih se odvija nenehna medsebojna interakcija med telesom, dušo in duhom. To pomeni, da so posameznikove izkušnje, pričakovanja, misli in občutki hkrati duhovna, čustvena in fiziološka oziroma biokemična stanja v telesu, ki vplivajo na telo in posledično na celotno osebo (Pace-Schotta et al., 2019). Raziskave kažejo, da do večine bolezni, tegob in trpljenja pride skozi medsebojno delovanje duha, duše (uma; naših misli, občutkov in izkušenj) in telesa. Čustva pacientov so biokemični procesi, ki lahko potekajo le znotraj telesa. Candace Pert (1999), mednarodno priznana raziskovalka na področju stresa, pojasnjuje, da možgani komunicirajo z imunskim sistemom s pomočjo »kurirskih celic« (ang. *messenger cells*), tj. neuropeptidov ali živčnih prenašalcev. Čim možgani interpretirajo neko čustvo (npr. strah, jezo, žalost), so o tej interpretaciji obveščene vse imunske celice v telesu. Raziskave potrjujejo, da se med kognitivno terapijo in različnimi metodami sproščanja in vizualizacije poveča število belih krvnih celic, imenovanih tudi »naravne celice ubijalke« (Haugan, 2021). Pert (1999) ta proces opisuje kot potovanje delčkov možganov po telesu (Pert 1999). Podobno tudi Haugan (2021) pojasnjuje, da naša čustva in misli potujejo po telesu v obliki beljakovinskih molekul (peptidov) v sklopu številnih biokemičnih in fizioloških procesov.

Optimistična naravnost in pozitivna pričakovanja so torej stvarna biološka dejstva, saj ima optimizem dokazano izjemno ugoden vpliv na zdravje (Seligman, 2006, 2012; Keyes, 2002, 2007, 2014). Nedavne raziskave

tudi dokazujejo, da je dojemanje življenjskega smisla bistvenega pomena za vzdrževanje ne le duševnega in čustvenega, ampak tudi fizičnega in funkcionalnega dobrega počutja (Haugan 2014a,b; Mwilambwe-Tshilobo et al., 2019). Ena od raziskav, ki se posvečajo celostnemu obstoju človeka, kaže, da na delovanje možganov starejših oseb močno vplivata dojemanje smisla življenja in osamljenost (Mwilambwe-Tshilobo et al., 2019). Raziskava s tem pomembno pogloblja naše poznavanje konceptov življenjskega smisla in osamljenosti. Ta pojava se izražata ne le skozi čustva in izkušnje, ampak tudi skozi fizična stanja znotraj kompleksnega omrežja človeških možganov (Mwilambwe-Tshilobo et al., 2019). Ukrepi za krepitev zdravja, ki so prilagojeni posamezniku in okoliščinam, v katerih se nahaja, torej pomembno vplivajo na celotno pacientovo bitje (na telo, um in duha). Posledično lahko na pojave, kot so anksioznost, depresija, bolečina, utrujenost in slabost, pozitivno vpliva tudi zdravstvena nega, ki nagovarja človekovega duha.

Svetovno prebivalstvo trenutno doživlja velike spremembe in številni ljudje po vsem svetu dočakajo zelo visoko starost. Daljšanje pričakovane življenjske dobe je samo po sebi sicer pozitivno, vendar pomeni tudi, da mora vse več ljudi živeti s funkcionalnimi in kroničnimi pridruženimi boleznimi ter različnimi telesnimi okvarami ter da mnogi potrebujejo tudi dolgotrajno oskrbo v domovih za starejše občane (DSO). Selitev v DSO spremljajo številne izgube, bolezen, invalidnost, izguba funkcij in socialnih odnosov ter soočenje z neizogibnostjo konca življenja, kar povečuje posameznikovo ranljivost in stisko. V literaturi sta osamljenost in depresija opredeljeni kot faktorja tveganja, ki lahko ogrozita čustveno počutje starejših (Routsaldo et al., 2006; Savikko, 2008). Populacija DSO se sooča z visoko starostjo, šibkostjo, pridruženimi boleznimi, umrljivostjo, invalidnostjo, nemočjo, odvisnostjo, ranljivostjo, slabšim splošnim zdravjem in visokim simptomatskim bremenom (Haugan, 2014a; Rinnan et al., 2022), kar vodi v bivanje na zgolj preživetveni ravni (Hoben et al., 2016). Eksistencialno trpljenje stanovalcev DSO se odraža tudi v prisotnosti eksistencialnih vprašanj, kot so dokončnost življenja, socialna izolacija, osamljenost in pomanjkanje smisla (Sanderson & Scherbov, 2010; Drageset & Haugan, 2021). Na splošno se stanovalci DSO vsakodnevno soočajo z izgubo, boleznijo, hudimi simptomi in žalostjo ter preživijo veliko časa v pasivnih dejavnostih, kot so mirovanje, spanje in čakanje, ki vodijo v občutke zdlgočasnosti, osamljenosti, nesmiselnosti in pomanjkanja dostojanstva (Brownie & Horstmanshof, 2011; Slettebø et al., 2017). Poleg tega je življenje v DSO institucionalizirano in kot tako predstavlja tudi izgubo družbenih odnosov, zasebnosti, smisla življenja in povezanosti (Haugan, 2014b; Barca et al., 2009). Kljub temu se paliativni in duhovni/eksistencialni oskrbi v DSO posveča vse premalo pozornosti.

Duhovna oskrba pomeni podporo človekovemu iskanju in izražanju tega, kar trenutno daje njegovemu življenju smisel in namen. Gre tudi za spodbujanje posameznikove povezanosti s samim seboj, drugimi, naravo in pri nekaterih tudi z nadčutnim (bogom). Takšna povezanost je izjemno pomembna za doseganje občutka veselja in smisla življenja ter samopreseganja (Haugan, 2021). Številne raziskave potrjujejo, da je občutek pripadnosti (povezanosti) osrednjega pomena za dobro počutje stanovalcev DSO (Prieto-Flores et al., 2011a,b; Philips-Salami et al., 2012; Welsh et al., 2012), kar nakazuje, da so občutki podpore in zaupanja, iskanje smisla in odgovorov na eksistencialna vprašanja ter pogled onkraj smrti ključnega pomena za posameznikovo duhovno dobrobit (Thauvoye et al., 2019). V DSO se duhovna oskrba odvija skozi interakcijo med medicinsko sestro in pacientom, skozi odnosne kvalitete, ki podpirajo in krepijo človekovega duha. Izkušnja biti spoštovan, razumljen, slišan in jeman resno, biti viden in priznan takšen, kakršen si, krepi zaupanje stanovalcev in neguje njihovega duha in telo, kar pa posledično krepi tudi njihovo zdravje in počutje (Haugan, 2014b). Odlično zdravstveno nego lahko torej definiramo kot »polno prisotnost« medicinske sestre ob starejši osebi med izvajanjem nege. Tovrstna zdravstvena nega združuje strokovno usposobljenost in negovanje odnosa kot neločljivo povezana vidika nege.

Novejše raziskave na podlagi modeliranja strukturnih enačb in vprašalnika o interakcijah med medicinsko sestro in pacientom Nurse-Patient Interaction Scale (NPIS) (Haugan et al., 2012) kažejo, da način, na katerega stanovalci DSO dojemajo interakcijo z medicinskimi sestrami, pomembno vpliva na samooceno njihove stopnje osamljenosti (Drageset & Haugan, 2021), veselja do življenja (Haugan et al., 2020), smisla življenja (Haugan, 2014 a,b), občutka skladnosti (Drageset et al., 2020), upanja (Haugan, 2014c), samopreseganja (Haugan et al., 2012) ter anksioznosti in depresije (Haugan, Innstrand, & Moksnes, 2013). Pozitivna komunikacija, ki vključuje duhovno komponento, kaže pozitivno korelacijo na vseh teh področjih. Z drugimi besedami: zdravstvena nega, za katero je značilna polna prisotnost v trenutku, spoštljivost, iskrenost, prijaznost, občutljivost in odzivnost na občutke ranljivosti ostarelih; nega, ki izraža razumevanje za njihove potrebe in sočutje do različnih vrst trpljenja in ki zagotavlja čustveno podporo in potrditev (Naden & Eriksson, 2004; Cartter 2009; Moss, 2009; Tejero & Marie, 2012), neguje duha ostarelih in s tem tudi krepi njihovo zdravje in dobro počutje. Pozitivna interakcija z medicinsko sestro pacientom pomaga občutiti zaupanje, varnost, ugodje, potrditev, vrednost, dostojanstvo in boljše počutje (Naden & Eriksson, 2004; Cartter 2009; Moss, 2009; Tejero & Marie, 2012).

Duhovna oskrba, izražena skozi interakcijo med medicinsko sestro in pacientom, temelji na negovalčevi sposobnosti poslušanja in zmožnosti vzpostavitve pozitivnega odnosa, torej prepoznavanja

in negovanja resničnega bistva oskrbovančevega doživljanja. Medicinske sestre se morajo seveda v veliki meri zanašati na svojo sposobnost posvečanja pozornosti, kar velja za vsak odnos med medicinsko sestro in pacientom, saj je ta sposobnost nujno potrebna za natančno ovrednotenje stanja pacienta in za kompetentno in etično pomoč oskrbovancu. Medicinske sestre morajo biti na sposobne izluščiti dragocene informacije podlagi najmanjših indikacij, kar velja tudi pri telesni negi, npr. oskrbi ran, obravnavi bolečine, okužbah sečil ali pljučnici. Duhovna oskrba zato ne pomeni dodatne nege, ne pomeni nečesa dopolnilnega ali dodanega splošni zdravstveni negi, temveč pomeni nego, ki skrbi za pacientovega duha med polno prisotnostjo ob pacientu. Skratka, pomeni prisotnost v početju oziroma »being in doing« (Baldacchino, 2010).

Conflict of interest/Nasprotje interesov

The author confirms that there are no conflict of interest./Avtorica izjavlja, da ni nasprotja interesov.

Literature

- Baldacchino, D. (2010). *Spiritual care: Being in doing*. Malta: Preca Library.
- Barca, M. L., Selbæk, G., Laks, J., & Engedal, K. (2009). Factors associated with depression in Norwegian nursing homes. *International Journal of Geriatric Psychiatry*, 24, 417–425. <https://doi.org/10.1002/gps.2139> PMID:18836988
- Brownie, S., & Horstmanshof, L. (2012). Creating the conditions for self-fulfilment for aged care residents. *Nursing Ethics*, 19(6), 777–786. <https://doi.org/10.1177/0969733011423292> PMID:22354812
- Cartter, M. (2009). Trust, power, and vulnerability: A discourse on helping in nursing. *Journal of Clinical Nursing*, 44(4), 393–405. <https://doi.org/10.1016/j.cnur.2009.07.012> PMID:19850176
- Drageset, J., & Haugan, G. (2021). The impact of Nurse-Patient Interaction on loneliness among nursing home Residents: A questionnaire survey. *Geriatric Nursing*, 42(4), 828–832. <https://doi.org/10.1016/j.gerinurse.2021.04.001> PMID:34090227
- Drageset, J., Taasen, S. E., Kuven, B. M., Eide, W. M., André, B., & Haugan, G. (2020). Sense of coherence and nurse-patient interaction in cognitively intact nursing home patients. *Journal of Holistic Nursing*, 39(1), 16–28. <https://doi.org/10.1177/0898010120942965> PMID:32700622; PMCID:PMC8041445

- The European Association for Palliative Care (EAPC). (2022). EAPC Reference Group on Spiritual Care. Retrieved June, 14, 2022 from <https://www.eapcnet.eu/eapc-groups/reference/spiritual-care/>
- Grech, A., & Marks, A. (2017). Existential suffering part 1: Definition and diagnosis. *Journal of Palliative Medicine*, 20(1), 93–94.
<https://doi.org/10.1089/jpm.2016.0422>
PMid:27918681
- Haugan, G., Hanssen, B., Rannestad, T., Garåsen, H., & Espnes, G. A. (2012). Self-transcendence and nurse-patient-interaction in cognitively intact nursing home patients. *Journal of Clinical Nursing*, 30(3), 147–159.
<https://doi.org/10.1177/0898010111429849>
PMid:22202231
- Haugan, G., Innstrand, S. T., & Moksnes, U. K. (2013). The effect of nurse-patient interaction on anxiety and depression in cognitively intact nursing-home patients. *Journal of Clinical Nursing*, 31(3), 152–163.
<https://doi.org/10.1177/0898010113491460>
PMid:23783663
- Haugan, G. (2014a). Meaning-in-life in nursing-home patients: A correlate to physical and emotional symptoms. *Journal of Clinical Nursing*, 23(7/8), 1030–1043.
<https://doi.org/10.1111/jocn.12282>
PMid:24350911
- Haugan, G. (2014b). Meaning-in-life in nursing home patients: A valuable approach for enhancing psychological and physical well-being. *Journal of Clinical Nursing*, 23(13/14), 1830–1844.
<https://doi.org/10.1111/jocn.12402>
PMid:24175942
- Haugan, G. (2014c). Nurse-patient interaction is a resource for hope, meaning-in-life, and self-transcendence in nursing home patients. *Scandinavian Journal of Caring Sciences*, 28(1), 74–88.
<https://doi.org/10.1111/scs.12028>
PMid:23461626
- Haugan, G. (2021). Nurse-patient interaction: A vital salutary resource in nursing home care. In G. Haugan & M. Eriksson (Eds.), 1st ed, *Health Promotion in Health Care: Vital Salutogenic Theories and Research*. Cham: Springer.
<https://doi.org/10.1007/978-3-030-63135-2>
- Haugan, G., Eide, W. M., André, B., Wu, Xi., V., Rinnan, E., Taasen, S. ... Drageset, J. (2020). Joy-of-life in cognitively intact nursing home patients: The impact of the nurse-patient interaction. *Scandinavian Journal of Caring Sciences*, 35(1), 208–219.
<https://doi.org/10.1111/scs.12836>
PMid:32200564
- Hoben, M., Chamberlain, S. A., Knopp-Sihota, J. A., Poss, J. W., Thompson, G. N., & Estabrooks, C. A. (2016) Impact of symptoms and care practices on nursing home residents at the end of life: A rating by frontline care providers. *Journal of the American Medical Directors Association*, 17(2), 155–161.
<https://doi.org/10.1016/j.jamda.2015.11.002>
PMid:26706418
- Keyes, C. L. (2007). Promoting and protecting mental health as flourishing: A complementary strategy for improving national mental health. *American Psychology*, 62(2), 95–108
<https://doi.org/10.1037/0003-066X.62.2.95>
PMid:17324035
- Keyes, C. L. (2014). Mental health as a complete state: How the salutogenic perspective completes the picture. In G. F. Bauer, O. Hämmig, (Eds.), *Bridging Occupational, Organizational, and Public Health* (pp. 179–92). Dordrecht: Springer.
https://doi.org/10.1007/978-94-007-5640-3_11
- Keyes, C. L. (2002) The mental health continuum: From languishing to flourishing in life. *Journal of Health and Social Behavior*, 43(2), 207–222.
<https://doi.org/10.2307/3090197>
PMid:12096700
- McSherry, W., Ross, L., Attard, J., van Leeuwen, R., Giske, T., Kleiven, T., Boughey, A. & the EPICC Network (2020). Preparing undergraduate nurses and midwives for spiritual care: Some developments in European education over the last decade. *Journal for the Study of Spirituality*, 10(1), 55–71.
<https://doi.org/10.1080/20440243.2020.1726053>
- Moss, B. (2017). *Communication skills in health and social care*. 4th ed. London: Sage.
- Mwilambwe-Tshilobo, L., Ge, T., Chong, M., Ferguson, M., Mistic, B., Burrow, A. ... Spreng, R. N. (2019). Loneliness and meaning in life are reflected in the intrinsic network architecture of the brain. *Social Cognitive and Affective Neuroscience*, 14(4), 423–433.
<https://doi.org/10.1093/scan/nsz021>
PMid:30924854; PMCID:PMC6523421
- Nåden, D., & Eriksson, K. (2004). Understanding the importance of values and moral attitudes in nursing care in preserving human dignity. *Nursing Science Quarterly*, 17(1), 86–89.
<https://doi.org/10.1177/0894318403260652>
PMid:14752958
- Pace-Schott, E. F., Amole, M. C., Auec, T., Balconi, M., Bylsma, L. M., Critchley, H. ... VanElzakkerr, M. B. (2019). Physiological feelings. *Neuroscience & Biobehavioral Reviews*, 103, 267–304.
<https://doi.org/10.1016/j.neubiorev.2019.05.002>
PMid:31125635
- Pert, C. B. (1999). *Molecules of emotion: Why you feel the way you feel*. New York: Simon and Schuster.

- Phillips-Salimi, C. R., Haase, J. E., & Kooken, W. C. (2012). Connectedness in the context of patient-provider relationships: A concept analysis. *Journal of Advanced Nursing*, 68(1), 230–245.
<https://doi.org/10.1111/j.1365-2648.2011.05763.x>
PMid:21771040; PMCID:PMC3601779
- Prieto-Flores, M., Fernandez-Mayoralas, G., Forjaz, M., Rojo-Perez, F., & Martinez-Martin, P. (2011). Residential satisfaction, sense of belonging and loneliness among older adults living in the community and in care facilities. *Health Place*, 17(6), 1183–1190.
<https://doi.org/10.1016/j.healthplace.2011.08.012>
PMid:21924944
- Prieto-Flores, M., Forjaz, M., Fernandez-Mayoralas, G., Rojo-Perez, F., & Martinez-Martin, P. (2011). Factors with loneliness of noninstitutionalized and institutionalized older adults. *Journal of Aging Health*, 23(1), 177–194.
<https://doi.org/10.1177/0898264310382658>
PMid:20881107
- Rchaidia, L., Dierckx de Casterlé, B., De Blaeser, L., & Gastmans, C. (2009). Cancer patients' perceptions of the good nurse: A literature review. *Nursing Ethics*, 16(5), 528–542.
<https://doi.org/10.1177/0969733009106647>
PMid:19671641
- Rinnan, E., Andre, B., Drageset, J., Garåsen, H., Espnes, G. A., & Haugan, G. (2022). Despite symptom severity, do nursing home residents experience joy-of-life: The associations between joy-of-life and symptom severity in Norwegian Nursing Home Residents. *Journal of Holistic Nursing*, 40(2), 84–96.
<https://doi.org/10.1177/08980101211021219>
PMid:34213960; PMCID:PMC9121523
- Routasalo, P., Savikko, N., Tilvis, R., Strandberg, T., & Pitkälä, K. H. (2006). Social contacts and their relationship to loneliness among aged people: A population-based study. *Gerontology*, 52, 181–187.
<https://doi.org/10.1159/000091828>
PMid:16645299
- Sanderson, W. C., & Scherbov, S. (2010). Demography remeasuring aging. *Science*, 329(5997), 1287–1288.
<https://doi.org/10.1126/science.1193647>
PMid:20829469
- Savikko, N. (2008). *Loneliness of older people and elements of an intervention for its alleviation* (doctoral dissertation). Annales Universitatis Turkuensis Turku: University of Turku, Finland.
- Seligman, M. E. P. (2006). *Learned optimism: How to change your mind and your life*. New York: Vintage Books
- Seligman, M. E. P. (2012). *Flourish: A visionary new understanding of happiness and well-being*. New York: Simon and Schuster.
- Slettebø, Å., Sæteren, B., Caspari, S., Lohne, V., Rehnsfeldt, A. W., Heggstad, A. K. T., & Aasgaard, T. (2017). The significance of meaningful and enjoyable activities for nursing home resident's experiences of dignity. *Scandinavian Journal of Caring Sciences*, 31(4), 718–726.
<https://doi.org/10.1111/scs.12386>
PMid:27910119
- Tejero, L., & Marie, S. (2012). The mediating role of the nurse-patient dyad bonding in bringing about patient satisfaction. *Journal of Advanced Nursing*, 68(5), 994–1002.
<https://doi.org/10.1111/j.1365-2648.2011.05795.x>
PMid:21790740
- Thauvoeye, E., Vanhooren, S., Vandenhoeck, A., & Dezutter, J. (2019). Spirituality among nursing home residents: A phenomenology of the experience of spirituality in late life. *Journal of Religion, Spirituality & Aging*, 32(1), 88–103.
<https://doi.org/10.1080/15528030.2019.1631939>
- Welsh, D., Moore, S. L., & Getslaf, B. A. (2012). Meaning in life: The perspective of long-term care residents. *Research Gerontology Nursing*, 5(3), 185–194.
<https://doi.org/10.3928/19404921-20120605-05>
PMid:22716655

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Original scientific article/Izvirni znanstveni članek

Experience of patients with chronic conditions with telemedicine in primary care: A focus group analysis

Izkušnje kronično obolelih pacientov s telemedicinsko obravnavo v ambulantah družinske medicine: analiza fokusnih skupin

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Key words: primary health care; diabetes; qualitative study; hypertension; telemedicine; user experience

Ključne besede: primarno zdravstveno varstvo; diabetes; kvalitativna raziskava; hipertenzija; telemedicina; uporabniška izkušnja

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ABSTRACT

Introduction: Telemedicine is becoming an increasingly important strategy for the management of chronic diseases, which cause a high proportion of deaths in Slovenia. The aim of this study was to investigate user experiences related to the use of telemedicine devices and experiences with telemedicine among patients diagnosed with chronic diseases in primary care.

Methods: We conducted four focus groups with 19 patients with type 2 diabetes and/or hypertension in July 2020 in a Slovenian primary health care centre. Transcripts were analysed according to the principles of inductive thematic analysis.

Results: Using inductive thematic analysis, seven themes were identified: advantages and disadvantages of telemedicine, ease of use of telemedicine, two-way communication with health professionals, impact of telemedicine on patients' health, desire to use telemedicine and its accessibility, influence and support from the environment, and concern for own health. The themes are composed of 10 subthemes and 29 factors.

Discussion and conclusion: Regular use of telemedicine is most strongly influenced by patients' perceived need to use it and instructions from health professionals. Despite patients' positive experiences of using telemedicine devices, an individual assessment of their suitability for each patient is needed, including an assessment of the patient's health status, attitude towards health, and level of digital literacy.

IZVLEČEK

Uvod: Telemedicinska obravnava stopa v ospredje kot strategija za obvladovanje kroničnih nenalezljivih bolezni, ki v Sloveniji povzročijo visok delež smrti. Namen raziskave je bil preučiti, kakšne izkušnje imajo pacienti z diagnozo kronične bolezni tako z uporabo telemedicinske opreme kot s telemedicinsko obravnavo v ambulantni družinski medicine.

Metode: Julija 2020 so bile v enem od slovenskih zdravstvenih domov izvedene štiri fokusne skupine z 19 pacienti s sladkorno boleznijo tipa 2 in/ali visokim krvnim tlakom. Prepisi skupinskih pogovorov so bili analizirani po načelih induktivne tematske analize.

Rezultati: S pomočjo induktivne tematske analize je bilo oblikovanih sedem tem: prednosti in slabosti telemedicinske obravnave, enostavnost uporabe telemedicinske opreme, dvosmerna komunikacija z zdravstvenim osebjem, učinki telemedicinske obravnave na zdravstveno stanje pacientov, želja po uporabi in dostopnosti telemedicinske obravnave, vpliv in opora okolja ter skrb za lastno zdravje. Teme vsebujejo 10 podtem in 29 dejavnikov.

Diskusija in zaključek: Na izvajanje telemedicinskih meritev najbolj vplivajo zaznana potreba pacientov in navodila zdravstvenega osebja. Kljub pozitivni izkušnji pacientov z uporabo telemedicinske opreme je potrebna strokovna presoja primernosti tovrstne obravnave na individualni ravni, ki ne vključuje le zdravstvenega stanja pacientov, marveč tudi oceno njihovega odnosa do zdravja in digitalnih veščin.



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Introduction

Chronic non-communicable diseases are responsible for 70% of all deaths in Slovenia (OECD, 2019), and we are seeing an increase in the number of people with diagnosed diabetes (Eržen, Zaletel, & Nadrag, 2020) and high blood pressure (Božič et al., 2020). At the same time, digital technologies now offer the possibility of using telemedicine in people with chronic diseases, which can significantly improve patients' medical treatment and have a positive impact on their overall quality of life (Gellis et al., 2012; van den Berg, Schumann, Kraft, & Hoffmann, 2012; Petrovčič, Peek, & Dolničar, 2019). Telemedicine refers to remote medical treatment by means of telemedicine devices, which eliminates the need for the patient to be physically present in the clinic (Snoswell et al., 2020). Telemedicine devices include monitoring devices (e.g. blood pressure and/or glucose monitors) and communication devices (e.g. tablets or smartphones running dedicated mobile applications) for the two-way exchange and transmission of data, forming a unified whole that allows health professionals to monitor and treat patients remotely (Goodwin, 2010).

The most common barriers to the adoption of telemedicine services by patients are related to the characteristics of the technology and supporting services (e.g. technical difficulties and inadequate support), telemedicine procedures (e.g., patients not using such devices regularly and seeing repetitive tasks as monotonous and tedious), users' attitudes towards technology (e.g., fear of technology, belief that telemedicine is unnecessary), and the desire for physical contact in medical treatment, expressed, for example, in patients' concerns that the use of telemedicine devices would lead to the loss of face-to-face contact with health professionals (Cimperman, Brenčič, Trkman, & Stanonik, 2013; Joo & Liu, 2021). Such barriers depend on patient characteristics, the type of technology used and the availability of support services for the operation of telemedicine devices, as well as their design and perceived usefulness in terms of their limited flexibility to accommodate patient preferences and needs, as well as in their opacity, imprecision and/or unreliability (Aberer, Hochfellner, & Mader, 2021; Joo & Liu, 2021). Appropriate app design is particularly important for older patients with lower levels of digital skills and who tend to be more reluctant to use health apps on mobile devices.

Barriers to the use of telemedicine are also related to the systemic use of telemedicine and telemedicine devices in health care (Joo & Liu, 2021). In this respect, Slovenia lags far behind the most advanced EU member states (European Commission, 2018; Oliveira Hashiguchi, 2020), as only few telemedicine pilot services have been implemented and researched here (Cimperman et al., 2013; Beštek & Brodnik, 2015; Rudel, Slemenik-Pušnik, Epšek-Lenart, Balorda,

& Lavre, 2016; Cimperman, Brenčič, & Trkman, 2016; Janković et al., 2020; Kaufman, Rudel, & Rudel, 2020). The first comprehensive description of existing telemedicine solutions in Slovenia was provided by Rant & Rudel (2021), who identified the problem of low national utilisation of such services and their integration into the national health and social care system. Existing telemedicine services in Slovenia focus on tertiary (e.g. CEZAR; Rudel et al., 2016), secondary (e.g. T-MED Gluco in diabetes clinics; Kaufman et al., 2020) and primary care (e.g. SOSTOP and E-Health Telekom; Rudel et al., 2016), which includes primary care outpatient clinics (Pečelin & Sočan, 2016). Research has shown positive impacts of telemedicine in terms of improved patient clinical outcomes (Aberer et al., 2021), financial benefits (Snoswell et al., 2020) and positive psychological impact on the user (Gellis et al., 2012; van den Berg et al., 2012). In Slovenia, research related to primary health care has mainly focused on the quality of care, patient outcomes (Petek & Mlakar, 2016) and health promotion (Janković et al., 2020), while there is a lack of comprehensive evaluation of telemedicine with user experience as a key aspect.

Aims and objectives

The aim of the study was to provide an in-depth evaluation of the experience of patients diagnosed with type 2 diabetes and/or hypertension with telemedicine and use of telemedicine devices in a primary care outpatient clinic. We addressed the following research question: What are the patients' experiences with the use of telemedicine equipment and the inclusion in telemedicine services?

Methods

We adopted a qualitative research approach and used the focus group method. This provided a comprehensive and in-depth insight into the factors that contribute to the experience of telemedicine in patients with chronic diseases at the primary level of health care in Slovenia. This is a widely used method of collecting information on the views of health service users and patients with chronic diseases (Lehoux, Poland, & Daudelin, 2006). The focus is on the interaction between focus group participants (Polit & Beck, 2014), who are more willing to share sensitive and personal information and views in group discussions, especially if the focus group has a common characteristic, which in our sample is experience with chronic diseases and participation in intervention research (Guest, Namey, Taylor, Eley, & McKenna, 2017).

Description of the research instrument

We developed a focus group guide that served as the basis for conducting the group discussions. The

topics of the guide were based on existing scientific publications and expanded based on the results of quantitative intervention research (Hvalič-Touzery, Dolničar, Prevodnik, Škafar, & Petrovčič, 2019). The guide was divided into seven thematic units/clusters, within which we asked respondents about their user experiences and expectations, their experiences with telemedicine and telemedicine devices, the impact of the use thereof on chronic disease management, and the desire for their further use. In addition to the key starting points, follow-up questions were prepared for the moderator to encourage reflections and responses from the focus group participants. The full text of the guide and the focus group guide are available from the corresponding author of the article. An example of a thematic question in one cluster: *Did you notice any changes in your life, perhaps in the way you think about your life and illness, while you were using the telemedicine devices? Is there a particular experience you can share? Examples of sub-questions: Were the telemedicine devices helpful? Please describe in what way. Did they give you relief? Did the use of the telemedicine devices represent an additional burden or stress? How did you perceive them yourself? What about your loved ones (family, relatives)? Did they also notice any changes? If yes, which ones?*

Description of the sample

A total of 103 patients who had participated in the intervention study in 2019 (Hvalič-Touzery et al., 2019) were invited to participate in this study. This was a purposive sample. The focus groups included 19 patients with type 2 diabetes and/or hypertension, representing almost one fifth of all participants in the intervention study. Their average age was 59.2 years (age range between 42 and 69 years). Nine patients had a secondary professional/technical qualification, four had vocational training or a lower qualification, and four had a tertiary degree (higher education or university education). Nine patients were retired, nine were currently employed, and one was unemployed. In total, nine men and ten women participated in the study. Twelve patients had hypertension, one had type 2 diabetes and six had both chronic diseases.

Description of the research procedure and data analysis

The focus groups were following the first intervention study in Slovenia, where telemedicine was utilised over a longer period of time and patients with chronic diseases were tested in the selected outpatient clinic in Slovenia. Thus, our participants had already had extensive experience with telemedicine during the three months of the intervention study, in which they had used monitoring devices (blood pressure and/or glucose monitors) and communication devices

(mobile apps on tablets or smartphones) to transfer data and communicate with health professionals. The telemedicine solution tested was developed by Telekom Slovenije (Hvalič-Touzery et al., 2019). The participants of the intervention study were recruited by health professionals in accordance with the protocols established for intervention research, under the supervision of nurses.

After obtaining approval from the Ethics Committee of the Faculty of Social Sciences, University of Ljubljana, we conducted four focus groups in July 2020. In determining the number of participants, we followed the guideline of smaller groups being more appropriate for topics that are relevant to participants and on which participants have an opinion (Nyumba, Wilson, Derrick, & Mukherjee, 2017). Our focus groups were therefore comprised of between three and seven participants. The group discussions, which lasted an average of 60 minutes, were led by a moderator and an assistant. All discussions were audio-recorded and transcribed (84 pages), and all the data obtained were anonymised.

The recorded discussions were analysed by an inductive form of thematic analysis (Braun & Clarke, 2012) using Atlas.ti software (Thomas Muhr – Atlas.ti Scientific Software Development GmbH, Germany). In consultation with the research team (consisting of three researchers), two researchers looked for the patterns (themes) that emerged directly from the data collected. Our coding book was formulated on four levels: Code – Factor – Sub-theme – Theme, where seven themes and ten sub-themes were identified based on 99 different codes (the total frequency of codes in all transcripts was 809). The frequencies reflect the frequency of the responses of focus group participants, but not the significance of the individual themes, which is why they were not interpreted separately.

Results

Using inductive thematic analysis, we identified seven themes and ten subthemes (Figure 1).

Advantages and disadvantages of telemedicine

The most frequently mentioned advantages of telemedicine were the ability to self-monitor blood pressure and/or blood glucose levels, and the ability to have the results of these measurements monitored by health professionals. The latter was seen by the participants as motivation to take these measurements regularly and thus monitor their health, which they would otherwise not do.

I was more encouraged and found it easier to do. To me, this was a kind of motivation. (F, 64)

Patients reported that they did not continue to perform these measurements regularly after the end of the study for lack of motivation. Patients also reported

a sense of safety knowing that health professionals were monitoring the results of their measurements. They also emphasised that they felt overwhelmed with health concerns (fear of the results of measurements, worry about health, feeling controlled by health professionals).

Well yes, I do occasionally, but not as often and not as regularly as I did when I had this device. Because it forces you a bit to do it, which is ok. It only takes a couple of minutes, and it feels ok, not bad, but we humans are just so wired that we need some encouragement. (F, 59)

An important benefit of telemedicine, according to patients, is the availability of measurement results over longer periods of time, which results in a more accurate identification of trends (elimination of the 'white coat syndrome' and familiarisation with the impact of daily

habits on one's health – in particular with the impact of physical activity and nutrition on blood glucose levels), which in turn can form the basis for a change in treatment (e.g. change/initiation of therapy, new diagnosis, referral to a specialist). The frequency of measurements did not contribute to patients feeling overburdened, as they became routine for most. Patients with diabetes took measurements more frequently. Some also felt more burdened at the beginning – especially those who had not been used to taking regular measurements before participating in the study.

Patients found the remote transmission of data to be the most useful feature of telemedicine devices, as it meant they no longer had to wait for a follow-up appointment and could avoid the 'white coat syndrome'. Patients rated communication via

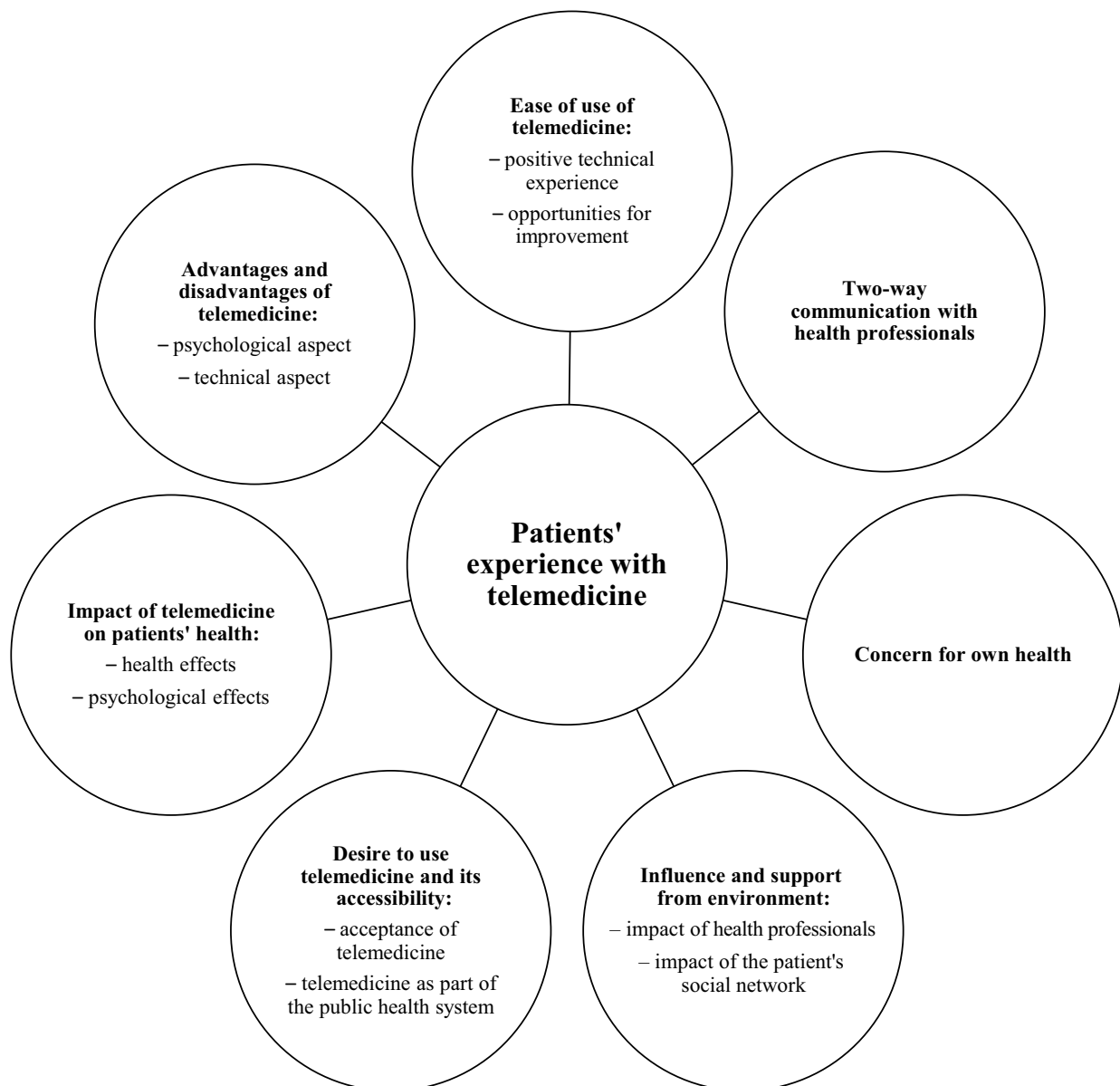


Figure 1: Themes and subthemes

messages in the mobile app as appropriate and time-saving. Communication via mobile devices was found to be more practical and faster than a personal visit to an outpatient clinic. It does not replace the need for a face-to-face visit, but it complements it well. Patients found that health professionals responded more to messages rather than calls.

Yes, and they found the solution faster. For example, if something was wrong, help was immediately available. And to be able to book an appointment and wait two or three days and avoid long queues is also in our favour. This way the doctors would also have a bit more time to talk. (F, 68)

Ease of use of telemedicine

Patients described the mobile app for entering measurements as simple and easy to understand. It was designed in a user-friendly way, with the user being guided through the user interface; using it required only basic knowledge of smartphone use.

I find that the tablet or phone and the software are so straightforward that you can't go wrong. It warns you: you have to do this and that, click here to send. Then it says, done, next time... So I think anyone who's not familiar with using a tablet or smartphone can learn it very quickly. Because it's not a complicated system, no. (F, 41)

Participants were mostly able to develop the necessary skills themselves or with the help of their family or friends. External assistance from health or technical staff was only needed in case of technical problems (e.g. password not working to unlock the mobile application). Such problems were very rare and did not negatively affect patients' confidence in their own digital skills or diminish their interest in telemedicine. On the contrary, some patients suggested additional functions and upgrades for the equipment and interface used: (1) alerts when to take measurements; (2) personalised limits for acceptable values and alerts when these limits are exceeded; (3) the ability to transfer readings to a computer; (4) integration of other smart devices (e.g. smartwatch); and (5) app connectivity with other monitoring devices and not only those used in the intervention study. Patients rated the monitoring devices they used as comparable or better than their own monitoring devices.

Yes, it would be very good if when you take a measurement a signal would remind you that your optimal value has been exceeded. Perhaps with an asterisk or something similar. Some kind of symbol should appear. (M, 64)

Two-way communication with health professionals

Although communication via messages was considered effective, sufficient and desirable, it should be taken into account that no patient experienced a

significant deterioration in their medical condition or required a medical intervention during the study. Had this been the case, patients would have opted for a telephone call or a personal visit to the clinic. The messages were seen by patients as a supplement to, rather than a substitute for, telephone calls and face-to-face visits to the doctor's office. They strongly emphasized the need to receive feedback on whether the measurements have been reviewed. Some patients who had not received feedback questioned whether health professionals had in fact reviewed the results. At the same time, they also expressed an interest in further information about how the patient – nurse – doctor triangle worked (whether the measurements had also been reviewed by the doctor or only by the nurse, or whether they had consulted about the feedback).

It was great because there was a nurse behind it. You knew she was going through it because you could see when she called up the measurements and she would then let you know if there was anything wrong. She could tell you in advance, "Listen, you need to do this or come in early. For me, that was a plus." (F, 41)

Patients expressed understanding of the workload of nurses in outpatient clinics and had not expected an immediate feedback regarding the measurements submitted.

Impact of telemedicine on patients' health

According to the participants, the use of telemedicine led to changes in their medical treatment (e.g. adjustment of therapy, health examinations) and for some to an actual improvement in their health status.

Well, and then I was advised to stop taking pills except for the ones for my pulse, but even with those, the dosage is lower now, and now after I have stopped taking those medications, I feel pretty good. So it was beneficial and it felt good that they could now really see what I was saying. That my blood pressure is lower at home, that it's gone down. (F, 50)

The most significant changes perceived were related to psychological effects: in the course of using telemedicine, patients had developed a more serious concern for their medical condition and felt empowered by the feeling that they were successfully managing their health and were therefore less anxious about it.

I was more disciplined. In other words, I spent more time thinking about it. I paid more attention to really taking those 10,000 steps a day, going out and spending time in the fresh air. And I continue to do so. (F, 64)

Desire to use telemedicine and its accessibility

Most patients found telemedicine beneficial and would recommend it to other people with similar health problems, especially people with serious illnesses or physical impairments who find it difficult

to access the doctor's office.

And one more thing, let's say for the older ones among us – we can still move, which is much better. If someone has difficulty getting around or if it's difficult for them to get to a clinic or if they do not have a ride, this is a great way to just show them from a distance and they can see it immediately. (M, 64)

Patients who considered their physical health to be stable felt that daily data submission and additional monitoring were unnecessary. Therefore, some mentioned that it would have been better for them if the telemedical monitoring had lasted longer and the measurements had been taken less frequently or only occasionally (e.g. every first week of the month). They felt that their health status was changing slowly.

Well, that depends on if you just need it for monitoring purposes and you don't have any actual problems, then most people would not pay for this service, and I probably wouldn't pay for it either, no. Oh, but if there are more serious problems, whatever that might be, like if you're shaking or about to have a stroke or something like that, then it's probably not a question of money any more. (M, 55)

Patients' decision to opt for telemedicine is influenced not only by their specific medical condition and health professionals, but also by the price. They estimate that telemedicine would be more accessible if it were financed by insurance or integrated into the public health system. This would also increase patients' trust in telemedicine and reduce concerns about the protection of personal data. On the other hand, telemedicine marketed by a private company would be less trusted. Patients believe that such a service is more credible and reliable when provided within the public health system. Most patients believe that the primary objective of offering market services in telemedicine is to make a profit, not to promote well-being.

You see, it is most legitimate when it is offered within the health system. As soon as there are other providers, that is not it anymore. It's the same when they call you and say, "We are going to measure your cardiovascular health". But how can you measure cardiovascular health without medical analysis? That means you can only trust medicine and no one else. (F, 67)

Patients also mentioned the potential use of applications with other (own) monitoring devices, which would mean a financial relief for the health system.

Influence and support from the environment

Health professionals have the greatest influence on patients' willingness to engage in telemedicine. Most patients in our sample had made the decision to participate in the intervention study independently, without consulting their family members or loved ones. Patients even expressed doubts about the soundness of the advice given by their family members,

who (like themselves) had no professional or practical experience with telemedicine. The same view applies to the field of health management.

You see, the doctor is the first authority, he knows the most about medicine, while the family's opinion depends on the background of individual members. The people in your family may come from completely different professional backgrounds. And I have the most confidence in medicine. (F, 67)

Although the influence of family members on the decision to use telemedicine is relatively low, patients appreciate their encouragement and willingness to provide technical support in their daily use of telemedicine devices.

Concern for own health

Two patterns were prevalent regarding patients' attitudes towards their own health: (a) active patients who give considerable thought to their health or illness, are aware of the importance of regular health monitoring for the development of appropriate treatment approaches, and strictly follow the doctor's instructions, show initiative and strive to achieve their target blood pressure and/or glucose levels (e.g. by closely monitoring the effects of diet and physical activity); (b) less active patients who are less consistent and take their measurements spontaneously or when they feel unwell.

It is always worth doing something for your health /.../ For myself I can say that I'm active, I go for walks, I do yoga, I do physical work, I do mental work. In short, I have grandchildren around me. And I think I am constantly on the move. Device or no device, I know that I do these things just for me and that I have to do them. (F, 67)

Discussion

With the research question in mind, the authors identified seven main themes related to patients' experiences with telemedicine. Most themes ($n = 5$) relate to patients' experiences of using telemedicine devices and their inclusion in telemedicine treatment, while the remaining two themes relate to the role of health professionals in telemedicine use, and the desire for its continued use.

Similar to previous research (Vermeulen et al., 2013; Su et al., 2019), our study identified the usability of telemedicine and telemedicine devices as a critical aspect of user (patient) experience. The mobile application used was found to be easy to use, intuitive and user-friendly. The acceptance and use of telemedicine and telemedicine devices is most significantly influenced by the perceived need for their use (which depends mainly on the patient's health status) and the instructions given by the health professional, who also has the role of partner

and authority in the medical treatment. This is an important implication for the treatment of type 2 diabetes in primary health care, in which many patients do not have the ability to perform blood glucose measurements themselves. Currently, basic health insurance does not yet cover the cost of monitoring devices, and when they are purchased by patients themselves, systematic awareness of the importance of regular measurements is not yet available to all (Vermeulen et al., 2013). This was also confirmed by the finding that patients with diabetes were extremely enthusiastic to participate in the intervention study (device testing).

Despite patients' positive experiences with the use of telemedicine and telemedicine devices, it should be kept in mind that some patients do not have enough motivation or discipline to monitor their chronic disease by performing regular measurements without external control and encouragement. Such encouragement is mostly given by nurses and/or doctors. Studies conducted in Slovenia have already highlighted the role and influence of health professionals, but they have mainly focused on the process of medical treatment or care (Iljaz, Meglič, Petek, Kolšek, & Susič, 2014; Petek & Mlakar, 2016) and changes in patient outcomes (Petek & Mlakar, 2016), without considering the psychological or motivational aspects. Our study highlights the importance of a partnership relationship and patients' trust in the primary healthcare team (i.e., the nurse and the physician). Because of patient trust, health professionals play a central role not only in the decision to use telemedicine, but also in the selection of patients who would benefit most from this approach. Using health data, an outpatient nurse or doctor can also more easily assess whether a patient possesses the necessary digital skills and whether they are capable to participate in telemedicine without undue psychological distress (Joo & Liu, 2021). This is an important implication for the potential systemic implementation of telemedicine in primary care clinics and beyond.

Based on the results of the study, we can identify specific patient groups who are more or less suitable for participating in telemedicine at the primary care level. Telemedicine is more suitable for patients who feel more responsible for their health and take better care of their health; for younger patients who are more skilled in using new technologies; for 'managed' patients who need only occasional follow-up visits; for patients who have recently been diagnosed with a chronic disease and show a greater potential to learn about their health status; for patients who find it more difficult to attend medical treatment or who, for various reasons, find it more difficult to see a doctor. Telemedicine is less suitable for patients who are less health conscious; for those who would not be able to use the devices independently (family or social implications); for

those who need additional motivation; for those to whom the use of telemedicine would present an excessive psychological burden; for those who do not have sufficient digital skills or support to use the telemedicine devices. As telemedicine provides an integrative approach to medical treatment through direct two-way communication and the active role of patients, its utilisation is beneficial for a wide range of patients with various chronic conditions (Simblett et al., 2018; Donelan et al., 2019). The establishment of an integrated service which would automatically transmit patients' entire history of treatment (e.g. results of measurements and past therapies) from the personal physician to the specialist would also speed up treatment at the secondary level (specialist clinics).

The introduction of telemedicine into the public health or social care system would increase patient confidence and willingness to engage in telemedicine. We have found that patients trust the service more if it is part of the health system as opposed to being a commercial service. Reservations about the marketing of such services are not only tied to cost coverage, but are also affected by participants' view that the primary objective of market providers is to generate profit rather than to improve patients' health (Harris, Alfonso, Stewart, & Moore, 2021; Michaud, Hill, Estabrooks, & Su, 2021). However, this attitude depends on the severity of the patient's medical condition, which also affects the willingness to pay for telemedicine services (Steigenberger, Glatsher-Thoeni, Siebert, & Leiter, 2022). Patients who have a more serious attitude towards their health are also more willing to pay for such services. Given the widening gap between patients in terms of their financial situation, it is essential to include such services in the basket of health services covered by health insurance (Michaud et al., 2021), which is also part of the Diabetes Control Action Plan (Zaletel, 2020).

Although research generally demonstrates patients' willingness to use telemedicine, matching telemedicine with patients' needs in the long term and motivating them to use telemedicine devices on a regular basis is still a major challenge. As has also been confirmed by this study, we can assume that the adoption of this technology is only successful provided that individuals are willing to continue using the technology after the initial usage phase (de Graaf, Ben Allouch, & van Dijk, 2018). The uptake of telemedicine and telemedicine devices seems to be particularly promoted by patients' recognition of their broader potential for health management and a more efficient access to health services, which is dependent on the user's personal characteristics such as perceptions of the usefulness of telemedicine, certainty about one's health, level of personal commitment to treatment, and personal initiative (Hibbard & Greene, 2013; Su et al., 2019; Joo & Liu, 2021). Patient enthusiasm for using telemedicine may also be positively influenced by

healthcare teams in outpatient clinics. The results of this study confirm that the acceptance of telemedicine depends on the positive attitude of patients as well as on the positive attitude of doctors and nurses towards this approach (Asua, Orruño, Reviriego, & Gagnon, 2012; Cimperman et al., 2013). With the introduction of telemedicine, we can successfully address some of the common barriers that negatively influence patient engagement in collaborative treatment of chronic diseases: asymptomatic nature of diseases, side effects of medications, discomfort, and lack of knowledge about the disease in question. One of the most important aims of primary care clinics is health empowerment (Pečelin & Sočan, 2016) so as to prevent the development or progression of chronic diseases by encouraging patient engagement in disease management (Govc Eržen, Vračko, Čuš, & Medved, 2017).

This study, which is one of the first in Slovenia to implement a functioning telemedicine service at the primary level of health care, provides important starting points for further research. In the future, it would be advisable to involve patients in telemedicine services for longer periods of time, to collect clinical data on their health status, and to monitor certain key aspects of their acceptance and effects through quantitative methods in a larger sample of participants. We also note that most initiatives and studies on the introduction of telemedicine in Slovenia have focused on the secondary or tertiary level of health care, while much less attention has been paid to the primary level, which also opens up opportunities for further research. The method of recruitment of participants in the intervention study and the sampling for the focus groups represents a certain limitation of this study. In the intervention study, recruitment was conducted in a single outpatient unit. Expanding the intervention research to include a larger number of outpatient units or clinics would result in a larger sample and thus a more diverse sample structure. This method of sampling (i.e. purposive sampling) does not allow for randomised controlled trials to be conducted, which would be possible in the case of random sampling.

Conclusion

This study has shown that telemedicine has an overall positive impact. This can be seen in the improvement of patients' quality of life and health status, health empowerment, motivation for disease management and an increased sense of safety. Remote access to health care and the ability to transmit data remotely are the most useful and frequently cited features of telemedicine devices, as they allow patients to avoid waiting for their medical examinations, reduce the frequency of doctor visits and eliminate the 'white coat syndrome'. The results of this study provide a solid basis for establishing the procedures for a wider

adoption of telemedicine at the primary level of health care. In future research, the use of telemedicine by the chronically ill should be conducted over longer periods of time and also include other target groups. To evaluate the impact of telemedicine, we recommend the use of mixed methods: in addition to qualitative research, quantitative monitoring (evaluation of user experience via questionnaires and assessment of the clinical condition of patients through an analysis of the measured values) should also be carried out.

Slovenian translation/Prevod v slovenščino

Uvod

Kronična nenalezljiva obolenja v Sloveniji povzročijo 70 % vseh smrti (OECD, 2019), pri čemer smo priča naraščanju števila oseb z znano sladkorno boleznijo (Eržen, Zaletel, & Nadrag, 2020) in oseb z visokim krvnim tlakom (Božič et al., 2020). Digitalne tehnologije ponujajo možnost razvoja telemedicinske obravnave kronično obolelih pacientov, ki lahko bistveno izboljša njihovo zdravstveno obravnavo in pozitivno vpliva na splošno kakovost njihovega življenja (Gellis et al., 2012; van den Berg, Schumann, Kraft, & Hoffmann, 2012; Petrovčič, Peek, & Dolničar, 2019). Telemedicinska obravnava zajema zdravstveno obravnavo na daljavo s pomočjo telemedicinske opreme, pri kateri ni fizične prisotnosti pacienta ob zdravstvenem delavcu (Snoswell et al., 2020). Telemedicinska oprema se nanaša na merilne naprave (npr. merilnik krvnega tlaka in/ali krvnega sladkorja) in komunikacijske pripomočke (npr. tablica z aplikacijo ali mobilna aplikacija na pametnem telefonu) za dvosmerno izmenjavo ter prenos podatkov, ki skupaj tvorijo celoto in zdravstvenemu osebju omogočajo spremljanje in zdravljenje pacientov na daljavo (Goodwin, 2010).

Najpogostejše ovire pri sprejemanju telemedicinske obravnave pri pacientih so povezane z značilnostmi tehnologije in podpornimi storitvami (npr. tehnične težave in podpora), postopkom vključenosti v telemedicinsko obravnavo (npr. pacienti pozabijo na redno uporabo ali se jim ponavljanje zdi monotono in dolgočasno), odnosom do tehnologije (npr. strah pred tehnologijo, prepričanje, da je telemedicinska obravnava nepotrebna) in željo po fizičnem stiku pri zdravstveni obravnavi, ki se odraža npr. v zaskrbljenosti pacientov, da bodo zaradi uporabe telemedicinske opreme izgubili osebni stik z zdravstvenim osebjem (Cimperman, Brenčič, Trkman, & Stanonik, 2013; Joo & Liu, 2021). Ovire temeljijo na značilnostih pacientov, tipu tehnologije in dostopnosti podpornih storitev za delovanje telemedicinske opreme, dizajnu slednje in njeni uporabnosti, ki se odraža v omejeni prilagodljivosti željam in potrebam pacientov, pa tudi v netransparentnosti, nenatančnosti

in/ali nezanesljivosti delovanja (Aberer, Hochfellner, & Mader, 2021; Joo & Liu, 2021). Ustrezen dizajn je pomemben zlasti za starejše paciente z manj razvitimi digitalnimi veščinami, ki so bolj zadržani do uporabe zdravstvenih aplikacij na mobilnih napravah.

Ovire so pogojene tudi s sistemsko razširjenostjo uporabe telemedicinske obravnave in telemedicinske opreme v zdravstvu (Joo & Liu, 2021). Pri tem Slovenija močno zaostaja v primerjavi z najrazvitejšimi članicami EU (European Commission, 2018; Oliveira Hashiguchi, 2020), saj pri nas obstaja le nekaj pilotnih storitev telemedicinske obravnave in z njimi povezanih raziskav (Cimperman et al., 2013; Beštek & Brodnik, 2015; Rudel, Slemenik-Pušnik, Epšek-Lenart, Balorda, & Lavre, 2016; Cimperman, Brenčič, & Trkman, 2016; Janković et al., 2020; Kaufman, Rudel, & Rudel, 2020). Prvi celovit opis obstoječih rešitev v Sloveniji sta pripravila Rant & Rudel (2021), ki sta prepoznala problematiko nizke nacionalne razširjenosti teh storitev in njihove vključenosti v nacionalni sistem zdravstvene ali socialne oskrbe. Obstoječe telemedicinske storitve v Sloveniji so osredotočene na terciarno (npr. CEZAR; Rudel et al., 2016), sekundarno (npr. T-MED Gluco v diabetoloških ambulantah; Kaufman et al., 2020) in primarno raven zdravstvenega varstva (npr. SOSTOP in E-Zdravje Telekom; Rudel et al., 2016), kamor uvrščamo tudi ambulante družinske medicine (Pečelin & Sočan, 2016). Raziskave ugotavljajo pozitivne učinke telemedicinske obravnave z vidika izboljšanja klinične slike pacientov (Aberer et al., 2021), finančnih prednosti (Snoswell et al., 2020) in pozitivnih psiholoških učinkov na uporabnika (Gellis et al., 2012; van den Berg et al., 2012). Raziskave v Sloveniji se na primarni ravni zdravstvenega varstva osredotočajo na zdravstveno oskrbo in spremembe v zdravstvenem stanju (Petek & Mlakar, 2016) ter na promocijo zdravja (Janković et al., 2020), manjka pa celovita evalvacija telemedicinske obravnave, pri čemer je uporabniški vidik eden ključnih.

Namen in cilji

Namen raziskave je bil poglobljeno ovrednotiti izkušnjo pacientov z diagnozo sladkorne bolezni tipa 2 in/ali visokega krvnega tlaka, ki so vodeni v ambulantni družinske medicine (primarna raven zdravstvenega varstva), s telemedicinsko obravnavo in uporabo telemedicinske opreme. V raziskavi smo postavili naslednje raziskovalno vprašanje: Kakšna je izkušnja pacientov z uporabo telemedicinske opreme in vključenostjo v telemedicinsko obravnavo?

Metode

Uporabili smo kvalitativni raziskovalni pristop z metodo fokusnih skupin. Ta nam je omogočil celovit in poglobljen vpogled v dejavnike, ki sooblikujejo

izkušnjo s telemedicinsko obravnavo pri pacientih s kroničnimi boleznimi na primarni ravni zdravstvenega varstva v Sloveniji. Gre za pogosto uporabljeno metodo zbiranja informacij o mnenju pri uporabnikih zdravstvenih storitev in pacientih s kroničnimi boleznimi (Lehoux, Poland, & Daudelin, 2006). Pri tem je v ospredju interakcija med udeleženci (Polit & Beck, 2014), ki v skupinskih pogovorih pogosteje delijo občutljive in osebne podatke ter mnenja, še posebej, ko ima skupina neko skupno značilnost – v našem vzorcu izkušnjo kronične bolezni in sodelovanje v intervencijski raziskavi (Guest, Namey, Taylor, Eley, & McKenna, 2017).

Opis instrumenta

Pripravljen je bil vodič za fokusne skupine, ki je osnova za vodenje skupinskega pogovora. Teme vodiča izhajajo iz obstoječih znanstvenih objav in so bile nadgrajene na podlagi rezultatov kvantitativnega dela intervencijske raziskave (Hvalič-Touzery, Dolničar, Prevodnik, Škafar, & Petrovčič, 2019). Vodič je bil razdeljen na sedem tematskih sklopov, v katerih smo povprašali po uporabniški izkušnji in pričakovanjih, izkušnji s telemedicinsko obravnavo in telemedicinsko opremo, učinkih uporabe na vodenje kronične bolezni ter želji po nadaljnji uporabi. Poleg osrednjih izhodišč smo za moderatorja pripravili podvprašanja za spodbujanje razmislekov in odzivov sodelujočih. Smernice in vodič za izvedbo fokusnih skupin so dostopni pri korespondenčnem avtorju članka, na tem mestu pa navajamo nekaj primerov. Izhodiščno tematsko vprašanje je bilo: *Če pomislite na obdobje uporabe telemedicinske opreme, ste opazili kakšne spremembe v vašem življenju, morda v tem, na kakšen način razmišljate o svojem življenju in bolezni? Imate kakšno posebno izkušnjo, ki bi jo lahko delili z nami?* Primeri podvprašanj: *Vam je telemedicinska oprema pomagala? Prosimo, opišite, kako. Ali vas je navedeno razbremenilo? Vam je uporaba telemedicinske opreme predstavljala dodatno breme, stres? Kako ste to dojemali sami? Kako pa vaši najbližji (družine)? So tudi oni zaznali kakšne spremembe? Če so jih, katere?*

Opis vzorca

K sodelovanju v raziskavi so bili povabljeni 103 pacienti, ki so v letu 2019 sodelovali v intervencijski raziskavi (Hvalič-Touzery et al., 2019). Gre za namenski vzorec. V fokusnih skupinah je sodelovalo 19 pacientov s sladkorno boleznijo tipa 2 in/ali visokim krvnim tlakom, kar predstavlja skoraj petino vseh udeležencev intervencijske raziskave. Njihova povprečna starost je 59,2 leta (starostni razpon 42–69 let). Devet pacientov je imelo srednjo strokovno/tehniško izobrazbo, štirje poklicno ali manj in štirje višjo ali visoko izobrazbo. Devet pacientov je bilo upokojenih, devet delovno aktivnih, en pacient je

bil brezposeln. Skupno je sodelovalo devet moških in deset žensk. Dvanajst pacientov je imelo visok krvni tlak, eden sladkorno bolezen tipa 2, šest pa obe omenjeni kronični bolezni.

Opis poteka raziskave in obdelave podatkov

Izvedba fokusnih skupin je sledila prvi intervencijski raziskavi v Sloveniji, ki je telemedicinsko obravnavo implementirala za daljše časovno obdobje in v testiranje vključila paciente s kroničnimi boleznimi izbranega zdravstvenega doma v Sloveniji. Pacienti so tako imeli celovito izkušnjo s sodelovanjem v telemedicinski obravnavi, saj so v okviru intervencijske raziskave tri mesece uporabljali merilne naprave (merilnik krvnega tlaka in/ali krvnega sladkorja) in komunikacijske pripomočke (tablica z aplikacijo ali mobilna aplikacija na pametnem telefonu) za prenos podatkov in komunikacijo z zdravstvenim osebjem. Testirano telemedicinsko rešitev je razvil Telekom Slovenije (Hvalič-Touzery et al., 2019). Pacienti so bili izbrani s strani zdravstvenega osebja in so opremo uporabljali v skladu s protokoli, določenimi za intervencijsko raziskavo, ki so jih nadzorovale medicinske sestre.

V juliju 2020 smo po pridobljenem soglasju Komisije za Etiko v raziskovanju Fakultete za družbene vede Univerze v Ljubljani izvedli štiri fokusne skupine. Pri določanju števila udeležencev smo sledili vodilu, da so za teme, ki so udeležencem blizu in imajo o njih izdelano mnenje, primernejše manjše skupine (Nyumba, Wilson, Derrick, & Mukherjee, 2017), zato so fokusne skupine vključevale od tri do sedem pacientov. Skupinske pogovore, ki so v povprečju trajali 60 minut, sta izvedla moderator in asistent. Vsi pogovori so bili zvočno posneti in dobesedno prepisani (84 strani), pri čemer so bili vsi pridobljeni podatki anonimizirani.

Zapisane pogovore smo analizirali z induktivno obliko tematske analize (Braun & Clarke, 2012) s programskim orodjem Atlas.ti (Thomas Muhr – Atlas.ti Scientific Software Development GmbH, Nemčija). Dve raziskovalki sta ob posvetovanju s širšo raziskovalno skupino (trije raziskovalci) poiskali vzorce (teme), ki izvirajo neposredno iz zbranih podatkov. Kodirna knjiga je bila zasnovana na štirih ravneh: koda – dejavnik – podtema – tema, pri čemer je bilo na osnovi 99 različnih kod (skupna frekvenca kod v vseh prepisih je 809) identificiranih sedem tem in deset podtem. Frekvence predstavljajo pogostnost odzivov udeležencev fokusnih skupin, ne pa tudi pomembnosti posamezne teme, zato niso interpretirane ločeno.

Rezultati

S pomočjo induktivne tematske analize smo identificirali sedem tem in deset podtem (Slika 1).

Prednosti in slabosti telemedicinske obravnave

Najpogosteje izpostavljeni prednosti uporabe telemedicinske obravnave med pacienti sta možnost samokontrole krvnega tlaka oziroma krvnega sladkorja in možnost spremljanja rezultatov meritev s strani zdravstvenega osebja. Pacienti so slednje izpostavili kot motivacijo za redno izvajanje meritev in spremljanje svojega zdravstvenega stanja, ki je sicer nimajo.

Jaz sem se bolj v pogon spravila, lažje, no. Mi je bila to ena motivacija. (Ž, 64)

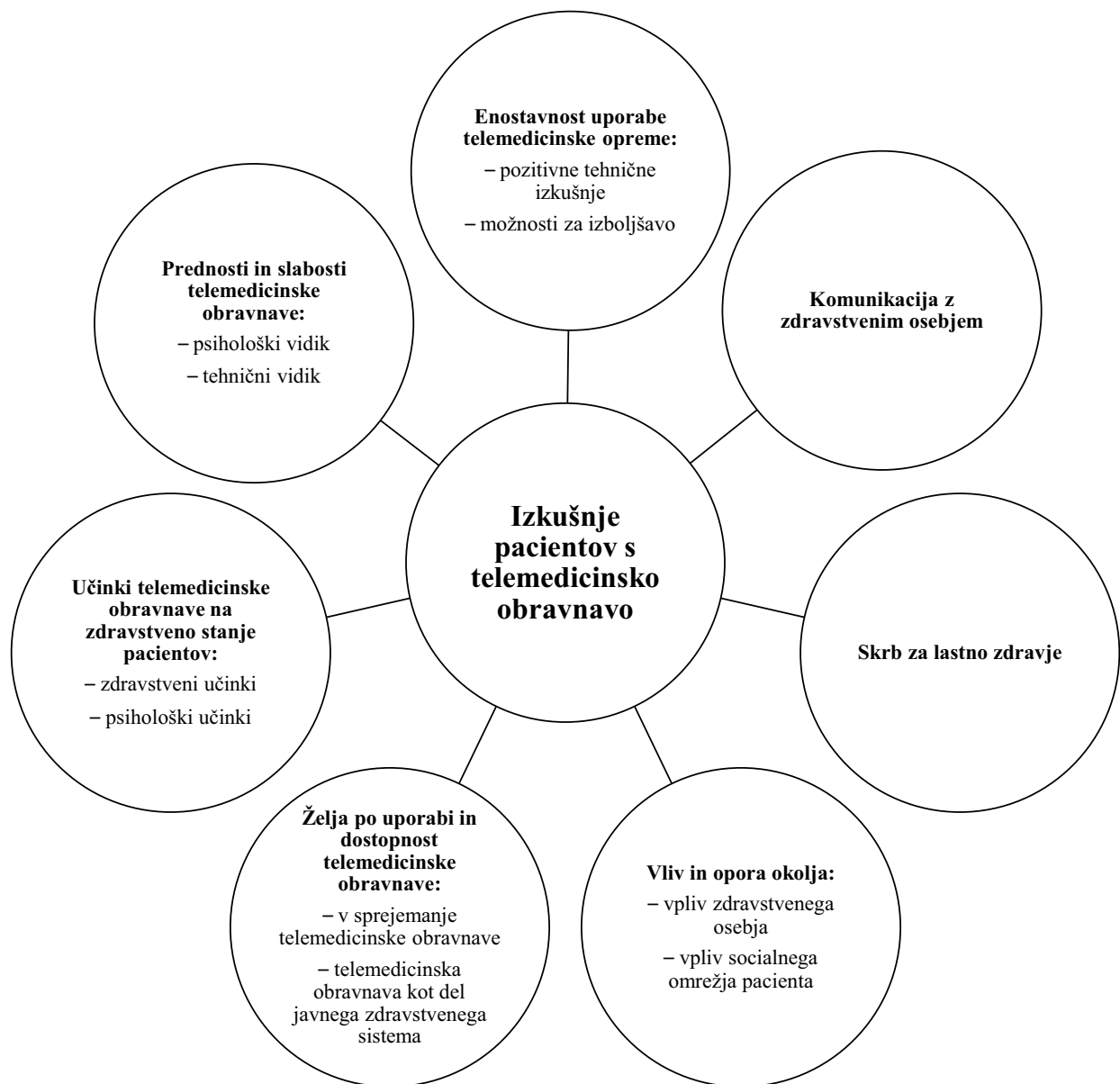
Povedali so, da so meritve po zaključku raziskave izvajali redkeje, saj niso imeli motivacije. Pacienti so poročali tudi o občutku varnosti ob zavedanju, da zdravstveno osebje spremlja rezultate meritev. Izpostavili so tudi preobremenjenost s skrbjo za zdravstveno stanje (strah zaradi rezultatov merjenja, obremenjenost z zdravjem, občutek nadzorovanosti s strani zdravstvenega osebja).

Ja, tisto občasno no, ne tako pogosto in ne tako redno kot takrat, ko sem imela to napravo. Ker to te tudi malo prisili, kar pa ni nič narobe. Saj s tem zgubiš tistih par minut, pa je samo, aaa, ni slabo, ni slabo, ker smo ljudje pač tako naštimani, da rabiš nekaj vzpodbude. (Ž, 59)

Pomembna prednost telemedicinske obravnave je po mnenju pacientov razpolaganje z rezultati meritev v daljšem časovnem obdobju, ki vodi v natančnejšo identifikacijo trendov (izogonejo se učinku »bele halje« in se učijo o vplivu vsakdanjih navad na zdravstveno stanje – predvsem vplivu telesne dejavnosti in prehrane na raven krvnega sladkorja) in lahko predstavlja osnovo za spremenbo zdravljenja (npr. sprememba/ uvedba terapije, nova diagnoza, napotitev na specialistični pregled). Pogostnost opravljanja meritev večinoma ni prispevala k občutku obremenjenosti med pacienti, saj so za večino meritve postale del rutine. Pacienti s sladkorno boleznijo so meritve opravljali pogosteje. Nekateri so se na začetku počutili tudi bolj obremenjene – zlasti tisti, ki pred vključitvijo v raziskavo opravljanja rednih meritev niso bili vajeni.

Najkoristnejša funkcionalnost telemedicinske opreme je po mnenju pacientov posredovanje podatkov na daljavo, kar omogoča, da se izogonejo čakanju na pregled in učinku »bele halje«. Komunikacijo s sporočili v mobilni aplikaciji pacienti ocenjujejo kot ustrezno in časovno učinkovito. Komunikacija z uporabo mobilnih naprav je praktična in hitrejša kot osebni obisk ambulante. Tega sicer ne nadomešča, vendar ga dobro dopolnjuje. Po njihovi oceni se zdravstveno osebje na sporočila bolj odziva kot na klice.

Ja, lažje so rešitev našli, ne ... če je recimo bilo kaj narobe, ne ... takoj si imel pomoč, ne. To pa, da se naročiš pa čakaš dva, tri dni, recimo, da ni gužve, je tut nam v prid, ne. Pa zdravniki mislim, da bi imeli malo več časa za pogovor, ne. (Ž, 68)



Slika 1: Teme in podteme

Enostavnost uporabe telemedicinske opreme

Pacienti so mobilno aplikacijo za vnos meritev opisali kot enostavno in razumljivo: zasnovana je na uporabniku prijazen način; pri uporabi ga vodi in usmerja uporabniški vmesnik; za njeno uporabo zadostujejo osnovne veščine, potrebne za uporabo pametnih telefonov.

Se mi zdi, da je tut tablica oziroma telefon, program tako enostavno narejen, da nimaš kaj zgrešit. Te opozori: aha, še to in to moraš naredit, tukaj pošlji. Potem piše: aha, končano, naslednjič ... Tako da, mislim, da tudi vsak, ki ni navajen tablice al pa telefona, to zelo hitro osvoji. Ker ni kompliciran sistem, ne. (Ž, 41)

Veščine so večinoma lahko usvojili sami ali s pomočjo

bližnjih. Zunanja pomoč medicinskega ali tehničnega osebja je bila potrebna le pri tehničnih težavah (npr. nedelujoče geslo za odklepanje mobilne aplikacije). Ker so bile tovrstne težave zelo redke, niso vplivale na nižje zaupanje pacientov v lastne digitalne veščine ali zmanjšale zanimanja za telemedicinsko obravnavo. Nasprotno, nekaj pacientov je predlagalo dodatne funkcionalne in vmesniške nadgradnje uporabljene opreme: (1) opozorila, kdaj opraviti meritve; (2) personalizirane meje sprejemljivih vrednosti meritev in opozorila, ko so te meje presežene; (3) prenos meritev na računalnik; (4) integracijo drugih pametnih naprav (npr. pametna ura) ter (5) povezljivost aplikacije z drugimi merilnimi napravami in ne zgolj z merilniki, ki so jih uporabljali v intervencijski raziskavi. Pacienti

so uporabljene merilne naprave ocenili kot primerljive oziroma boljše od svojih.

Ja, zelo dobro bi bilo, če bi bilo zraven recimo, ko si izmeriš, ko gre čez tisto mero, ko je zate že mal vprašljiva, da ti da nek signal. Al zvezdico al, al, ne vem kaj. Nekaj bi ti moglo pokazat. (M, 64)

Komunikacija z zdravstvenim osebjem

Čeprav je komunikacija z uporabo sporočil ocenjena kot učinkovita, zadostna in zaželena, je treba upoštevati, da se med raziskavo noben pacient ni srečal z bistveno poslabšanim zdravstvenim stanjem ali zdravstveno intervencijo. V tem primeru bi se pacienti odločili za telefonski klic ali osebni obisk v ambulanti družinske medicine. Sporočila so pacienti dojeli kot dopolnilo in ne nadomestilo telefonskih stikov in osebnih obiskov v ordinaciji. Močno si želijo povratne informacije o tem, ali so bile meritve pregledane, pri čemer so nekateri, ki povratne informacije niso prejeli, izrazili dvom o resničnosti pregledovanja rezultatov. Hkrati so izrazili tudi zanimanje za dodatne informacije glede delovanja trikotnika pacient – medicinska sestra – zdravnik (ali so bile meritve posredovane v vpogled tudi zdravniku ali jih je pregledala le medicinska sestra, ali sta se o povratni informaciji posvetovala ...).

Dejansko je fajn, ker je zadaj stala sestra. Vedel si, da je ona pregledovala, ker se je, tako kot sem rekla, videlo, kdaj je ona pogledala te meritve, in ti je potem tut sporočila, če karkoli ni v redu. Ti je lahko predhodno povedala: »Lej, to pa to moraš naredit al pa tok prej se oglasi, ne. To je bil po eni strani meni plus.« (Ž, 41)

Pacienti so sicer izrazili razumevanje za obremenjenost medicinskih sester v ambulantah družinske medicine in niso pričakovali takojšnjega odziva na posredovane meritve.

Učinki telemedicinske obravnave na zdravstveno stanje pacientov

Po poročanju pacientov so rezultati vključenosti v telemedicinsko obravnavo opazni v spremembah pri njihovi zdravstveni obravnavi (npr. prilagoditev terapije, dodatni pregledi), pri nekaterih pa tudi v dejanskem izboljšanju zdravstvenega stanja.

No in pol smo, zdej smo stran dali tablete, ene pa samo še za pulz, ampak tud ta nizek odmerek, in zdej po teh, ukinitvi, se prav čisto dobro počutim. Tako da je to prav prišlo in čisto mi je bilo fajn, da sem rekla, no lej, zdej pa res vidijo, da je tako, ne. Da imam jaz doma nizek pritisk, da je dol šel, ne. (Ž, 50)

Največje spremembe so bile zaznane v psihološkem smislu: pacienti so v obdobju trajanja vključenosti v telemedicinsko obravnavo do skrbi za svoje zdravstveno stanje razvili resnejši odnos in se zaradi občutka, da uspešno upravljajo s svojim zdravjem, počutili opolnomočene in manj zaskrbljene.

Jaz sem bila bolj disciplinirana. Se pravi, da sem več

razmišljala o tem, ne. Bolj sem skrbela za to, da sem naredila tistih 10.000 korakov vsak dan, ane, da sem šla hodit, da sem bila na zraku. To sem bolj, skrbim tud zdej. (Ž, 64)

Želja po uporabi in dostopnost telemedicinske obravnave

Večina pacientov je telemedicinsko obravnavo ocenila kot koristno zanje in priporočljivo za druge osebe s podobnimi zdravstvenimi težavami, še posebej za osebe s slabšim zdravstvenim stanjem in gibalno ovirane posameznike z omejenimi možnostmi dostopa do zdravnika.

Pa še nekaj, recimo za starejše od nas – mi smo še kolker tok gibljiv, ne, je, to je velik boljše, ne. Tam recimo nekdo, ki je težko gibljiv al pa težko pride v zdravstveni dom, nima tega, nima unga, nima prevoza, pa ne vem kaj še vse, je to super, samo če zdej oni, če imajo ta program, da jim od daleč pokaže, da jim ni treba iskat, da vid. (M, 64)

Pacientom, ki so dojemali svoje zdravstveno stanje kot stabilno, se vsakodnevno posredovanje podatkov in dodatno spremljanje nista zdela potrebna. Zato so nekateri omenjali, da bi jim bolj ustrezalo, če bi telemedicinska obravnava trajala dlje časa in bi bile meritve manj pogoste oziroma občasne (npr. merjenje vsak prvi teden v mesecu). Zdi se jim namreč, da se njihovo zdravstveno stanje spreminja počasi.

To je zdej odvisno, če si samo takole v ... kako bi rekel, v kontrolne namene, da nimaš nobenih problemov, pol si jih večina pomoje ne bi odločila, al pa tut zase bi lahko rekel, da najbrž ne bi plačeval, ne. Aa, če pa pride bolj do resnih težav, ne vem ... Kakšnih sicer, ampak da se to izpostavi, da se včasih, ne vem, tresiš al pa da si na meji kakšne kapi al kej tazga, pol pa verjetno ni več vprašanje denarja. (M, 55)

Na odločitev pacienta za telemedicinsko obravnavo poleg zdravstvenega osebja in njegovega zdravstvenega stanja vpliva tudi cena. Ocenjujejo, da bi bila telemedicinska obravnava dostopnejša, če bi bila financirana s strani zavarovalnice oziroma integrirana v javni zdravstveni sistem. Pacienti bi tako imeli tudi večje zaupanje v telemedicinsko obravnavo in manj skrbi glede varovanja osebnih podatkov. Telemedicinska obravnava, ki bi jo tržilo zasebno podjetje, bi uživala nižje zaupanje, saj so prepričani, da je takšna storitev v okviru javnega zdravstvenega sistema bolj verodostojna in zanesljiva. Med pacienti prevladuje mnenje, da je primarni cilj ponujanja tržnih storitev na področju telemedicinske obravnave dobiček in ne blaginja pacienta.

Lejte, verodostojno je najbolj, če je prek zdravstvenega. Čim so drugi, recimo, nisi več to. To je isto recimo, ko te pokličejo, pa pravijo, ti bomo zmerili ne vem koga vse, ožilje pa to. Ja kako boš meril ožilje brez analiz pa brez skrbi, ne. To pomeni, da zaupaš samo tam zdravstvenemu nivoju, onemu drugemu pa ne. (Ž, 67)

Pacienti so omenjali tudi potencialno uporabo aplikacij z drugimi (lastnimi) merilnimi napravami, s čimer bi finančno razbremenili zdravstveni sistem.

Vpliv in opora okolja

Največji vpliv na pripravljenost pacientov za vključitev v telemedicinsko obravnavo ima zdravstveno osebje. Večina pacientov je odločitev za sodelovanje v intervencijski raziskavi sprejela samostojno in se o tem ni posvetovala z družinskimi člani ali bližnjimi. Pacienti so izrazili celo dvom glede tehtnosti nasvetov svojcev, ki so (podobno kot oni sami) brez strokovnih in praktičnih izkušenj s telemedicinsko obravnavo. To prepričanje tudi sicer velja za področje upravljanja z zdravjem.

Lejte, prvo je zdravnik avtoriteta, on o zdravstvu največ ve, domači krog zavis, kakšen imaš okoli sebe. Maš lahko čist drug krog. In sigurno je to, da ti zdravstvo reče največ, ne. (Ž, 67)

Kljub temu da je vpliv družinskih članov na odločitev za vključitev v telemedicinsko obravnavo razmeroma majhen, pa pacienti kot pomembno ocenjujejo njihovo spodbudo in pripravljenost nudenja tehnične podpore pri vsakdanji uporabi telemedicinske opreme.

Skrb za lastno zdravje

Prevladujeta dva vzorca odnosa pacientov do lastnega zdravja: (a) dejavni pacienti, ki imajo do svojega zdravja oziroma bolezni resen odnos, zavedajo se pomembnosti izvajanja rednih meritev za oblikovanje ustreznega pristopa k zdravljenju in dosledno upoštevajo navodila zdravnikov, so samoiniciativni in si prizadevajo za doseganje ciljnih vrednosti krvnega tlaka in/ali sladkorja (npr. s podrobnim spremljanjem vpliva prehrane in fizične dejavnosti na ravni parametrov); (b) manj dejavni pacienti, ki so pri meritvah manj dosledni in jih opravljajo »po občutku« oziroma ob slabem počutju.

Vedno je vredno narest nekaj, kar je v povezavi z zdravjem /.../ Ker jaz tako, za sebe, lahko rečem, jaz sem aktivna, hodim, na jogo hodim, hodim aktivno, fizično delam, miselno delam. Skratka, okoli sebe imam vnuke. In mislim, da sem skoz v pogonu. Še tako da ... Če bi bila aparatura al pa ne, vem, da pač te stvari delam zase in jih moram delat. (Ž, 67)

Diskusija

Ob upoštevanju raziskovalnega vprašanja so avtorji oblikovali sedem glavnih tem, ki naslavljajo izkušnjo pacientov. Največ tem ($n = 5$) se nanaša na izkušnjo pacientov z vidika uporabe telemedicinske opreme in vključenosti v telemedicinsko obravnavo, po dve temi pa sta vezani na vlogo zdravstvenih delavcev pri sprejemanju telemedicinske obravnave in na željo po njihovi nadaljnji uporabi.

Podobno kot v preteklih raziskavah (Vermeulen et al., 2013; Su et al., 2019) je bila tudi v tej uporabnost telemedicinske opreme in obravnave prepoznana kot kritični vidik izkušnje uporabnikov (pacientov) s kroničnimi boleznimi. Uporabljena mobilna aplikacija je bila ocenjena kot enostavna za uporabo, intuitivna in uporabnikom prijazna. Na prisvojitve in uporabo telemedicinske opreme in telemedicinske obravnave med pacienti najbolj vplivajo zaznana potreba po uporabi (odvisna predvsem od zdravstvenega stanja pacienta) in navodila zdravstvenega osebja, ki ima hkrati vlogo partnerja in avtoritete v zdravstveni obravnavi. To predstavlja pomembno implikacijo za pristop k zdravljenju sladkorne bolezni tipa 2 na primarni ravni zdravstvenega varstva, kjer so večinoma vodeni tisti pacienti, ki pogosto nimajo možnosti izvajanja meritev krvnega sladkorja. Za zdaj predpis pripomočkov v breme osnovnega zdravstvenega zavarovanja še ni možen, če pa si jih kupijo sami, sistematično osveščanje o pomenu meritev še ni na voljo vsem (Vermeulen et al., 2013). To potrjuje tudi ugotovitev, da so bili sodelovanju v intervencijski raziskavi (testiranju opreme) izjemno naklonjeni pacienti s sladkorno boleznijo.

Kljub pozitivni izkušnji z uporabo telemedicinske opreme in telemedicinsko obravnavo se je treba zavedati, da nekateri pacienti sami ne premorejo zadostne motivacije ali discipline, da bi kronično bolezen z rednimi meritvami spremljali tudi brez zunanje kontrole in spodbude. Slednjo najpogosteje predstavljajo medicinske sestre in/ali zdravnik. Nekatero raziskavo v Sloveniji so že izpostavile vlogo in vpliv zdravstvenega osebja, vendar so se osredotočile na proces zdravstvene obravnave oziroma oskrbe (Iljaz, Meglič, Petek, Kolšek, & Susič, 2014; Petek & Mlakar, 2016) in spremembe v zdravstvenem stanju (Petek & Mlakar, 2016), manjkala pa je psihološki oziroma motivacijski vidik. V naši raziskavi ugotavljamo pomen partnerskega odnosa in zaupanja pacienta v tim ambulante družinske medicine (tj. medicinske sestre in zdravnika). Zaradi zaupanja pacientov zavzema zdravstveno osebje osrednjo vlogo ne le pri odločitvi za izvajanje telemedicinske obravnave, pač pa tudi pri izboru pacientov, ki bi imeli od slednje največjo korist oziroma bi jim takšna obravnava ustrezala. Medicinska sestra oziroma osebni zdravnik v ambulanti družinske medicine namreč ob zdravstvenih informacijah lažje oceni tudi to, ali ima pacient potrebne digitalne veščine in ali je sposoben vključitve v telemedicinsko obravnavo brez večjih psihičnih obremenitev (Joo & Liu, 2021). To je pomembno sporočilo za morebitno sistemsko implementacijo telemedicinske obravnave v ambulante družinske medicine in širše.

Na osnovi izsledkov raziskave lahko identificiramo skupine pacientov, ki so za vključitev v telemedicinsko obravnavo na primarni ravni zdravstvenega varstva bolj oziroma manj primerne. Primernejši so pacienti, ki čutijo večjo odgovornost za svoje zdravje in bolj

skrbijo zanj; mlajši in večji uporabe novih tehnologij; »urejeni« pacienti, ki potrebujejo občasne kontrole; tisti, ki so nedavno prejeli diagnozo kronične bolezni in imajo večji potencial za učenje o svojem zdravstvenem stanju; tisti, ki se težje udeležijo zdravstvene obravnave oziroma iz različnih razlogov težje obiščejo zdravnika. Telemedicinska obravnava je manj primerna za paciente, ki so manj ozaveščeni glede svojega zdravja; se za uporabo ne bi odločili samostojno (vpliv družine ali socialnega okolja); potrebujejo dodatno motivacijo; bi jim uporaba telemedicinske obravnave predstavljala preveliko psihično obremenitev; nimajo digitalnih veščin ali zadostne podpore za uporabo telemedicinske opreme. Vključevanje v telemedicinsko obravnavo je smiselno za širok krog pacientov tudi pri drugih kroničnih boleznih, saj telemedicinska obravnava predpostavlja vključujoč pristop k zdravstveni obravnavi z neposredno dvosmerno komunikacijo in dejavno vlogo pacientov (Simblett et al., 2018; Donelan et al., 2019). Z vzpostavitvijo integrirane storitve, s katero bi celotno telemedicinsko obravnavo pacienta (npr. rezultate meritev in pretekle terapije) samodejno prenesli od osebnega zdravnika do specialista, pa bi bila olajšana implementacija tudi na sekundarni ravni (specialistične ambulante).

Zaupanje in s tem pripravljenost za sodelovanje v telemedicinski obravnavi bi bila višja pri njeni implementaciji v javni sistem zdravstvene ali socialne oskrbe. Ugotovili smo, da pacienti storitvi bolj zaupajo, če je ta del zdravstvenega sistema in ne gre za tržno storitev. Zadržki do trženja tovrstnih storitev niso vezani le na kritje stroškov, temveč nanje vpliva tudi mnenje sodelujočih, da je primarni cilj tržnih ponudnikov želja po dobičku in ne skrb za zdravje pacientov (Harris, Alfonso, Stewart, & Moore, 2021; Michaud, Hill, Estabrooks, & Su, 2021). Obenem je to stališče pogojeno z resnostjo njihovega zdravstvenega stanja, ki vpliva tudi na pripravljenost plačila telemedicinske obravnave (Steigenberger, Glatscher-Thoeni, Siebert, & Leiter, 2022). Plačilo so bolj naklonjeni pacienti, ki skrb za zdravje pripisujejo večji pomen. Zaradi povečanja razkoraka med pacienti glede na njihov ekonomski položaj je ključno, da se tovrstne storitve vključijo v košarico zdravstvenih storitev, ki jih krije zdravstvena zavarovalnica (Michaud et al., 2021), kar je tudi del akcijskega načrta za obvladovanje sladkorne bolezni (Zaletel, 2020).

Kljub temu da raziskave splošno kažejo pripravljenost pacientov na vključenost v telemedicinsko obravnavo, velik izziv predstavljata skrb za dolgoročno skladnost telemedicinske obravnave s potrebami pacientov in njihova motivacija za redno uporabo telemedicinske opreme. Le če so posamezniki po začetnem obdobju uporabe pripravljeni še naprej uporabljati tehnologijo, lahko domnevamo, da je bila prisvojitve te tehnologije uspešna (de Graaf, Ben Allouch, & van Dijk, 2018), kar je potrdila tudi ta raziskava. Zdi se, da v kontekstu telemedicinske obravnave in

opreme prisvojitve spodbujajo predvsem pacientova zaznava širših možnosti oziroma potenciala za upravljanje z lastnim zdravjem in učinkovitejšega dostopa do zdravstvenih storitev, ki so pogojene z njegovimi osebnimi značilnostmi, kot so dojetje uporabnosti telemedicinske opreme, pomirjenost glede zdravstvenega stanja, zavzetost za zdravljenje in lastno aktivacijo (Hibbard & Greene, 2013; Su et al., 2019; Joo & Liu, 2021). Na povečanje zavzetosti pacientov za uporabo telemedicinske obravnave lahko vplivajo tudi zdravstveni timi v ambulantah. Predstavljeni rezultati so potrdili pomen pacientove zaznave pozitivnega odnosa in dojetanja telemedicinske obravnave med zdravniki in medicinskimi sestrami, kar vpliva na njeno sprejemanje (Asua, Orruño, Reviriego, & Gagnon, 2012; Cimperman et al., 2013). Z vpeljavo telemedicinske obravnave lahko uspešno naslovimo tudi nekatere splošne ovire, ki zmanjšujejo zavzetost pacientov za sodelovanje pri zdravljenju kroničnih boleznih: asimptomatičnost bolezni, nezaželeni učinki zdravil in slabo počutje ter pomanjkljivo ozaveščanje o bolezni. Prav opolnomočenje na področju zdravja predstavlja pomembno dejavnost ambulant družinske medicine (Pečelin & Sočan, 2016), katerih cilj je preprečevanje razvoja oziroma napredovanja kroničnih boleznih in s tem tudi povečanje pacientove zavzetosti za obvladovanje bolezni (Govc Eržen, Vračko, Čuš, & Medved, 2017).

Raziskava, ki je kot ena izmed prvih v Sloveniji implementirala delujočo telemedicinsko storitev na primarno raven zdravstvenega varstva, postavlja pomembna izhodišča za nadaljnje raziskave. V prihodnje bi bilo paciente smiselno vključiti v tovrstno storitev za daljše časovno obdobje, pridobiti tudi klinične podatke o njihovem zdravstvenem stanju in v primeru večjega vzorca udeležencev spremljati nekatere ključne vidike sprejemanja in učinkov s kvantitativnimi metodami. Prav tako opazamo, da je večina iniciativ in raziskav, ki si prizadevajo za vzpostavitev telemedicinske obravnave v Sloveniji, osredotočenih na sekundarno ali terciarno raven zdravstvenega varstva, precej manj pozornosti pa je namenjene primarni ravni, ki tako ponuja priložnost za nadaljnje raziskovanje. Ne nazadnje pa omejitev raziskave predstavlja način rekrutacije sodelujočih v intervencijski študiji in vzorčenje za fokusne skupine. V okviru intervencijske raziskave je bila rekrutacija namreč izvedena v enem zdravstvenem domu. Z razširitvijo intervencijske raziskave, ki bi potekala v večjem številu zdravstvenih domov oziroma bi vključevala več ambulant družinske medicine, bi zagotovili večji vzorčni okvir in s tem bolj raznoliko strukturo vzorca. Izvedeni način vzorčenja (tj. namensko vzorčenje) ne omogoča izvedbe randomiziranih kontroliranih kliničnih študij (ang. *Randomized Controlled Trials*), ki bi bile mogoče v primeru slučajnega vzorca.

Zaključek

Z raziskavo ugotavljamo pozitivne učinke telemedicinske obravnave, ki se kažejo v boljši kakovosti življenja pacientov, izboljšanju njihovega zdravja, opolnomočenju, večji motivaciji za upravljanje z boleznijo in povečanem občutku varnosti. Dostop do zdravstvene oskrbe na daljavo in možnost posredovanja podatkov na daljavo sta najuporabnejši in najpogosteje izpostavljeni funkcionalnosti telemedicinske opreme, saj pacientom omogočata, da se izognejo čakanju na pregled, manj pogoste obiske zdravnika in izničenje učinka »bele halje«. Ugotovitve raziskave so ustrezna osnova za oblikovanje postopkov širše implementacije telemedicinske obravnave na primarno raven zdravstvenega varstva. V prihodnjih raziskavah bi veljalo uporabo telemedicinske obravnave s strani kroničnih pacientov spremljati dlje časa in vključiti tudi druge ciljne skupine. Za oceno učinka telemedicinske obravnave priporočamo uporabo kombiniranih metod: poleg kvalitativnega tudi kvantitativno spremljanje (ocena uporabniške izkušnje z anketnimi vprašalniki in ocena klinične slike z analizo izmerjenih vrednosti).

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Conflict of interest/Nasprotje interesov

The authors declare that there is no conflict of interest./Avtorji izjavljajo, da ni nasprotja interesov.

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Ethical approval/Etika raziskovanja

On 28 November 2018, we obtained the approval from the Research Ethics Committee of the Faculty of Social Sciences of the University of Ljubljana (No.801-2018-040/JG), and the patients gave their informed consent to participate in the study, to the recording of the interview, and to the publication of the results./Za izvedbo raziskave smo 28. 11. 2018 pridobili soglasje Komisije za etiko v raziskovanju Fakultete za družbene vede Univerze v Ljubljani (št. 801-2018-040/JG), pacienti pa so podali obveščeno soglasje k sodelovanju v raziskavi, snemanju pogovora in objavi rezultatov.

Author contributions/Prispevek avtorjev

Katja Prevodnik contributed to the Introduction, Methods, Results and Discussion sections, as well as the preparation of the manuscript for submission. Her contribution includes the preparation of the theoretical background and literature review, the preparation of the research instrument, data collection, data processing and interpretation, and the coordination of the work of the other authors. Simona Hvalič-Touzery contributed to the Introduction, Methods, Results and Discussion sections, as well as the linguistic revision of the text. She prepared the theoretical background, participated in outlining the starting points of the research instrument and provided an expert review of the interpretation of the data processing. Vesna Dolničar contributed to the Introduction, Methods, Results and Discussion sections. Her contribution includes the conceptual design of the research, expert review of the research instrument and analysis design, and final review of the text. Jelka Zaletel contributed to the Introduction, Results and Discussion sections. She provided expert guidance of the research from a medical perspective, the expert review of the analysis and the implications of the results. Jerneja Laznik contributed to the Methods, Results and Discussion sections. Her contribution is an overview of the research instrument, data processing and interpretation and translation of the abstract. Andraž Petrovčič contributed to the Introduction, Methods, Results and Discussion sections. His contribution is the conceptual design of the research, the management of the data collection and processing, and the interpretation of the results./Katja Prevodnik je sodelovala pri poglavjih Uvod, Metode, Rezultati in Diskusija, vključno s pripravo besedila za oddajo. Njen prispevek je priprava teoretskih izhodišč in pregleda literature, priprava raziskovalnega inštrumenta, zbiranje in obdelava podatkov in njihova interpretacija ter koordinacija dela ostalih avtorjev. Simona Hvalič-Touzery je sodelovala pri poglavjih Uvod, Metode, Rezultati in Diskusija, vključno z jezikovnim pregledom besedila. Njen prispevek je priprava teoretičnih izhodišč, sodelovanje pri izhodiščih

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Literature

- Aberer, F., Hochfellner, D. A., & Mader, J. K. (2021). Application of telemedicine in diabetes care: The time is now. *Diabetes Therapy*, 12(3), 629–639. <https://doi.org/10.1007/s13300-020-00996-7> PMID:33474646; PMCID:PMC7816834
- Asua, J., Orruño, E., Reviriego, E., & Gagnon, M. P. (2012). Healthcare professional acceptance of telemonitoring for chronic care patients in primary care. *BMC Medical Informatics and Decision Making*, 12(1), 139. <https://doi.org/10.1186/1472-6947-12-139> PMID:23194420; PMCID:PMC3520721
- Beštek, M., & Brodnik, A. (2015). Preconditions for successful eCare. *Informatica Medica Slovenica*, 20(1/2), 17–29.
- Božič, N., Knez, J., Dolenc, P., Salobir, B., Erhartič, A., Čegovnik, B. ... Brguljan Hitij, J. (2020). May measurement month 2018: An analysis of blood pressure screening results from Slovenia. *European Heart Journal Supplements*, 22(Suppl. H), H112–H114. <https://doi.org/10.1093/eurheartjsupp/suaa042>
- Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology*, Vol. 2. Research designs: Quantitative, qualitative, neuropsychological, and biological (pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004> PMID:22108560
- Cimperman, M., Brenčič, M. M., Trkman, P., & Stanonik, M. D. L. (2013). Older adults' perceptions of home telehealth services. *Telemedicine and E-Health*, 19(10), 786–790. <https://doi.org/10.1089/tmj.2012.0272> PMID:23931702; PMCID:PMC3787386
- Cimperman, M., Brenčič, M. M., & Trkman, P. (2016). Analyzing older users' home telehealth services acceptance behavior: Applying an Extended UTAUT model. *International Journal of Medical Informatics*, 90, 22–31. <https://doi.org/10.1016/j.ijmedinf.2016.03.002> PMID:27103194
- de Graaf, M. M. A., Ben Allouch, S., & van Dijk, J. A. G. M. (2018). A phased framework for long-term user acceptance of interactive technology in domestic environments. *New Media & Society*, 20(7), 2582–2603. <https://doi.org/10.1177/1461444817727264> PMID:30581364; PMCID:PMC6256720
- Donelan, K., Barreto, E. A., Sossong, S., Michael, C., Estrada, J. J., Cohen, A. B. ... Schwamm, L. H. (2019). Patient and clinician experiences with telehealth for patient follow-up care. *The American Journal of Managed Care*, 25(1), 40–44.
- Eržen, I., Zaletel, J., & Nadrag, P. (2020). *Obvladovanje sladkorne bolezni: Ključni podatki za leto 2019*. Retrieved February 12, 2022 from https://www.nijz.si/sites/www.nijz.si/files/uploaded/podatki/sladkorna_bolezen_slikovno_gradivo_2019_f.pdf
- European Commission. (2018). *Market study on telemedicine*. Retrieved January 30, 2022 from https://ec.europa.eu/health/sites/health/files/ehealth/docs/2018_provision_marketstudy_telemedicine_en.pdf
- Gellis, Z. D., Kenaley, B., McGinty, J., Bardelli, E., Davitt, J., & Ten Have, T. (2012). Outcomes of a telehealth intervention for homebound older adults with heart or chronic respiratory failure: A randomized controlled trial. *The Gerontologist*, 52(4), 541–552. <https://doi.org/10.1093/geront/gnr134> PMID:22241810
- Goodwin, N. (2010). The state of telehealth and telecare in the UK: Prospects for integrated care. *Journal of Integrated Care*, 18(6), 3–10. <https://doi.org/10.5042/jic.2010.0646>
- Govc Eržen, J., Vračko, P., Čuš, B., & Medved, N. (2017). *Timska obravnava v referenčnih ambulantah družinske medicine: Dokument pripravljen za OE NIJZ*. Retrieved December 12, 2021 from https://www.nijz.si/sites/www.nijz.si/files/datoteke/clanek_oe_nijz_timska_obravnava_v_radm_04052017.pdf
- Guest, G., Namey, E., Taylor, J., Eley, N., & McKenna, K. (2017). Comparing focus groups and individual interviews: Findings from a randomized study. *International Journal of Social Research Methodology*, 20(6), 693–708. <https://doi.org/10.1080/13645579.2017.1281601>
- Harris, E., Alfonso, S. A., Stewart, B., & Moore, M. A. (2021). Patients are unaware of clinical recommendations and resources. *Primary Care Diabetes*, 15, 693–698. <https://doi.org/10.1016/j.pcd.2021.03.004> PMID:33858784

- Hibbard, J. H., & Greene, J. (2013). What the evidence shows about patient activation: Better health outcomes and care experiences; fewer data on costs. *Health Affairs*, 32(2), 207–214. <https://doi.org/10.1377/hlthaff.2012.1061>
PMid:23381511
- Hvalič-Touzery, S., Dolničar, V., Prevodnik, K., Škafar, M., & Petrovčič, A. (2019). The importance of patients' user experience with a telehealth system for their evaluation of its psychosocial impacts. *Proceedings of Smart Living Forum 2019, Villach, 14. November 2019* (pp. 19–25).
- Iljaz, R., Meglič, M., Petek, D., Kolšek, M., & Susič, T. P. (2014). Adherence factors to paperless primary healthcare: A focus group study. *Zdravstveno varstvo*, 53(1), 42–54. <https://doi.org/10.2478/sjph-2014-0006>
- Janković, M., Zili, D., Bizjak Bajec, N., Leskovšek, J., Baje, M., & Ilijaz, R. (2020). Telemedicina v referenčnih ambulantah: Pilotna študija. In T. Marčun & E. Dornik (Eds.), *Digitalni mostovi v zdravstvu: e-Kongres MI'2020: zbornik prispevkov in povzetkov* (pp. 1–6). Ljubljana: SDMI.
- Joo, J. Y., & Liu, M. F. (2021). A scoping review of telehealth-assisted case management for chronic illnesses. *Western Journal of Nursing Research*, 44(6), 598–611. <https://doi.org/10.1177/01939459211008917>
PMid:33890848
- Kaufman, A., Rudel, D., & Rudel, L. (2020). Telemedicinsko spremljanje bolnikov s sladkorno boleznijo v diabetoloških ambulantah. In T. Marčun & E. Dornik (Eds.), *Digitalni mostovi v zdravstvu: e-Kongres MI'2020: Zbornik prispevkov in povzetkov* (p. 19). Ljubljana: SDMI.
- Lehoux, P., Poland, B., & Daudelin, G. (2006). Focus group research and "the patient's view". *Social Science & Medicine*, 63(8), 2091–2104. <https://doi.org/10.1016/j.socscimed.2006.05.016>
PMid:16797811
- Michaud, T. L., Hill, J. L., Estabrooks, P. A., & Su, D. (2021). Cost analysis of a remote patient monitoring programme for post-discharge patients with type 2 diabetes. *Journal of Telemedicine and Telecare*. <https://doi.org/10.1177/1357633X20985393>
PMid:33497310
- Nyumba, O. T., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The Use of Focus Group Discussion Methodology: Insights from Two Decades of Application in Conservation. *Methods in Ecology and Evolution*, 9(1), 20–32. <https://doi.org/10.1111/2041-210X.12860>
- OECD. (2019). *State of health in the EU: Slovenia country health profile*. Retrieved November 12, 2022 from <https://www.oecd.org/slovenia/slovenia-country-health-profile-2019-79ba70a2-en.htm>
- Oliveira Hashiguchi, T. (2020). Bringing health care to the patient: An overview of the use of telemedicine in OECD countries. *OECD Health Working Papers*, 116. <https://doi.org/10.1787/8e56ede7-en>.
- Pečelin, S., & Sočan, M. (2016). Referenčne ambulante: Izkušnje diplomiranih medicinskih sester. *Obzornik zdravstvene nege*, 50(2). <https://doi.org/10.14528/snr.2016.50.2.82>
- Petek, D., & Mlakar, M. (2016). Quality of care for patients with diabetes mellitus type 2 in »model practices« in Slovenia: First results. *Zdravstveno varstvo*, 55(3), 179–184. <https://doi.org/10.1515/sjph-2016-0023>
PMid:27703537; PMCID:PMC5031067
- Petrovčič, A., Peek, S., & Dolničar, V. (2019). Predictors of seniors' interest in assistive applications on smartphones: Evidence from a population-based survey in Slovenia. *International Journal of Environmental Research and Public Health*, 16(9), 1623. <https://doi.org/10.3390/ijerph16091623>
PMid:31075879; PMCID:PMC6539287
- Polit, D. F., & Tatano Beck, C. (2014). *Nursing research: Generating and assessing evidence for nursing practice* (8th ed.). London: Lippincott Williams & Wilkins.
- Rant, Ž., & Rudel, D. (2021). Telemedicinske storitve v Sloveniji. In P. Šprajc (Ed.), *40. mednarodna konferenca o razvoju organizacijskih znanosti: vrednote, kompetence in spremembe v organizacijah* (pp. 849–863). Maribor: Univerza v Mariboru, University Press.
- Rudel, D., Slemenik-Pušnik, C., Epšek-Lenart, M., Balorda, Z., & Lavre, J. (2016). Telemedicine support to patients with chronic diseases for better long-term control at home. *Slovenian Medical Journal*, 85(11/12), 676–685. <https://doi.org/10.6016/zdravvestn.1553>
- Simblett, S., Greer, B., Matcham, F., Curtis, H., Polhemus, A., Ferrão, J. ... Wykes, T. (2018). Barriers to and facilitators of engagement with remote measurement technology for managing health: Systematic review and content analysis of findings. *Journal of Medical Internet Research*, 20(7), Article e10480. <https://www.jmir.org/2018/7/e10480/>
PMid:30001997; PMCID:PMC6062692
- Snowell, C. L., Taylor, M. L., Comans, T. A., Smith, A. C., Gray, L. C., & Caffery, L. J. (2020). Determining if telehealth can reduce health system costs: Scoping review. *Journal of Medical Internet Research*, 22(10), Article e17298. <https://doi.org/10.2196/17298>
PMid:33074157; PMCID:PMC7605980
- Steigenberger, C., Flatscher-Thoeni, M., Siebert, U., & Leiter, A. M. (2022). Determinants of willingness to pay for health services: A systematic review of contingent valuation studies. *The European Journal of Health Economics*, 23, 1455–1482. <https://doi.org/10.1007/s10198-022-01437-x>
PMid:35166973; PMCID:PMC8853086

Su, D., Michaud, T. L., Estabrooks, P., Schwab, R. J., Eiland, L. A., Hansen, G. ... Siahpush, M. (2019). Diabetes management through remote patient monitoring: The importance of patient activation and engagement with the technology. *Telemedicine and E-Health*, 25(10), 952–959.

<https://doi.org/10.1089/tmj.2018.0205>

PMid:30372366

van den Berg, N., Schumann, M., Kraft, K., & Hoffmann, W. (2012). Telemedicine and telecare for older patients: A systematic review. *Maturitas*, 73(2), 94–114.

<https://doi.org/10.1016/j.maturitas.2012.06.010>

PMid:22809497

Vermeulen, J., Neyens, J. C. L., Spreeuwenberg, M. D., van Rossum, E., Sipers, W., Habets, H. ... de Witte, L. P. (2013). User-centered development and testing of a monitoring system that provides feedback regarding physical functioning to elderly people. *Patient Preference and Adherence*, 7, 843–854.

<https://doi.org/10.2147/PPA.S45897>

PMid:24039407; PMCID:PMC3770345

Zaletel, J. (2020). *Akcijski načrt za obvladovanje sladkorne bolezni 2020-2021 (ANOSB), poročilo za leto 2020*. Retrieved November 22, 2021 from

<https://www.obvladajmoslaskorno.si/wp-content/uploads/2020/11/>

[Porocilo-2020-k-ANOSB-20-21.pdf](https://www.obvladajmoslaskorno.si/wp-content/uploads/2020/11/Porocilo-2020-k-ANOSB-20-21.pdf)

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Original scientific article/Izvirni znanstveni članek

Direct psychosocial health risk factors in hospital employees: A descriptive study Direktni psihosocialni dejavniki tveganja za zdravje zaposlenih v bolnišnici: opisna raziskava

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Key words: psychophysical health; risks; nurses; work environment

Ključne besede: delovno okolje; psihofizično zdravje; medicinske sestre; tveganja

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ABSTRACT

Introduction: In the work environment, employee health is influenced by indirect and direct psychosocial risk factors which determine employee productivity and efficiency. The aim of the study was to determine the strength of the association and the influence of direct risk factors in the workplace on the psychophysical health of hospital employees.

Method: A survey was conducted among a group of 112 out of 994 randomly selected general hospital employees. A standardised questionnaire on managing psychosocial risks and absenteeism (Cronbach $\alpha = 0.915$) was used as the measurement instrument. We used quantitative data analysis to determine the correlations between the variables and regression analysis to determine the strength of the influence of the independent variables on the psychophysical health of hospital employees.

Results: Respondents most frequently reported pain in the muscles of the shoulders, neck and/or upper limbs ($n = 44$, 39.3%), and feeling overburdened and fatigued ($n = 52$, 46.6%). Four of the six direct psychosocial risk factors were significantly correlated with hospital employees' psychophysical health: work environment, work equipment and physical exertion ($r_s = 0.385$, $p < 0.01$); stress resulting from socio-demographic circumstances ($r_s = 0.401$, $p < 0.01$); pace of work ($r_s = 0.319$, $p < 0.01$); and work relationship with superiors ($r_s = 0.261$, $p < 0.01$). Psychophysical health was found to be significantly associated with ($R^2 = 0.18$, $p < 0.01$) work environment, work equipment and physical exertion ($R^2 = 0.15$, $p < 0.05$), as well as stress resulting from socio-demographic circumstances ($R^2 = 0.08$, $p < 0.05$).

Discussion and conclusion: Respondents need more direct supervision, consideration of their opinion in decision-making at the organisational level and more flexibility in terms of time constraints at work. It was found that the feelings of being overburdened and fatigued were mainly due to working night shifts, and that the most common health problem – neck, shoulder and arm pain – was due to heavy lifting and insufficient breaks from work.

IZVLEČEK

Uvod: V delovnem okolju na zdravje zaposlenih vplivajo indirektni in direktni psihosocialni dejavniki tveganja, ki določajo storilnost in učinkovitost zaposlenega. Namen raziskave je bil ugotoviti moč povezanosti direktnih dejavnikov tveganja pri delu na psihofizično zdravje zaposlenih v bolnišnici.

Metode: Izvedena je bila presečna raziskava na 112 izmed 994 naključno izbranih zaposlenih v splošni bolnišnici. Kot merski instrument je bil uporabljen vprašalnik *Obvladovanje psihosocialnih tveganj in absentizma* (Cronbach $\alpha = 0,915$). S kvantitativno analizo podatkov je bila raziskana povezanost med spremenljivkami in z regresijsko analizo moč neodvisnih spremenljivk na psihofizično zdravje zaposlenih.

Rezultati: Anketiranci so izmed težav z zdravjem najpogosteje navedli bolečine v mišicah ramen, vratu in/ali zgornjih udih ($n = 44$, 39,3 %), počutijo se preobremenjeni in utrujeni ($n = 52$, 46,6 %). S psihofizičnim zdravjem zaposlenih se značilno povezujejo štirje od šestih direktnih psihosocialnih dejavnikov tveganja, in sicer so ti delovno okolje, delovna oprema in fizične obremenitve ($r_s = 0,385$, $p < 0,01$); obremenitve kot posledica sociodemografskih okoliščin ($r_s = 0,401$, $p < 0,01$); delovna obremenitev in hitrost poteka dela ($r_s = 0,319$, $p < 0,01$); in; odnos zaposlenega z nadrejenimi ($r_s = 0,261$, $p < 0,01$). Psihofizično zdravje pojasnjujejo ($R^2 = 0,18$, $p < 0,01$) delovno okolje, delovna oprema in fizične obremenitve ($R^2 = 0,15$, $p < 0,05$) ter obremenitve kot posledica sociodemografskih okoliščin ($R^2 = 0,08$, $p < 0,05$).

Diskusija in zaključek: Anektirani potrebujejo več neposrednega nadzora, boljše upoštevanje njihovega mnenja pri odločanju na nivoju organizacije in večjo prilagoditev časovnih rokov pri delu. Preobremenjenost in utrujenost izhajata predvsem iz nočnega dela, najpogostejša težava z zdravjem – bolečine v vratu, ramenih in rokah – pa je povezana z dvigovanjem bremen in prekratki odmori med delom.

Introduction

Psychosocial risk factors in the workplace affect all employees regardless of their position, staffing levels or the activity of their work establishment (Kralj et al., 2011). Direct psychosocial risks in the workplace include physical, chemical and biological risks arising from the work environment, work equipment and level of physical exertion, content of work, workload, pace of work, work schedule, employees' work relationship with their superiors, and stress arising from employees' socio-demographic circumstances. The work environment in health care is one of the most hazardous work environments, as workers are exposed to excessive workloads and physical exertion, a fast pace of work, an unstable schedule and lack of appropriate equipment (Šprah & Dolenc, 2014). In health care, work often takes place in an unhealthy work environment characterised by disordered employee relations, poor communication, conflict, violence, disrespect, resistance to change, lack of understanding, and harassment. Health professionals are frequently affected by lack of breaks during work, inappropriately scheduled work days, insufficient help from their superiors, and high work intensity. Such unhealthy work environments increase the risk of illness and injury (Ritter, 2011; Andersen, Lønning, Bjørnevl, & Fagerstör, 2016).

The work of nurses carries even more risk due to physical exertion, heavy lifting, poor workplace ergonomics and inadequate work equipment. Psychosocial risks for nurses also arise from unpredictable work schedules, shift and night work, and the lengthening of working days, which can lead to sleep deprivation and fatigue and can result in profound health changes, higher incidence of errors and absenteeism (De Oliveira et al., 2014; Peršolja, Mišmaš, & Jurdana, 2018).

For employees to feel well, both physically and mentally, their work environment should be well organised (Galletta, Portoghese, Ciuffi, Sancassiani, D' Aloja, & Campagna, 2016). A safe work environment is one which provides training and knowledge enhancement and ensures adequate and appropriate work equipment (Er & Sokmen, 2018). Managers play an important role in this regard, as they can motivate employees to undergo medical check-ups and support them in protecting their health and well-being during the workday (Čehovin Zajc & Kohont, 2017). Moreover, a healthy work environment increases nurses' productivity, enhances their well-being and reduces stress and burnout rates (Er & Sokmen, 2018). One of the challenges for work establishments is therefore to create an appropriate and healthy work environment which will result in the required level of work performance, efficiency and productivity (Raziq & Maulabakhsh, 2015).

Aims and objectives

The aim of the study was to identify the direct psychosocial risk factors for employee health so as to determine the strength of their correlation with general hospital employees' psychophysical health. We focused on direct risk factors such as workload and pace of work, work schedule, content of work, work environment, work equipment and physical exertion, stress resulting from employees' socio-demographic circumstances and employees' work relationship with superiors. Our main research question was as follows: To what extent are direct psychosocial risk factors associated with the psychophysical health status of hospital employees?

Our additional research questions were as follows:

- How are workload and pace of work related to the employees' psychophysical health status?
- How is the work schedule related to the employees' psychophysical health status?
- How is the content of work related to the employees' psychophysical health status?
- How are the work environment, work equipment and physical exertion related to the employees' psychophysical health status?
- How is the stress resulting from socio-demographic circumstances related to the employees' psychophysical health status?
- How is employees' work relationship with superiors related to their psychophysical health status?

Methods

We used a descriptive quantitative method, in which data were collected by means of a cross-sectional questionnaire.

Description of the research instrument

The measurement instrument used was the freely available standardised survey questionnaire *Orodje za obvladovanje psihosocialnih tveganj in absenzizma/ Tool for the management of psychosocial risks and health-related absenteeism* (OPSA) (Šprah & Dolenc, 2014), a closed-type questionnaire containing 141 questions. The OPSA instrument was shown to be reliable (Cronbach $\alpha = 0.915$).

The questionnaire consists of two parts. The first part contains socio-demographic and medical data (Table 1). The questions in the first part of the questionnaire are of the closed type. The second part of the questionnaire consists of 130 statements measuring psychosocial stress in the respondents' work establishment. Respondents indicate their answers on a five-point Likert scale (1—Strongly Disagree or Does not Apply to Me ; 2—Slightly Agree or Seldom Applies to Me ; 3—Somewhat Agree or Sometimes Applies to Me. ; 4—Quite Agree or Often

Table 1: *Indices and variables included*

<i>Index</i>	<i>Variables</i>
Socio-demographic data	Gender; age; level of educational attainment; region of residence and whether place of employment is in the respondent's region of residence
Health data	Hearing problems; vision problems; skin conditions; spinal problems; lower limb muscle pain; digestive disorders; respiratory problems; cardiovascular disorders; hormonal disorders; metabolic disorders; injuries; mood disorders; neurological disorders and other problems; reason for and duration of sick leave, long-term health problems (overwork, fatigue, lack of energy, exhaustion, communication problems, insomnia); the impact of these problems on the performance of daily activities; work-life balance; satisfaction with current health status; desire to change jobs or employers.
Psychophysical health	I feel anxious, worried or irritable; I have frequent or persistent physical pain or suffer from a chronic physical illness; due to my feelings of persistent sadness, excessive anxiety and distress, I have already considered or sought professional help; I have poor immunity to illness.
Workload and pace of work	The scope of my work tasks is limited; I perform several different work tasks at the same time; my work is very demanding; the scope of my work tasks is extensive; my work involves working under tight time constraints; my pace of work depends on how quickly or qualitatively the work is done by my colleagues; my work establishment has unrealistic expectations of me in terms of the amount of work I have to do; my employer assigns me additional work on top of my regular work.
Work schedule	I work shifts; my working hours are longer than eight hours; I work night shifts; my working hours are unpredictable; I have too few breaks during work; I have few opportunities to leave the workplace during working hours.
Content of work	My work is not demanding; my work routines change constantly; my work is monotonous or involves little work task variety; I face unforeseen difficulties at work; my work tasks change frequently; I have to participate in raising financial resources to receive a full salary or to keep my job.
Work environment, work equipment and physical exertion	I am exposed to harmful environmental factors (noise; heat; cold; gases; fumes; dust; vibrations; glare); at work, my posture is restricted for long periods of time (sitting; standing); I have already witnessed a serious work accident or injury to a colleague at my workplace; I have difficulty accessing my work or protective equipment or it is poorly maintained; there are many people in my work area; there is a high likelihood of work-related accidents occurring at my workplace (working at heights; working on construction sites; working in transport); I lift heavy loads at work; my work involves repetitive movements; I have already had an accident or sustained an injury at my workplace; my work also takes place outdoors; my work procedures are dangerous (e.g. the use of force).
Stress resulting from socio-demographic circumstances	My salary is not enough to meet my personal needs; my financial situation is poor; my living conditions are poor (small apartment; no sanitary facilities; no central heating; it takes me a long time to reach the workplace from my home due to poor transport links; the nearest health facility is very far from my place of residence; I am heavily in debt; it seems to me that there is a general insecurity in society which affects my work and well-being; the kindergarten is far from my home and that of my child).
Work relationship with superiors	I feel that my work is overly controlled by my superior or employer; I have little influence on decision-making in my work establishment (in terms of work schedule, colleagues, work tasks, business policies); if a problem arises at work, I have few options to solve the problem and even these are predetermined; I have little control over the content, schedule and pace of work.

Applies to Me; 5—Strongly Agree or Always Applies to Me). The second part of the questionnaire covers psychosocial stress, which is divided into seventeen areas. These areas are further divided into direct and indirect health risks. For the purpose of this study, statements referring to direct risk factors for employee health were used (Table 1).

Description of the sample

The target population was the employees of a general hospital ($n = 994$) who were at work at the time of the

survey. The sample size was calculated to at least 112 subjects with a risk of 5 per cent. The sample was based on random selection and included 130 respondents, i.e. 13.1% of all employees. A total of 113 questionnaires were returned, i.e. 86.9% of the total distributed questionnaires, of which 112 (86.1%) were correctly and fully completed, and were therefore included in the analysis.

In total, 88 women (78.6%) and 24 men (21.4%) participated in the study. Most respondents had secondary school ($n = 37$, 33%) or higher vocational school ($n = 37$, 33%) qualifications. The majority of respondents ($n = 98$, 87.5%) were between 18 and 50

years old and lived ($n = 99$, 88.4%) in the same region where they were employed.

Description of the research procedure and data analysis

Respondents were informed about the procedure of the study, the possibility of refusing to participate, and anonymity. The study was conducted at the selected institution through personally delivered paper questionnaires in October and November 2018. Questionnaires were distributed to randomly selected employees who were at work on the day of the survey. The completed questionnaires were collected in closed envelopes in a postbox at an internally agreed location.

Statistical data analysis was conducted using SPSS 23.0 for Windows. The characteristics of the sample are represented by frequency (n) and proportion (%), as well as the mean (m) and standard deviation (s). The assessment of the normality of data distribution, which was calculated using the Kolmogorov-Smirnov and Shapiro-Wilk tests, showed an uneven distribution for most variables. We therefore performed a Spearman correlation analysis to determine correlations, as well as a regression analysis. The level of statistical significance was set at $p < 0.05$. We used Microsoft Excel 2010 to design the charts and tables.

We determined the independent and dependent variables by compiling new variables (indices) from a large number of variables measuring the same concept. The newly obtained variables are of the interval type. The psychophysical health of the respondents was considered as a dependent variable.

Results

Almost one third of the respondents ($n = 31$, 27.7%) had been on sick leave in the past 12 months, of whom there were 26 women (83.9%) and five men (16.1%). For 40.6% ($n=13$) of the respondents, the sick leave had lasted between fifteen and 30 days, 25% ($n=8$) of the respondents had been on sick leave for up to six days, and two (1.8%) had been on sick leave for more than one month.

In the last 12 months, respondents had most frequently experienced pain in the muscles of the shoulders, neck and/or upper limbs ($n = 44$, 39.3%), as well as spinal problems ($n = 39$, 34.8%) (Figure 1). Pain in the muscles of the shoulders, neck and/or upper limbs is associated with lifting loads ($r_s = 0.247$, $p = 0.009$).

Respondents reported a variety of long-term health conditions. Feeling overburdened and fatigued was reported most frequently ($n = 52$, 46.6%), followed by lack of energy and exhaustion ($n = 43$, 38.4%). Feeling overburdened and fatigued was found to be significantly associated with working night shifts ($r_s = 0.266$, $p = 0.005$) and with insufficient number of breaks from work ($r_s = 0.199$, $p = 0.036$). Similarly, exhaustion and lack of energy are associated with insufficient breaks from work ($r_s = 0.229$, $p = 0.015$) and insufficient number of permitted departures from the workplace ($r_s = 0.236$, $p = 0.012$). Despite these issues, respondents were satisfied with their health, for as many as 62.5% ($n = 70$) answered this question with 4 — I am satisfied with my health or 5 — I am very satisfied with my health (on a scale of 1 to 5) ($m = 3.62$, $s = 0.903$).

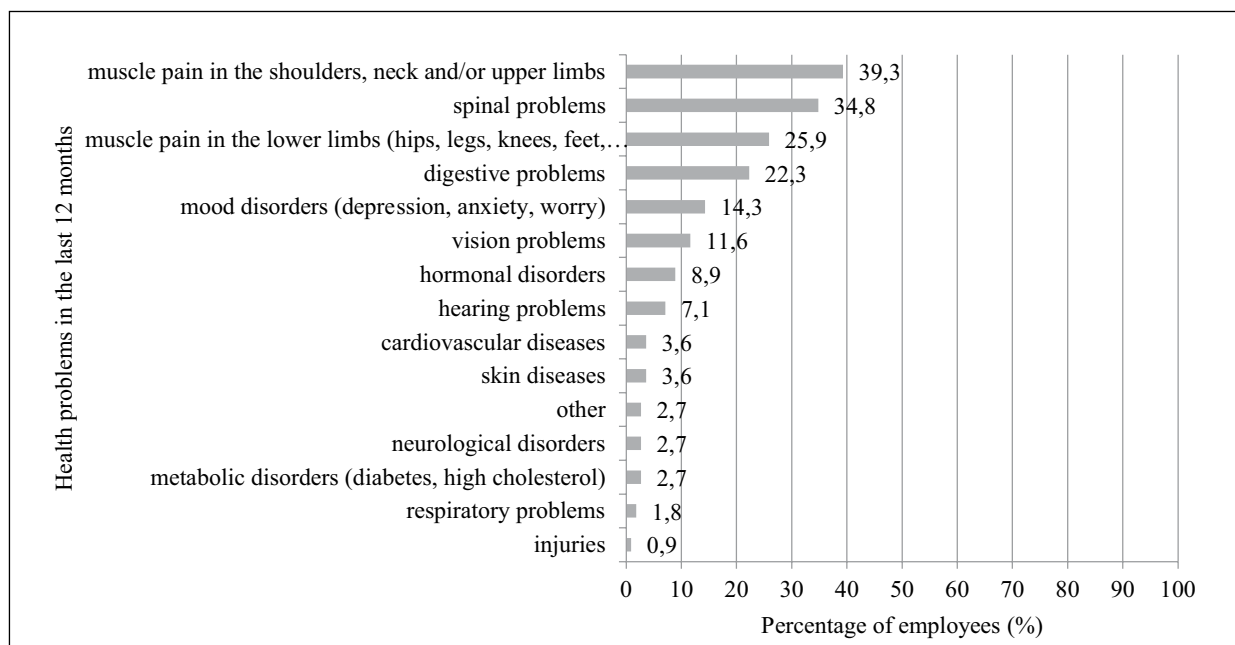


Figure 1: Employees' health problems in the last year

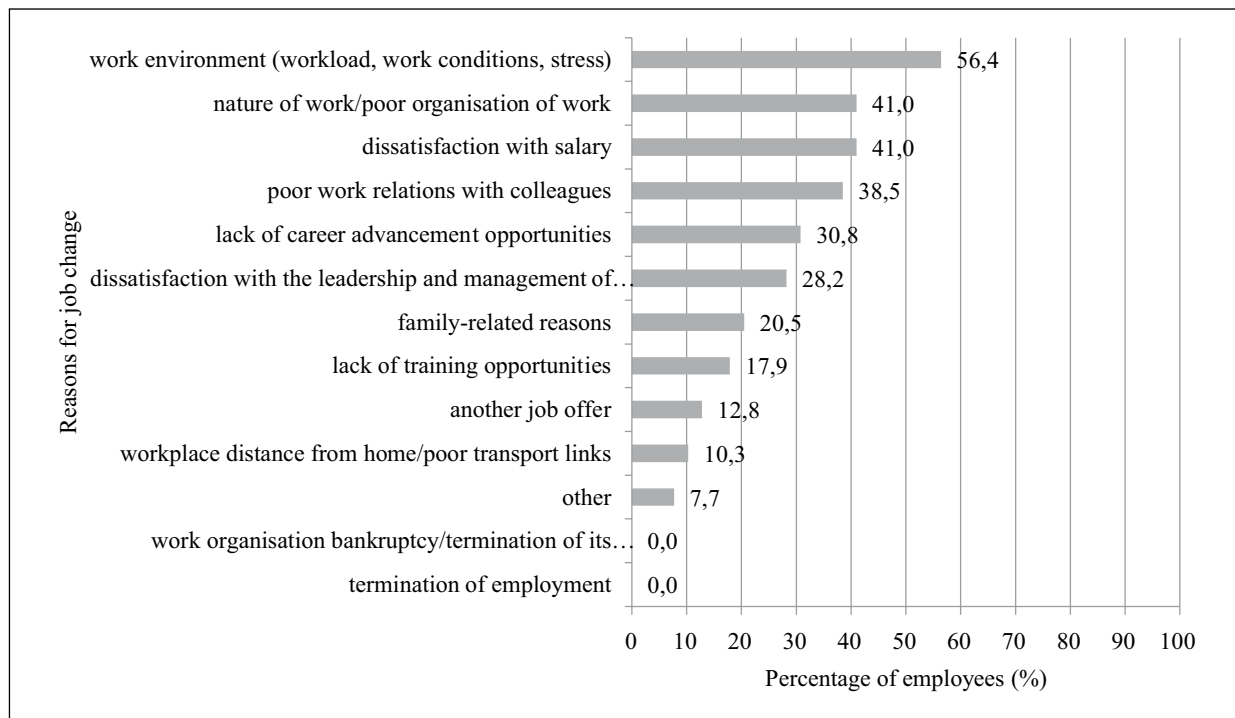


Figure 2: Reasons for considering a change of employment

Respondents assessed their work-life balance positively and most of them ($n = 73$, 65.2%) were not considering changing their job or employer. Those who would consider changing jobs would do so mainly because of the work environment, the nature of work and dissatisfaction with the salary (Figure 2).

All the observed indices or independent indicators explain 23.3% ($p < 0.001$) of the variability of the psychophysical health variable. Psychophysical health is determined by the following two indices: (1) Work environment, work equipment and physical exertion, and (2) Stress resulting from socio-demographic circumstances (Table 2).

The Work Environment, Work Equipment and Physical Exertion index consists of eleven variables, six of which are significantly associated with the

Psychophysical Health index (Table 3). Most respondents ($n = 79$, 69.9%) had not witnessed a serious work accident or injury to a colleague. In general, most respondents rated the likelihood of workplace accidents as low ($n = 67$, 60.1%) and had not yet experienced a workplace accident or injury ($n = 88$, 77.9%). However, many respondents ($n = 79$, 77.7%) work in an environment where many people lift heavy loads ($n = 68$, 60.2%) and also perform repetitive movements ($n = 73$, 46.6%). The characteristics of the work environment determine 19.2% of the employees' psychophysical health.

Five of the eight factors indicating socio-demographic characteristics of employees are related to employees' psychophysical health (Table 4). A total of 36.6% of respondents ($n = 41$) rated their personal income

Table 2: Correlation and strength of direct risk factors on the psychophysical health of employees

Psychophysical health	Coefficients			
	r_s	Beta	p	R^2
Work environment, work equipment and physical exertion	0.385	0.273	0.019**	0.156
Stress resulting from socio-demographic circumstances	0.401	0.206	0.038*	0.084
Content of work	0.122	0.180	0.100	0.006
Work relationship with superiors	0.261	0.145	0.132	0.093
Workload and pace of work	0.319	0.127	0.315	0.08
Work schedule	0.026	0.073	0.432	0.00

Legend: r_s – Spearman correlation coefficient; R^2 – R Square; *** – statistical significance under 0.001; ** – statistical significance under 0.05

Table 3: Correlation between the Psychophysical Health index with the index and variables of Work Environment, Work Equipment and Physical Exertion

<i>Index and subordinate variables</i>	<i>Psychophysical Health Index</i> r_s
Work environment, work equipment and physical exertion	0.385***
At this workplace, I have already witnessed a serious work accident or injury sustained by a colleague.	0.351***
My work involves lifting heavy loads.	0.344***
There are many people in my work area.	0.229**
My work involves repetitive movements.	0.233**
There is a high likelihood of work-related accidents occurring at my workplace (working at heights, on construction sites, in transport).	0.218**
At work, my posture is restricted for longer periods of time (sitting, standing).	0.211**

Legend: r_s – Spearman correlation coefficient; *** – statistical significance under 0.001; ** – statistical significance under 0.05

Table 4. Correlation between the Psychophysical Health index and the index and variables of Stress Resulting from Socio-demographic Circumstances

<i>Index and subordinate variables</i>	<i>Psychophysical Health Index</i> r_s
Stress resulting from socio-demographic circumstances	0.401***
The nearest health facility is far from my place of residence.	0.349***
There seems to be a general insecurity in society which affects my work and well-being.	0.264**
My personal income is too low to meet my personal needs.	0.235**
My financial situation is poor.	0.234**
Due to poor transport links, it takes me a lot of time to reach the workplace from my home	0.187**

Legend: r_s – Spearman correlation coefficient; *** – statistical significance under 0.001; ** – statistical significance under 0.05

as too low to meet their needs, while one fifth of all respondents rated their financial situation as poor ($n = 23$, 20.3%). Most respondents indicated that transport links from their home to their workplace were good ($n = 82$, 72.6%) and that the nearest health facility was close to their home ($n = 91$, 80.5%). One third ($n = 35$, 30.9%) of all respondents reported that they did not feel general insecurity in society. Stress resulting from socio-demographic circumstances was reported to affect the psychophysical health of 13% of employees and was weakly associated with the occurrence of neurological disorders ($r_s = 0.287$, $p = 0.002$), increased sweating ($r_s = 0.215$, $p = 0.023$), muscle tension ($r_s = 0.224$, $p = 0.018$) and general weakness ($r_s = 0.235$, $p = 0.013$). Socio-demographic circumstances were found to affect the occurrence of cardiovascular diseases ($\beta = 0.304$, $p = 0.001$) and communication problems ($\beta = 0.186$, $p = 0.034$).

The Content of Work ($r_s = 0.077$, $p = 0.42$) and Work Schedule ($r_s = 0.035$, $p = 0.712$) indices are not significantly associated with the psychophysical health of employees. Of the subordinate variables included in the Content of Work index, the only significant association was formed with the variable of monotonous work ($r_s = 0.265$, $p = 0.005$), with the majority of respondents ($n = 86$, 76.1%) denying that

their work was monotonous. Within the Work Schedule index, a significant correlation was found between employees' psychophysical health and the variable of night shift work ($r_s = -0.229$, $p = 0.002$) and the statement that there were not enough breaks during work ($r_s = -0.253$, $p = 0.007$). While 59.3% ($n = 67$) of all respondents confirmed working night shifts and 80.6% ($n = 91$) confirmed working shifts, 63% ($n = 70$) reported working for more than eight hours. Working night shifts was associated with muscle tension ($r_s = 0.322$, $p = 0.001$), feeling overburdened and fatigued ($r_s = 0.227$, $p = 0.017$), sick leave duration ($r_s = 0.215$, $p = 0.022$) and frequency ($r_s = 0.198$, $p = 0.036$). Shift work, long working hours (over 8 hours), unpredictable working hours and limited departures from the workplace are not associated with employees' psychophysical health.

Employees' work relationship with superiors was found to be weakly correlated with their psychophysical health ($r_s = 0.269$, $p = 0.004$). Among the subordinate indicators of the Work Relationship with Superiors index, the dependent variable is significantly correlated with the statements *I feel that my work is overly controlled by my superior or employer* ($r_s = -0.245$, $p = 0.009$) and *I have little influence on decision-making in my work establishment (in terms of*

work schedule, colleagues, work tasks, business policies) ($r_s = 0.258, p = 0.006$). The majority of respondents ($n = 80, 70.8\%$) reported not being overly supervised (or at all), and more than half of all respondents ($n = 59, 53.2\%$) reported having little influence on decision-making in their work establishment. Employees' work relationship with superiors has an impact on their job dissatisfaction ($\beta = 0.193, p = 0.047$).

The independent variable *Workload and Pace of Work* is weakly correlated ($r_s = 0.280, p = 0.03$) with the dependent variable of Psychophysical Health. It consists of eight variables, three of which are significantly correlated with the variable *Psychophysical Health: My work involves working under tight time constraints* ($r_s = -0.437, p < 0.001$), *My work establishment has unrealistic expectations of me in terms of the amount of work I have to do* ($r_s = -0.540, p < 0.001$), *My employer assigns me additional work on top of my regular work* ($r_s = -0.698, p < 0.001$). A total of 45.1% ($n = 51$) of all respondents indicated that they often worked under tight time constraints. It is neither true nor completely untrue that superiors have unrealistic expectations about work ($n = 51.45\%$) or that they assign additional work to employees ($n = 53, 46.9\%$). Workload and pace of work are correlated with the incidence of chronic pain and illness ($r_s = 0.346, p < 0.001$) and may lead to heart palpitations ($\beta = 0.264, p = 0.006$), general dissatisfaction ($\beta = 0.281, p = 0.005$), digestive disorders ($\beta = 0.213, p = 0.020$) and respiratory problems ($\beta = 0.181, p = 0.046$).

Discussion

In this study, we used the OPSA instrument to identify the psychosocial risk factors associated with employees' psychophysical health. Respondents reported a range of health problems they had experienced in the last year. They indicated muscle pain in the shoulders, neck and upper limbs, which may be related to heavy lifting heavy loads at work. They also frequently experienced spinal problems, followed by lower limb muscle pain. Similar findings have been reported in the literature (Ellapen & Narsigan, 2014; Yan et al., 2018), stating that musculoskeletal disorders are the main cause of absenteeism in half of health professionals. In a survey by Yan et al. (2018), eight out of ten nurses reported back pain. Ellapen & Narsigan (2014) state that health professionals report pain in lower abdomen as the most common health problem, followed by neck pain, upper back pain and pelvic pain.

Almost half of all respondents had experienced feeling overburdened and fatigued, just over a third had experienced lack of energy and exhaustion, and a fifth of all respondents reported experiencing persistent anxiety, restlessness, tension and worry. Feeling overburdened and fatigued is associated with working night shifts. Among nurses, fatigue at work seems to

increases over the years, especially among those who work night shifts (Rollins, 2015). Exhaustion results from working with an insufficient number of breaks and departures from the workplace. Research shows that about 10% of nurses do not have enough time to take a break during their work. Breaks from work should be of great importance to workers as they can improve their short-term performance and reduce fatigue (Witkoski & Vaughan Dickson, 2010). Night work combined with high work intensity and low autonomy at work seems to be a factor which causes burnout syndrome with its characteristic chronic fatigue and feeling of being overworked (Portoghese, Galletta, Coppola, Finco, & Campagna, 2014; Martins Pereira, Teixeira, Carvalho, Hernandez-Marrero, & Null, 2016).

The Work Environment, Work Equipment and Physical Exertion index was found to be correlated with employees' psychophysical health. Most respondents indicated that their work involved lifting heavy loads and performing repetitive movements. They also indicated that their work involved activities that require working with larger teams. Such stresses resulting from the work environment manifest themselves in various problems such as neck and leg pain, insomnia, muscle tension, dissatisfaction, irritability, feelings of being overburdened and fatigued, as well as communication problems. According to research (Freimann, Coggon, Merisalu, Animagi, & Paasuke, 2013), nurses assisting with surgery and those working in administration are most at risk due to repetitive movements. Typically, nurses also have to lift heavy loads in their work (D'Agostin & Negro, 2016).

Insufficient personal income and a poor financial situation have a negative impact on employees' psychophysical health. More than one third of all respondents indicated that their personal income was insufficient to meet their personal needs, but at the same time they also reported that their living conditions and financial situation were not bad. These risks manifest themselves in cardiovascular diseases and communication problems. An employee may also be dissatisfied with their job and unmotivated to complete their work tasks (Šprah & Dolenc, 2014). In addition to non-financial motivational factors, financial incentives have been shown to be very important in motivating health professionals (Baljoon, Banjar, & Banakhar, 2018).

In terms of their workload, the respondents highlighted working under intense time pressure, which, according to Mark & Smith (2011), can manifest itself in anxiety and depression. In particular, nurses working in short-stay wards indicated higher work demands in terms of the work tasks they have to complete, as well as a faster pace of work. Moreover, in such wards, there is also a higher occurrence of work-family conflict and greater emotional demands,

which are associated with insomnia, stress, burnout and lower job satisfaction (Cho, Park, Jeon, Chang, & Hong, 2014).

Employees' work relationship with their superiors and their psychophysical health were found to be weakly correlated. Employees' lack of control over their own work and their insufficient influence on decision-making in their work establishment were found to have a negative impact on their health. When health professionals are exposed to heavier workloads, they are more exhausted if they also lack sufficient autonomy at work. Employees are also less certain that they are doing the right thing, and this uncertainty can lead to exhaustion (Portoghese et al., 2014).

We also found a correlation between employees' psychophysical health and the content of their work, as the majority of respondents indicated that their work was not monotonous and that it therefore had a positive influence on their health. Health professionals typically work in a rapidly changing work environment and have to constantly adapt to changing circumstances during their workdays, which are filled with very diverse tasks (Fiedler et al., 2012).

While we expected a significant correlation between psychophysical health and the Work Schedule index, it was found to be significant only for night shift work, which leads to feelings of fatigue and sleep deprivation (Peršolja et al., 2018), as well as to insomnia, poor sleep quality and shortened sleep duration after the night shift (Liira et al., 2014). Night work has also been shown to be a likely carcinogen (Peršolja et al., 2018). We also found a statistically significant correlation between work breaks and employees' psychophysical health. Work breaks (especially when working long hours) are important as they improve the quality of patient care and reduce the risk of errors (Min, Yoon, & Hong, 2019).

Given the structure and size of the research sample, the results of the study cannot be generalised to a larger population. However, the method of random sampling allowed us to include a sufficient number of employees to obtain a representative sample in the hospital under consideration. The results of the questionnaires could have been influenced by various random errors, respondents' motivation to participate in the study, inaccuracies in completing the questionnaires, potentially socially desirable responses, misunderstandings of the questions and unwillingness or reluctance to complete the questionnaire due to its size. For further research, we would suggest obtaining a stratified and sufficiently large sample of subjects, which would allow the results to be generalised to the population as a whole.

Conclusion

There are two direct risk factors which affect the psychophysical health of employees, namely (1) the work

environment, work equipment and physical exertion, and (2) stress resulting from socio-demographic circumstances. Employees' psychophysical health could be improved by supervisors providing more feedback, involving employees in strategic decision-making within the work establishment, giving them sufficient attention and allowing more flexibility in terms of the time needed to complete work tasks, as well as encouraging breaks from work, especially when working long hours. Lifting heavy loads, which is typical for nurses working with patients, shows that working conditions need to be improved with the use of (ergonomic) devices. Shortening the night shift and limiting the number of night shifts per month would in all likelihood succeed in alleviating feelings of overwork and fatigue, as well as insomnia.

Slovenian translation/Prevod v slovenščino

Uvod

Glede na psihosocialno tveganje so na delovnem mestu ogroženi vsi zaposleni, ne glede na položaj, velikost, ali dejavnost delovne organizacije (Kralj et al., 2011). Med direktna psihosocialna tveganja na delovnem mestu uvrščamo fizična, kemična in biološka tveganja z vidika delovnega okolja, delovne opreme ter fizičnih obremenitev, vsebine dela, delovne obremenitve, hitrosti poteka dela, urnika, odnosov z nadrejenimi in obremenitev, ki so posledica sociodemografskih okoliščin zaposlenega. Delovno okolje v zdravstvu je eno najnevarnejših delovnih okolij, saj so zaposleni izpostavljeni prekomernim delovnim in fizičnim obremenitvam, hitremu poteku dela, nestalnemu urniku in neustrezni opremi (Šprah & Dolenc, 2014). V zdravstvu se velikokrat opravlja delo v nezdravem delovnem okolju, za katerega so značilni neurejeni odnosi med zaposlenimi, slaba komunikacija, konflikti, nasilje, nespoštovanje, odpor do sprememb, pomanjkanje razumevanja in nadlegovanje. Delavci v zdravstvu velikokrat delajo brez odmorov, v neustrezno razporejenih delavniških, s pomanjkljivo pomočjo nadrejenih in visoko intenzivnostjo dela. Tako nezdravo okolje poveča možnost nastanka bolezni in poškodb (Ritter, 2011; Andersen, Lønning, Bjørnevl, & Fagerstørm, 2016).

Medicinske sestre so še toliko bolj ogrožene, saj se pri izvajanju zdravstvene nege srečujejo s fizičnim naporom, dvigovanjem, ergonomsko nepravilno urejenimi prostori in neustrezno delovno opremo. Za psihosocialna tveganja pri medicinskih sestrah so odgovorni tudi nepredvidljivi urniki, izmensko in nočno delo ter podaljševanje delavnikov, zaradi katerega pride do neprespanosti in utrujenosti, pozneje pa tudi do izrazitih sprememb v zdravju, večje pojavnosti napak in odsotnosti z dela (De Oliveira et

al., 2014; Peršolja, Mišmaš, & Jurdana, 2018).

Delovno okolje bi moralo biti dobro organizirano, da bi se v njem zaposleni dobro počutili, in sicer tako fizično kot tudi psihično (Galletta, Portoghese, Ciuffi, Sancassiani, D' Aloja, & Campagna, 2016). V varnem delovnem okolju se izvajajo izobraževanja in nadgrajevanja znanja, zaposleni imajo na razpolago zadostno in ustrezno opremo (Er & Sokmen, 2018). Pri tem imajo veliko vlogo vodje, saj lahko zaposlene motivirajo za zahtevane zdravstvene preglede in jih podpirajo pri skrbi za zdravje med celotnim delovnim dnevom (Čehovin Zajc & Kohont, 2017). V zdravem delovnem okolju so tudi medicinske sestre bolj produktivne, izboljša se njihovo počutje in zniža stopnja stresa in izgorelosti (Er & Sokmen, 2018). Eden od izzivov za delovne organizacije je torej ustvariti ustrezno zdravo delovno okolje, saj se le tako osvoji zahtevano delovno učinkovitost, uspešnost in produktivnost (Raziq & Maulabakhsh, 2015).

Namen in cilji

Namen raziskave je bil raziskati direktne psihosocialne dejavnike tveganja za zdravje zaposlenih s ciljem opisati moč povezanosti s psihofizičnim zdravjem zaposlenih v splošni bolnišnici. Zanimali so nas direktni dejavniki tveganja, kot so delovna obremenitev in hitrost poteka dela, urnik dela, vsebina dela, delovno okolje, delovna oprema in fizične obremenitve, obremenitve kot posledica sociodemografskih okoliščin in odnos z nadrejenimi. Oblikovali smo glavno raziskovalno vprašanje: V kolikšni meri se direktni psihosocialni dejavniki tveganja za zdravje povezujejo s psihofizičnim zdravstvenim stanjem zaposlenih?

Zastavili smo tudi dodatna raziskovalna vprašanja:

- Kako se delovna obremenitev in hitrost poteka dela povezuje s psihofizičnim zdravstvenim stanjem zaposlenega?
- Kako se urnik dela povezuje s psihofizičnim zdravstvenim stanjem zaposlenega?
- Kako se vsebina dela povezuje s psihofizičnim zdravstvenim stanjem zaposlenega?
- Kako se delovno okolje, delovna oprema in fizične obremenitve povezujejo s psihofizičnim zdravstvenim stanjem zaposlenega?
- Kako se obremenitve kot posledica sociodemografskih okoliščin povezujejo s psihofizičnim zdravstvenim stanjem zaposlenega?
- Kako se odnos zaposlenega z nadrejenim povezuje s psihofizičnim zdravstvenim stanjem zaposlenega?

Metode

Izbrana je bila opisna kvantitativna metoda dela, pri kateri je bil v presečni raziskavi za pridobivanje podatkov uporabljen anketni vprašalnik.

Opis instrumenta

Kot merski instrument je bil uporabljen prostodostopen standardiziran anketni vprašalnik *Orodje za obvladovanje psihosocialnih tveganj in absentizma* (OPSA) (Šprah & Dolenc, 2014), ki je zaprtega tipa in vsebuje 141 vprašanj. Analize kažejo, da je orodje OPSA zanesljivo (Cronbach $\alpha = 0,915$).

Vprašalnik sestavlja dva dela. Prvi del vključuje sociodemografske in zdravstvene podatke (Tabela 1). Vprašanja v prvem delu vprašalnika so zaprtega tipa. Drugi sestavni del sestavlja 130 trditve, ki merijo psihosocialne obremenitve v delovni organizaciji, v kateri so anketiranci zaposleni. Anketiranci odgovarjajo s petstopenjsko Likertovo lestvico (1 – Sploh se ne strinjam oziroma nikoli ne velja zame.; 2 – Malo se strinjam oziroma redko velja zame.; 3 – Srednje se strinjam oziroma občasno velja zame.; 4 – Precej se strinjam oziroma pogosto velja zame.; 5 – Zelo se strinjam oziroma vedno velja zame.). Vprašalnik v drugem delu meri psihosocialne obremenitve, ki so razdeljene na sedemnajst področij. Ta področja so razdeljena na direktna in indirektna tveganja za zdravje. Za potrebe raziskave so bile uporabljene trditve, ki obravnavajo direktne dejavnike tveganja za zdravje zaposlenih (Tabela 1).

Opis vzorca

Ciljno prebivalstvo so bili vsi zaposleni ene splošne bolnišnice ($n = 994$), ki so bili na delovnem mestu v času poteka raziskave. Velikost vzorca je bila pri 5 % tveganju izračunana na najmanj 112 oseb. Vzorec je bil sestavljen z naključno izbiro in je vključeval 130 anketirancev, kar znaša 13,1 % vseh zaposlenih. Vrnjenih je bilo 113 vprašalnikov, kar je 86,9 % vseh razdeljenih, od tega jih je bilo 112 (86,1 %) pravilno in popolno izpolnjenih in zajetih v nadaljnjo raziskavo.

Sodelovalo je 88 žensk (78,6 %) in štiriindvajset moških (21,4 %). Največ anketirancev je končalo srednjo ($n = 37$, 33 %) oziroma visoko strokovno ($n = 37$, 33 %) šolo. Večina ($n = 98$, 87,5 %) jih je bila starih med osemnajst let in 50 let in so živeli ($n = 99$, 88,4 %) v isti regiji, v kateri so bili zaposleni.

Opis poteka raziskave in obdelave podatkov

Anketiranci so bili seznanjeni s potekom raziskave, možnostjo odklonitve sodelovanja in anonimnostjo. Raziskava je v izbranem zavodu preko osebno izročeni pisnih anket potekala v mesecih oktobru in novembru 2018. Vprašalniki so bili razdeljeni naključno izbranim zaposlenim, ki so bili na dan raziskovanja na delovnem mestu. Izpolnjeni vprašalniki so se v zaprtih kuvertah zbirali v nabiralniku na interno dogovorjenem mestu.

Statistična analiza podatkov je bila izvedena v programu SPSS 23.0 za Windows. Značilnosti vzorca so prikazane s frekvenco (n) in deleži (%) ter s povprečjem (m) in standardnim odklonom (s). Glede

Tabela 1: Sestavljene spremenljivke (indeksi) in podrejene spremenljivke

Indeksi	Spremenljivke
Sociodemografski podatki	spol; starost; dosežena stopnja izobrazbe; regija prebivanja in ali je zaposlitev v regiji, kjer anketiranci prebivajo
Zdravstveni podatki	težave s sluhom; vidom; kožna obolenja; težave s hrbtenico; bolečine v mišicah spodnjih udov; težave s prebavo; težave z dihanjem; kardiovaskularna obolenja; hormonske motnje; metabolične motnje; poškodbe; razpoloženske motnje; nevrološke motnje in druge težave; vzrok in trajanje bolniškega staleža, dlje časa prisotni zdravstveni pojavi (preobremenjenost, utrujenost, pomanjkanje energije, izčrpanost, težave v komunikaciji, nespečnost), vpliv teh pojavov na opravljanje vsakodnevnih dejavnosti, usklajenost poklicnega in zasebnega življenja; zadovoljstvo s sedanjim zdravstvenim stanjem; želja po zamenjavi delovnega mesta ali delodajalca.
Psihofizično zdravje	počutim se tesnobno, zaskrbljeno, ali razdražljivo; imam pogoste ali dolgotrajne telesne bolečine oziroma trpim za kroničnim telesnim obolenjem; zaradi svojih občutkov dolgotrajne žalosti, pretirane zaskrbljenosti in tesnobe sem že razmišljal/-a o strokovni pomoči ali jo poiskal/-a; moja telesna odpornost je slaba.
Delovna obremenitev in hitrost poteka dela	količina mojih delovnih nalog je majhna; opravljam več različnih delovnih nalog hkrati; moje delo je zelo zahtevno; obseg mojih delovnih nalog je velik; moje delo vključuje veliko časovnih rokov v kratkem času; potek mojega dela je odvisen od tega, kako hitro ali kakovostno svoje delo opravijo moji sodelavci; delovna organizacija ima nerealna pričakovanja do mene o količini dela, ki naj bi ga opravil/-a; delodajalec mi ob rednem delu nalaga še dodatno delo.
Urnik dela	delam v izmenah; moj delovni čas je daljši od osem ur; opravljam nočno delo; moj delovni čas je nepredvidljiv; med delom imam premalo odmorov; med delom imam malo dovoljenih izhodov z dela.
Vsebina dela	moje delo ni zahtevno; postopki mojega dela se nenehno spreminjajo; moje delo je monotono oziroma vključuje malo raznolikih delovnih nalog; med delom se srečujem z nepredvidenimi težavami; moje delovne naloge se hitro menjavajo; tudi sam/-a moram sodelovati pri pridobivanju finančnih sredstev, da dobim polno plačo ali obdržim zaposlitev.
Delovno okolje, delovna oprema in fizične obremenitve	izpostavljen/-a sem škodljivim okoljskim vplivom (hrup; vročina; mraz; plini; hlapi; prah; vibracije; bleščanje); pri delu je drža mojega telesa dalj časa prisiljena (sedenje; stanje); na tem delovnem mestu sem bil/-a že priča resni delovni nesreči oziroma poškodbi sodelavca; do svoje delovne oziroma zaščitne opreme težko pridem oziroma je slabo vzdrževana; v prostoru, kjer delam, je veliko ljudi; pri mojem delu je velika verjetnost za nastanek nesreče; poškodbe pri delu (delo na višini; gradbišču; v prometu); pri delu dvigujem težka bremena; moje delo vključuje ponavljajoče se gibe; na tem delovnem mestu sem že imel/-a nesrečo oziroma poškodbo; moje delo poteka tudi na terenu; postopki mojega dela so nevarni (npr. uporaba prisilnih sredstev).
Obremenitve kot posledica sociodemografskih okoliščin	moj osebni dohodek je prenizek za zadovoljevanje osebnih potreb; moje premoženjsko stanje je slabo; moje bivalne razmere so slabe (majhno stanovanje; brez vodovodne napeljave; brez centralnega ogrevanja; zaradi slabih prometnih povezav porabim veliko časa, da pridem s kraja prebivališča na delovno mesto; zdravstvena služba je daleč od mojega kraja prebivališča; sem precej zadolžen; zdi se mi, da je v družbi prisotna splošna negotovost, ki vpliva na moje delo in počutje; vrtec je daleč od mojega in otrokovega kraja prebivališča).
Odnos zaposlenega z nadrejenim	nadrejeni oziroma delodajalec pretirano nadzira moje delo; imam majhen vpliv na odločitve v delovni organizaciji (o urniku; sodelavcih; delovnih nalogah; politiki poslovanja); ko se pri mojem delu pojavi problem, imam na razpolago malo načinov reševanja in še ti so vnaprej določeni; imam slab nadzor nad vsebino, časovnim razporejanjem in hitrostjo izvajanja delovnih nalog.

na oceno normalnosti porazdelitve podatkov, ki je bila izračunana z uporabo testov Kolmogorov-Smirnov in Shapiro-Wilk, smo v večini spremenljivk ugotovili neenakomerno razporejenost, zato smo za preverjanje povezanosti uporabili Spearmanovo korelacijsko analizo in dodatno izvedli regresijsko analizo. Stopnja statistične značilnosti je bila upoštevana pri vrednosti manjši od $p < 0,05$. Pri izdelavi grafov in preglednic smo uporabili program Microsoft Excel 2010.

Neodvisne in odvisno spremenljivke smo pridobili tako, da smo iz večjega števila spremenljivk, ki

merijo isti koncept, sestavili nove spremenljivke (indekse). Nove pridobljene spremenljivke so intervalnega tipa. Psihofizično zdravje anketirancev je bilo obravnavano kot odvisna spremenljivka.

Rezultati

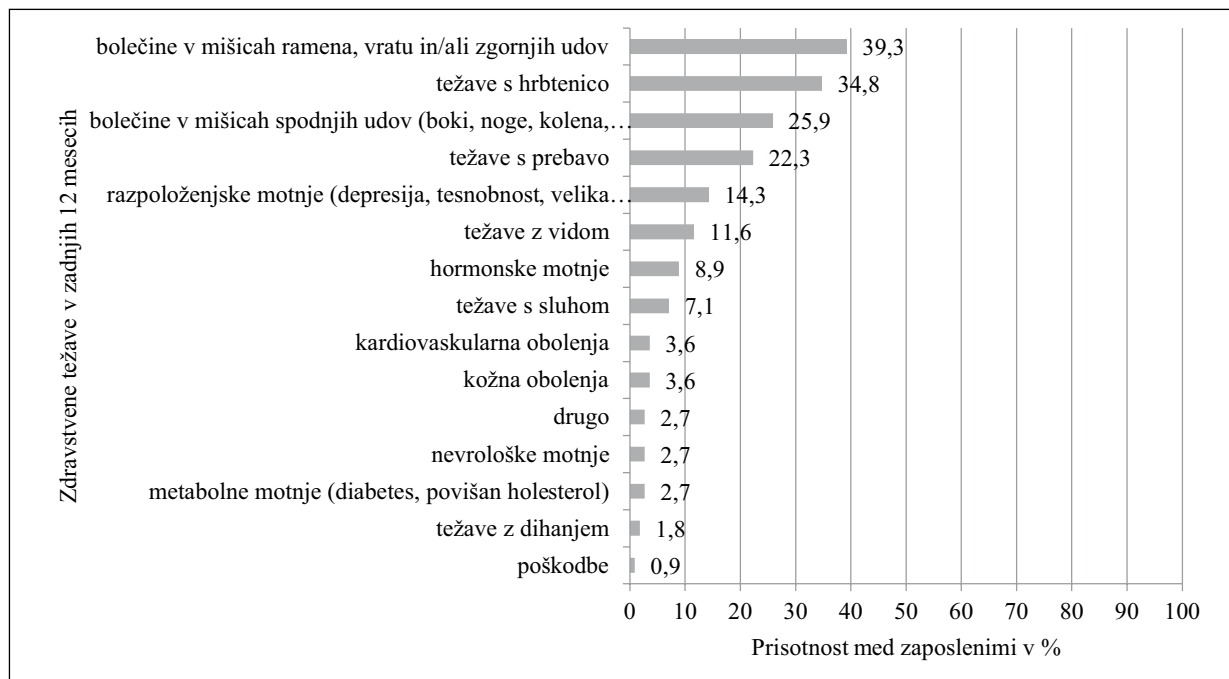
Skoraj tretjina anketiranih ($n = 31$, 27,7 %) je v zadnjih dvanajstih mesecih koristila bolniški stalež, od tega 26 (83,9 %) žensk in pet (16,1 %) moških. Pri 40,6 % ($n = 13$) anketirancev je bolniški stalež trajal od

petnajst do 30 dni, 25 % ($n = 8$) anketirancev je bilo na bolniškem staležu do šest dni, dve osebi (1,8 %) sta bili na bolniškem dopustu več kot mesec dni.

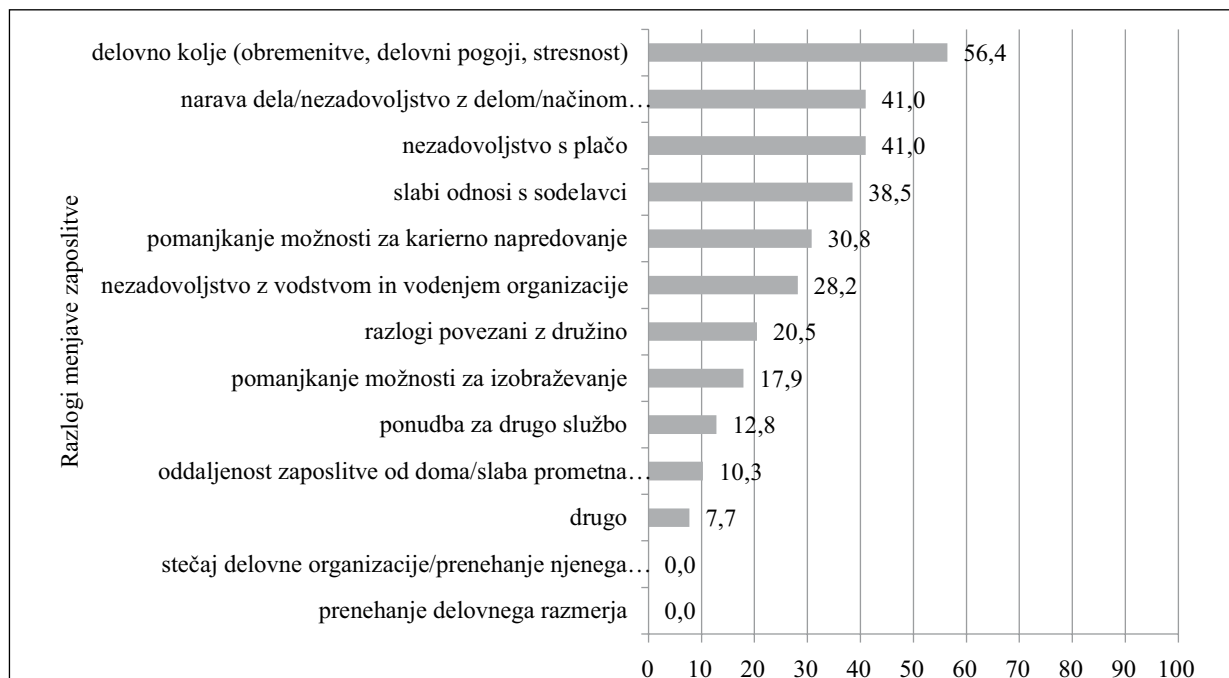
Zaposleni so imeli v zadnjih dvanajstih mesecih najpogosteje bolečine v mišicah ramen, vratu in/ali zgornjih udih ($n = 44$, 39,3 %) in težave s hrbtenico

($n = 39$, 34,8 %) (Slika 1). Bolečine v mišicah ramena, vratu in/ali zgornjih udih so povezane z dvigovanjem bremen ($r_s = 0,247$, $p = 0,009$).

Anketiranci so navedli različne dlje časa prisotne pojave v zdravju. Med njimi je najpogostejši občutek preobremenjenosti in utrujenosti ($n = 52$, 46,6 %),



Slika 1: Zdravstvene težave zaposlenih v zadnjih dvanajstih mesecih



Slika 2: Razlogi za željo po menjavi zaposlitve

sledita pomanjkanje energije in izčrpanost ($n = 43$, 38,4 %). Preobremenjenost in utrujenost se značilno povezujeta z nočnim delom ($r_s = 0,266$, $p = 0,005$) in s premalo odmori med delom ($r_s = 0,199$, $p = 0,036$). Podobno se izčrpanost in pomanjkanje energije povezuje s premalo odmori med delom ($r_s = 0,229$, $p = 0,015$) in premalo dovoljenimi izhodi z delovnega mesta ($r_s = 0,236$, $p = 0,012$). Anketiranci so bili kljub tem pojavom zadovoljni s svojim zdravjem, saj jih je kar 62,5 % ($n = 70$) obkrožilo 4 – S svojim zdravjem sem zadovoljen. ali 5 – S svojim zdravjem sem zelo zadovoljen. (na lestvici od 1 do 5) ($m = 3,62$, $s = 0,903$).

Anketiranci usklajenost poklicnega in zasebnega življenja ocenjujejo kot dobro in večina ($n = 73$, 65,2 %) jih ne razmišlja o menjavi zaposlitve, ali delovnega mesta, ali delodajalca. Tisti, ki bi se za menjavo zaposlitve odločili, bi to dejanje storili predvsem zaradi delovnega okolja, narave dela in nezadovoljstva s plačo (Slika 2).

Vsi opazovani indeksi oziroma neodvisni kazalniki skupaj pojasnijo 23,3 % ($p < 0,001$) variabilnosti spremenljivke psihofizično zdravje. Psihofizično zdravje določata indeksa Delovno okolje, delovna oprema in fizične obremenitve ter obremenitve kot

posledica sociodemografskih okoliščin (Tabela 2).

Indeks Delovno okolje, delovna oprema in fizične obremenitve sestavlja enajst spremenljivk, med katerimi se jih šest značilno povezuje z indeksom Psihofizično zdravje (Tabela 3). Večina ($n = 79$, 69,9 %) anketiranih še ni bil priča resni delovni nesreči oziroma poškodbi sodelavca, nasploh jih večina ocenjuje, da je verjetnost nesreč pri delu nizka ($n = 67$, 60,1 %) in še niso imeli nesreče oziroma poškodbe pri delu ($n = 88$, 77,9 %). Jih pa veliko ($n = 79$, 77 %) dela v okolju, v katerem je prisotno večje število ljudi, ki dvigujejo težka bremena ($n = 68$, 60,2 %) in tudi izvajajo ponavljajoče gibe ($n = 73$, 46,6 %). Značilnosti delovnega okolja določajo 19,2 % psihofizičnega zdravja zaposlenega.

S psihofizičnim zdravjem zaposlenih je povezanih pet izmed osmih dejavnikov, ki kažejo na sociodemografske značilnosti zaposlenih (Tabela 4). Da ima preizek osebnih dohodek glede na potrebe, navaja 36,6 % anketirancev ($n = 41$), petina jih ima slabo premoženjsko stanje ($n = 23$, 20,3 %). Večina ima dobre prometne povezave od doma do delovnega mesta ($n = 82$, 72,6 %), zdravstvena služba je blizu ($n = 91$, 80,5 %). Tretjina ($n = 35$, 30,9 %) anketirancev

Tabela 2: Povezanost in moč direktnih dejavnikov tveganja na psihofizično zdravje zaposlenih

Psihofizično zdravje		Koefficienti			
		r_s	Beta	p	R^2
Indeksi	delovno okolje, delovna oprema in fizične obremenitve	0,385	0,273	0,019**	0,156
	obremenitve kot posledica sociodemografskih okoliščin	0,401	0,206	0,038*	0,084
	vsebina dela	0,122	0,180	0,100	0,006
	odnos zaposlenega z nadrejenimi	0,261	0,145	0,132	0,093
	delovna obremenitev in hitrost poteka dela	0,319	0,127	0,315	0,08
	urnik dela	0,026	0,073	0,432	0,00

Legenda: r_s - Spearmanov korelacijski koeficient; Beta - regresijski koeficient; p - statistična značilnost; R^2 - R determinacijski koeficient; *** - statistična značilnost pod 0,001; ** - statistična značilnost pod 0,05

Tabela 3: Povezanost indeksa psihofizično zdravje s spremenljivkami in z indeksom delovno okolje, delovna oprema in fizične obremenitve

Indeks in podrejene spremenljivke	Psihofizično zdravje r_s
Delovno okolje, delovna oprema in fizične obremenitve	0,385***
Na tem delovnem mestu sem bil/-a že priča resni delovni nesreči oziroma poškodbi sodelavca.	0,351***
Pri delu dvigujem težka bremena.	0,344***
V prostoru, kjer delam, je veliko ljudi.	0,229**
Moje delo vključuje ponavljajoče se gibe.	0,233**
Pri mojem delu je velika verjetnost za nastanek nesreče, poškodbe pri delu (delo na višini, gradbišču, v prometu).	0,218**
Pri delu je drža mojega telesa dalj časa prisiljena (sedenje, stanje).	0,211**

Legenda: r_s - Spearmanov korelacijski koeficient; *** - statistična značilnost pod 0,001; ** - statistična značilnost pod 0,05

Tabela 4: Povezanost indeksa psihofizično zdravje s spremenljivkami in indeksom obremenitve kot posledica sociodemografskih okoliščin

Indeks in podrejene spremenljivke	Psihofizično zdravje r_s
Obremenitve kot posledica sociodemografskih okoliščin	0,401***
Zdravstvena služba je daleč od mojega kraja prebivališča.	0,349***
Zdi se mi, da je v družbi prisotna splošna negotovost, ki vpliva na moje delo in počutje.	0,264**
Moj osebni dohodek je prenizek za zadovoljevanje osebnih potreb.	0,235**
Moje premoženjsko stanje je slabo.	0,234**
Zaradi slabih prometnih povezav porabim veliko časa, da pridem s kraja prebivališča na delovno mesto.	0,187**

Legenda: r_s – Spearmanov korelacijski koeficient; *** – statistična značilnost pod 0,001; ** – statistična značilnost pod 0,05

ne občuti splošne negotovosti v družbi. Obremenitve kot posledica sociodemografskih okoliščin vplivajo na 13 % psihofizičnega zdravja zaposlenih in se šibko povezujejo s pojavom nevroloških obolenj ($r_s = 0,287, p = 0,002$), povečanim znojenjem ($r_s = 0,215, p = 0,023$), napetostjo v mišicah ($r_s = 0,224, p = 0,018$) in splošno slabostjo ($r_s = 0,235, p = 0,013$). Sociodemografske okoliščine vplivajo na pojav kardiovaskularnih obolenj ($\beta = 0,304, p = 0,001$) in težave v komunikaciji ($\beta = 0,186, p = 0,034$).

Indeksa Vsebina dela ($r_s = 0,077, p = 0,42$) ter Urnik dela ($r_s = 0,035, p = 0,712$) nista značilno povezana s psihofizičnim zdravjem zaposlenih. Izmed podrejenih spremenljivk v indeksu Vsebina dela, je edina značilna povezava z monotonim delom ($r_s = 0,265, p = 0,005$), pri čemer je večina anketirancev ($n = 86, 76,1\%$) zanimala, da bi bilo njihovo delo monotono. V indeksu Urnik dela ima značilno povezavo s psihofizičnim zdravjem s spremenljivko nočno delo ($r_s = -0,229, p = 0,002$) in trditvijo, da je med delom premalo odmorov ($r_s = -0,253, p = 0,007$). Nočno delo sicer opravlja 59,3 % ($n = 67$) anketirancev, 80,6 % ($n = 91$) jih dela izmensko, za 63 % ($n = 70$) velja, da je njihov delovni čas pogosto daljši od osem ur. Nočno delo se povezuje z napetostjo v mišicah ($r_s = 0,322, p = 0,001$), občutkom obremenjenosti in utrujenosti ($r_s = 0,227, p = 0,017$), trajanjem ($r_s = 0,215, p = 0,022$) in pogostostjo bolniške odsotnosti ($r_s = 0,198, p = 0,036$). Izmensko delo, več kot osemurno delo, nepredvidljiv urnik in omejenost izhodov z dela niso povezani s psihofizičnim zdravjem zaposlenih.

Odnos zaposlenega z nadrejenim je šibko povezan ($r_s = 0,269, p = 0,004$) s psihofizičnim zdravjem. Izmed podrejenih kazalnikov indeksa Odnos zaposlenega z nadrejenim se z odvisno spremenljivko značilno povezuje z Nadrejeni ali delodajalec pretirano nadzira moje delo ($r_s = -0,245, p = 0,009$) in Imam majhen vpliv na odločitve v delovni organizaciji (o urniku, sodelavcih, delovnih nalogah, politiki poslovanja) ($r_s = 0,258, p = 0,006$). Za večino anketirancev ($n = 80, 70,8\%$) namreč velja, da (sploh) niso pretirano nadzorovani, za dobro polovico ($n = 59, 53,2\%$), da le malo vplivajo

na odločitve v delovni organizaciji. Odnos zaposlenega z nadrejenim vpliva na nezadovoljstvo na delovnem mestu ($\beta = 0,193, p = 0,047$).

Neodvisna spremenljivka Delovna obremenitev in hitrost poteka dela je šibka ($r_s = 0,280, p = 0,03$), povezana z odvisno spremenljivko Psihofizično zdravje zaposlenega. Sestavljena je iz osmih spremenljivk, med katerimi so tri značilno povezane s spremenljivko psihofizično zdravje: Moje delo vključuje veliko časovnih rokov v kratkem času ($r_s = -0,437, p < 0,001$), Delovna organizacija ima nerealna pričakovanja do mene o količini dela, ki naj bi ga opravil/-a ($r_s = -0,540, p < 0,001$), Delodajalec mi ob rednem delu nalaga še dodatno delo ($r_s = -0,698, p < 0,001$). Da pogosto delajo v kratkih časovnih rokih, je navedlo 45,1 % ($n = 51$) anketiranih. Ne velja oziroma sploh ne velja, da bi imeli vodje nerealna pričakovanja v zvezi z delom ($n = 51, 45\%$) in ne, da bi delavcem nalagali dodatno delo ($n = 53, 46,9\%$). Delovna obremenitev in hitrost poteka dela se povezuje z pojavom kroničnih bolečin in bolezni ($r_s = 0,346, p < 0,001$) in vplivata na razbijanje srca ($\beta = 0,264, p = 0,006$), na splošno nezadovoljstvo ($\beta = 0,281, p = 0,005$), težave s prebavo ($\beta = 0,213, p = 0,020$) in dihanjem ($\beta = 0,181, p = 0,046$).

Diskusija

Z orodjem OPSA smo v splošni bolnišnici raziskovali; cilj je bil ugotoviti psihosocialne dejavnike tveganja, ki se povezujejo s psihofizičnim zdravjem zaposlenih. Anketiranci so navedli številne zdravstvene težave, ki so jih pestile v zadnjem letu, posebej so povzročale težave bolečine v mišicah ramen, vratu in zgornjih udih, ki jih lahko povežemo z dvigovanjem bremen pri delu. Zelo pogosto so prisotne tudi težave s hrbtenico, ki jim sledijo bolečine v mišicah spodnjih udov. Podobne ugotovitve najdemo v literaturi, ki pravi (Ellapen & Narsigan, 2014; Yan et al., 2018), da so pri polovici zdravstvenih delavcev glavni vzrok za absentizem mišično-skeletne bolezni. V raziskavi Yan et al. (2018) je imelo bolečine v predelu hrbta osem od deset medicinskih sester. Ellapen & Narsigan (2014) ugotavljata, da so najpogostejše med zdravstvenimi delavci bolečine v spodnjem delu

trebuha, ki jim sledijo bolečine v vratu, zgornjem delu hrbta in medenici.

Skoraj polovica anketirancev je imela občutek preobremenjenosti in utrujenosti, pri dobri tretjini sta bila prisotna pomanjkanje energije in izčrpanost, pri petini pa dlje časa tesnoba, nemir, napetost in zaskrbljenost. Občutek preobremenjenosti in utrujenosti je povezan z opravljanjem nočnega dela. Pri medicinskih sestrah utrujenost na delovnem mestu narašča z leti, še posebno pri tistih, ki opravljajo nočno izmensko delo (Rollins, 2015). Izčrpanost je zaradi dela s premalo odmori in izhodi z dela. Raziskave kažejo, da okrog 10 % medicinskih sester v svojem delovniku nima časa za odmor. Odmori naj bi bili za zaposlene nadvse pomembni, saj lahko izboljšajo kratkoročno uspešnost in zmanjšujejo utrujenost (Witkoski & Vaughan Dickson, 2010). Kot kaže, je nočno delo v kombinaciji z visoko intenzivnostjo dela in nizko avtonomijo pri delu dejavnik, zaradi katerega nastane sindrom izgorelosti z značilno kronično utrujenostjo in občutki preobremenjenosti (Portoghese, Galletta, Coppola, Finco, & Campagna, 2014; Martins Pereira, Teixeira, Carvalho, Hernandez-Marrero, & Null, 2016).

Indeks Delovno okolje, delovna oprema in fizične obremenitve se povezuje s psihofizičnim zdravjem. Večina anketirancev je navedla, da pri delu dvigujejo težka bremena in izvajajo ponavljajoče se gibe. Izvajajo dejavnosti, ki zahtevajo delo v večjih skupinah. Te obremenitve, ki izhajajo iz okolja, se kažejo v raznih težavah, kot so bolečine v vratu in nogah, nespečnosti, napetosti mišic, nezadovoljstvo, razdražljivost, občutek preobremenjenosti in pomanjkanje energije ter težave s komunikacijo. V literaturi poročajo (Freimann, Coggon, Merisalu, Animagi, & Paasuke, 2013), da so v največji nevarnosti zaradi ponavljajočih gibov tiste medicinske sestre, ki instrumentirajo pri operacijah, ter tiste, ki se bolj ali manj ukvarjajo z administracijo. Za medicinske sestre je tudi sicer značilno, da pri delu dvigajo težka bremena (D'Agostin & Negro, 2016).

Psihofizično zdravje je slabše, če sta osebni dohodek in premoženjsko stanje nižja od nujnega. Dobra tretjina anketirancev je zatrdila, da je njihov osebni dohodek prenizek za zadovoljevanje osebnih potreb, vendar so obenem zapisali, da njihove bivalne razmere in premoženjsko stanje niso slabi. Tveganja se kažejo v kardiovaskularnih obolenjih in težavah s komunikacijo. Prav tako je lahko tak zaposlen nezadovoljen z delom in nemotiviran za opravljanje dela (Šprah & Dolenc, 2014). Skupaj z nefinančnimi motivacijskimi viri so namreč pri zaposlenih v zdravstvu izredno pomembni tudi finančni (Baljoon, Banjar, & Banakhar, 2018).

Med delovnimi obremenitvami so zaposleni poudarili delo v kratkih časovnih rokih, kar se po Mark & Smith (2011) lahko kaže kot tesnoba in depresija. Predvsem tiste medicinske sestre, ki delajo na oddelkih s kratko ležalno dobo, poročajo o večjem številu nalog, ki jih morajo opraviti, in hitrejšem delovnem

ritmu. Na takih oddelkih ugotavljajo več konfliktov med delom in družino pa tudi večje čustvene zahteve, ki so povezane z nespečnostjo, stresom, izgorelostjo in nezadovoljstvom na delovnem mestu (Cho, Park, Jeon, Chang, & Hong, 2014).

Odnos zaposlenega z nadrejenim in psihofizično zdravje se med seboj šibko povezujeta. Zdravje slabša pomanjkljiv nadzor nad delom in (pre)majhen vpliv delavcev na odločitve v organizaciji. Ko je pri zdravstvenih delavcih prisotna višja raven delovne obremenitve, so ti bolj izčrpani, če je ob tem prisoten tudi slab nadzor nad delom. Ob tem so zaposleni bolj negotovi, ali delajo prav, negotovost pa vodi v izčrpanost (Portoghese et al., 2014).

Ugotovili smo tudi povezanost psihofizičnega zdravja zaposlenih z vsebino dela, pri čemer je večina anketirancev navedla, da njihovo delo ni monotono in kot tako pripomore k njihovem boljšemu zdravju. Za zaposlitve v zdravstvu je značilno delati v spreminjajočem se delovnem okolju, nenehno se je treba prilagajati, se soočati s spremembami, delovnik je pester in poln raznolikih nalog (Fiedler et al., 2012).

Pričakovali smo značilno povezanost psihofizičnega zdravja z indeksom Urnik dela, ki se je pokazala kot značilna samo pri nočnem delu, kar povzroča občutek utrujenosti in neprespanosti (Peršolja et al., 2018) ter nespečnost, slabo kakovost in krajši čas spanja po nočni izmeni (Liira et al., 2014). Znano je tudi, da nočno delo spada med verjetne rakotvorne dejavnike (Peršolja et al., 2018). Prav tako smo ugotovili, da obstaja statistično značilna povezanost med odmori in psihofizičnim zdravjem zaposlenega. Odmori so (predvsem med dolgimi delovniki) pomembni, saj izboljšajo kakovost oskrbe bolnikov in zmanjšujejo možnost napak (Min, Yoon, & Hong, 2019).

Glede na strukturo in velikost raziskovalnega vzorca rezultatov raziskave ne moremo posplošiti na večje število prebivalstva. Vendar smo z naključnim vzorčenjem v našo raziskavo vključili dovolj zaposlenih, da predstavljajo reprezentativni vzorec v obravnavani bolnišnici. Na rezultate iz anketnih vprašalnikov lahko vplivajo različne naključne napake, motiviranost anketirancev za sodelovanje, nenatančnost pri izpolnjevanju vprašalnikov, mogoče navajanje socialno zaželenih odgovorov, napačno razumevanje vprašanj in nepripravljenost oziroma nejevoljnost za reševanje vprašalnika zaradi njegove obsežnosti. Za nadaljnje raziskave predlagamo stratificiran in dovolj velik vzorec preiskovancev, ki bo omogočil posplošitev rezultatov na celotno prebivalstvo.

Zaključek

Izmed direktnih dejavnikov tveganja na psihofizično zdravje zaposlenih značilno vplivata dva dejavnika: Delovno okolje, delovna oprema in fizične obremenitve ter Obremenitve kot posledica sociodemografskih okoliščin. Psihofizično zdravstveno stanje zaposlenih

bi lahko izboljšali z več povratnimi informacijami vodij, z vključevanjem zaposlenih v strateško odločanje v organizaciji, večjo pozornostjo in prilagajanjem časovnih rokov ter spodbujanjem zaposlenih h koriščenju odmora, predvsem med dolgimi delovniki. Dvigovanje bremen, ki je značilno za osebje zdravstvene nege, ki dela neposredno s pacientom, kaže, da je treba s (ergonomičnimi) pripomočki izboljšati razmere dela. S krajšanjem nočnega turnusa in omejevanjem števila nočnih izmen na mesec bi po vsej verjetnosti uspeli znižati občutke preobremenjenosti in utrujenosti ter nespečnost.

Conflict of interest/Nasprotje interesov

The authors declare that no conflicts of interest exist./Avtorici izjavljata, da ni nasprotja interesov.

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Ethical approval/Etika raziskovanja

Approval to conduct the study was obtained from the Medical Ethics Committee (application number: 0120-557/2017/4) and the management of the research institute. The study was conducted in accordance with the Helsinki-Tokyo Declaration (World Medical Association, 2013) and the Code of Ethics for Nurses and Nurse Assistants of Slovenia (2014)./Za izvedbo raziskave je Komisija za medicinsko etična vprašanja (štev. vloge: 0120-557/2017/4) in vodstvo zavoda podelilo dovoljenje. Raziskava je pripravljena v skladu z načeli Helsinško-tokijske deklaracije (World Medical Association, 2013) in v skladu s Kodeksom etike v zdravstveni negi in oskrbi Slovenije (2014).

Author contributions/Prispevek avtorjev

The authors jointly designed the study, which was conducted by the first author. The co-author participated in the analysis and interpretation of the results. Both authors participated in the writing of the article./Avtorici sta skupaj zastavili raziskavo, ki jo je izvedla prva avtorica. Soavtorica je sodelovala pri analizi in interpretaciji rezultatov. Obe avtorici sta sodelovali pri pisanju članka.

Literature

Andersen, M., Lønning, K., Bjørnelv, G. M., & Fagerström, L. (2016). Nursing intensity and costs of nurse staffing demonstrated by the RAFAELA system: Liver vs. kidney transplant recipients. *Journal of Nursing Management*, 24(6), 798–805. <https://doi.org/10.1111/jonm.12384> PMID:27162168

Baljoon, R. A., Banjar, H. E., & Banakhar, M. A. (2018). Nurses' work motivation and the factors affecting it: A scoping review. *International Journal of Nursing & Clinical Practices*, 5(277), 1–10. <https://doi.org/10.15344/2394-4978/2018/277>

Cho, S. H., Park, M., Jeon, S. H., Chang, H. E., & Hong, H. J. (2014). Average hospital length of stay, nurses' work demands, and their health and job outcomes. *Journal of Nursing Scholarship*, 46(3), 199–206. <https://doi.org/10.1111/jnu.12066> PMID:24502556

Čehovin Zajc, J., & Kohont, A. (2017). Impacts of work intensity on employees' quality of work, life and health. *Teorija in praksa*, 54(2), 209–223.

D'Agostin, F., & Negro, C. (2016). Symptoms and musculoskeletal diseases in hospital nurses and in a group of university employees: A cross sectional study. *International Journal of Occupational Safety and Ergonomics*, 23(2), 274–284. <https://doi.org/10.1080/10803548.2016.1198092> PMID:27277971

De Oliveira, L. B., Lopes de Sousa, A. F., da Cruz Silva, W., Silva, G.B., Guimaraes, M. S. O., & Batista Moura, M. E. (2014). Nurses health and safety: Ergonomic risks in critical hospital units. *Journal of Nursing UFPE / Revista de Enfermagem*, 8(8), 2633–2637.

Ellapen, T. J., & Narsigan, S. (2014). Work related musculoskeletal disorders among nurses: Systematic review. *Journal of Ergonomics*, 4(2), 1–6. <https://doi.org/10.4172/2165-7556.S4-003>

Er, F., & Sokmen, S. (2018). Investigation of the working conditions of nurses in public hospitals on the basis of nurse-friendly hospital criteria. *International Journal of Nursing Sciences*, 5(2), 206–212. <https://doi.org/10.1016/j.ijnss.2018.01.001> PMID:31406826; PMCID:PMC6626204

Fiedler, K. M., Weir, P. L., van Wyk, P. M. & Andrews, D. M. (2012). Analyzing what nurses do during work in a hospital setting: A feasibility study using video. *Work*, 43(4), 515–523. <https://doi.org/10.3233/WOR-2012-1419> PMID:22927611

Freimann, T., Coggon, D., Merisalu, E., Animagi, L., & Paasuke, M. (2013). Risk factors for musculoskeletal pain amongst nurses in Estonia: A cross-sectional study. *BMC Musculoskeletal Disorders*, 14(1), pp. 1–13. <https://doi.org/10.1186/1471-2474-14-334> PMID:24289649; PMCID:PMC4219579

Galletta, M., Portoghese, I., Ciuffi, M., Sancassiani, F., D'Aloja, E., & Campagna, M. (2016). Working and environmental factors on job burnout: A cross-sectional study among nurses. *Clinical Practice and Epidemiology in Mental Health*, 12, 132–141. <https://doi.org/10.2174/1745017901612010132> PMID:27990173; PMCID:PMC5120375

- Kodeks etike v zdravstveni negi in oskrbi Slovenije in Kodeks etike za babice Slovenije. (2014). Ljubljana: Zbornica zdravstvene in babiške nege Slovenije – Zveza strokovnih društev medicinskih sester, babic in zdravstvenih tehnikov Slovenije.
- Kralj, A., Sedmak, M., Kotnik, V., Medica, K., Sekloča, P., Medarič, Z., et al. (2011). Analiza stanja psihosocialnih tveganj na delovnih mestih v mikro, malih in srednje velikih podjetjih. Retrieved May 14, 2018 from http://www.ir-rs.si/f/docs/Razvojni_projekti/Studija_MSP.pdf
- Liira, J., Verbeek, J. H., Costa, G., Driscoll, T. R., Sallinen, M., Isotalo, L. K., & Ruotsalainen, J. H. (2014). Pharmacological interventions for sleepiness and sleep disturbances caused by shift work. *Cochrane Database of Systematic Reviews*, 12(8), 1–69.
<https://doi.org/10.1002/14651858.CD009776.pub2>
PMid:25113164
- Mark, P. & Smith, A. P. (2011). Occupational stress, job characteristics, coping, and the mental health of nurses. *British Journal of Health Psychology*, 17(3), 505–521.
<https://doi.org/10.1111/j.2044-8287.2011.02051.x>
PMid:22107162
- Martins Pereira, S., Teixeira, C. M., Carvalho, A. S., Hernandez-Marrero, P., & Null, N. (2016). Compared to palliative care, working in intensive care more than doubles the chances of burnout: Results from a nationwide comparative study. *Plos One*, 11(9), 1–21.
<https://doi.org/10.1371/journal.pone.0162340>
PMid:27612293; PMCID:PMC5017676
- Min, A., Yoon, Y. S., & Hong, H. C. (2019). Association between nurses' breaks, missed nursing care and patient safety in Korean hospitals. *Journal of Nursing Management*, 28(8), 1–9.
<https://doi.org/10.1111/jonm.12831>
PMid:31350775
- Peršolja, M., Mišmaš, A., & Jurdana, M. (2018). Povezava med neprespanostjo in delazmožnostjo zaposlenih v zdravstveni negi. *Obzornik zdravstvene nege*, 5(1), 8–17.
<https://doi.org/10.14528/snr.2018.52.1.186>
- Portoghese, I., Galletta, M., Coppola, R. C., Finco, G., & Campagna, M. (2014). Burnout and workload among health care workers: The moderating role of job control. *Safety and Health at Work*, 5(3), 152–157.
<https://doi.org/10.1016/j.shaw.2014.05.004>
PMid:25379330; PMCID:PMC4213899
- Raziq, A., & Maulabakhsh, R. (2015). Impact of working environment on job satisfaction. *Procedia Economics and Finance*, 23, 717–725.
[https://doi.org/10.1016/S2212-5671\(15\)00524-9](https://doi.org/10.1016/S2212-5671(15)00524-9)
- Ritter, D. (2011). The relationship between healthy work environments and retention of nurses in a hospital setting. *Journal of Nursing Management*, 19(1), 27–32.
<https://doi.org/10.1111/j.1365-2834.2010.01183.x>
PMid:21223402
- Rollins, J. A. (2015). The 12-Hour Shift. *Pediatric nursing*, 41(4), 162–164.
- Šprah, L. & Dolenc, B. (2014). Orodje za obvladovanje psihosocialnih tveganj in absentizma (orodje OPSA). Retrieved February 21, 2018 from https://dmi.zrc-sazu.si/sites/default/files/opsa_vprsalnik.pdf
- Witkoski, A., & Vaughan Dickson, V. (2010). Hospital staff nurses' work hours, meal periods, and rest breaks: A review from an occupational health nurse perspective. *AAOHN Journal*, 58(11), 489–497.
<https://doi.org/10.1177/216507991005801106>
PMid:21053797
- Yan, P., Yang, Y., Zhang, L., Li, F., Huang, A., Wang, Y., ... Yao, H. (2018). Correlation analysis between work-related musculoskeletal disorders and the nursing practice environment, quality of life, and social support in the nursing professionals. *Medicine*, 97(9), 1–6.
<https://doi.org/10.1097/MD.00000000000010026>
PMid:29489648; PMCID:PMC5851758
- World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *Journal of the American Medical Association*, 310(20), 2191–2194.
<https://doi.org/10.1001/jama.2013.281053>
PMid:24141714

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Izvirni znanstveni članek/Original scientific article

Prepričanja in implementacija na dokazih podprte prakse med visokošolsko izobraženimi medicinskimi sestrami in zdravstveniki (2. del): presečna raziskava

Beliefs and implementation of evidence-based practice among nurses with a higher education degree (2. Part): A cross-sectional study

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Ključne besede: znanje; izobraževanje; raziskovanje; karierni razvoj; zdravstvena politika; zdravstveni menedžment; napredna zdravstvena nega

Key words: knowledge, education, research, career development, healthcare policy, healthcare management, advanced nursing

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IZVLEČEK

Uvod: Zaposleni v zdravstveni negi še vedno niso dovolj opolnomočeni s kompetencami o dokazih podprti praksi. Namen raziskave je bil prepoznati dejavnike, ki oblikujejo prepričanja in tudi implementacijo na dokazih podprte prakse medicinskih sester na vseh ravneh zdravstvenega varstva v Sloveniji.

Metode: Izvedena je bila presečna raziskava. Uporabljeni sta bili dve lestvici, in sicer »*Evidenced based practice Beliefs Scale and the Implementation Scale*«. Sodelovalo je 1014 visokošolsko izobraženih medicinskih sester in zdravstvenikov z vseh treh nivojev zdravstvenega varstva. Podatke smo obdelali z opisnimi, eksplorativnimi in eksplikativnimi statističnimi metodami.

Rezultati: O raziskovanju na področju zdravstva se je izobraževalo $n = 325$ (38,8 %) anketirancev, o dokazih podprti praksi $n = 280$ (34 %) anketirancev. Pozitivna prepričanja o dokazih podprte prakse pojasnijo samoocena znanja o dokazih podprti praksi ($\beta = 0,249$) in raziskovanju ($\beta = 0,162$), leta zaposlitve ($\beta = -0,124$), zadovoljstvo z delom ($\beta = 0,117$), izobraževanje o dokazih podprti praksi ($\beta = 0,092$) in izobrazba strokovni magisterij ($\beta = 0,077$). Pogostejšo implementacijo pojasnijo pozitivna prepričanja o dokazih podprte prakse ($\beta = 0,306$) in zaposlitev v zdravstvenem domu ($\beta = 0,132$).

Diskusija in zaključek: Pomanjkanje znanja o raziskovanju in dokazih podprte prakse se pokazata kot najtrdnejša napovedna dejavnika za razvoj prepričanj, medtem ko so pozitivna prepričanja trden napovednik za pogostejšo implementacijo na dokazih podprte prakse. Karierni razvoj medicinskih sester in zdravstvenikov na primarni ravni, ki je osredinjen na prevzem novih nalog, se pokaže kot pomemben dejavnik implementacije na dokazih podprte prakse med vključenimi v raziskavo.

ABSTRACT

Introduction: Nursing professionals are still not sufficiently empowered to use evidence-based practice competences. The aim of the study was to identify the factors shaping the beliefs on and implementation of evidence-based practice among nurses working in the Slovenian health care system.

Methods: This study used a cross-sectional research design. A total of 1,014 nurses with a higher education degree from all three levels of the health care system participated in the study. Two scales were used: *EBP Beliefs Scale* and *EBP Implementation Scale*. Data were processed using descriptive, exploratory, and explanatory methods.

Results: Overall, a total of 325 participants (38.8%) had received education and training in research, compared to 280 of those (34%) who had received education and training in evidence-based practice. Self-assessed knowledge about research and evidence-based practice was highest among respondents with a master's degree. Beliefs about evidence-based practice were explained by self-assessed knowledge of evidence-based practice ($\beta = 0,249$) and research ($\beta = 0,162$), total years of employment ($\beta = -0,124$), job satisfaction ($\beta = 0,117$), training in evidence-based practice ($\beta = 0,092$), and master's degree ($\beta = 0,077$). Implementation of evidence-based practice is explained by beliefs regarding evidence-based practice ($\beta = 0,306$) and employment at a community health centre ($\beta = 0,132$).

Discussion and conclusion: Lack of knowledge in research and evidence-based practice and the importance of knowledge obtained through master's programmes are central to developing beliefs regarding evidence-based practice and improving its implementation. Career development at the primary level focused on taking on new roles and linked to both postgraduate education and independent work in nursing proved to be an important factor in the implementation of evidence-based practice.



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Uvod

Raziskave kažejo, da na dokazih podprta praksa rezultira v izboljšani skladnosti zdravstvene obravnave, povečani varnosti pacientov in kakovosti zdravstvene obravnave, izboljšajo se izidi in stroški zdravstvene obravnave, zmanjša se število neželenih dogodkov (Titler, LoBiondo-Wood, & Haber, 2019). Vseeno raziskovalci ugotavljajo, da zaposleni v zdravstveni negi še vedno niso opolnomočeni s kompetencami o uporabi na dokazih podprte prakse, kar se kaže s pomanjkanjem znanja in odporom do sprememb v klinični praksi in obsežne rabe izkušenj iz lastnega dela (Camargo et al., 2018; Melnyk et al., 2018). Opravljenih je bilo več raziskav o ovirah za implementacijo na dokazih podprte prakse, bolj ali manj sta poudarjena slabo znanje in pomanjkanje veščin za njegovo uporabo (Bole, 2018; Shayan, Kiwanuka, & Nakaye, 2019; Dolezel et al., 2020).

Pomembno vlogo ima menedžment zdravstvene nege, ki je ključni spodbujevalec na dokazih podprte prakse. Njegova naloga je ustvariti pogoje za pridobivanje znanj o na dokazih podprte prakse med zaposlenimi v zdravstveni negi in implementaciji prav te v prakso (Cheng, Feng, Hu, & Broome, 2018). Srednji menedžment je najučinkovitejši pri spreminjanju klinične prakse, saj lahko izkoristi svoj položaj med odločevalci in zaposlenimi, ki delajo neposredno ob pacientovi postelji, če je opolnomočen strateškega načrtovanja, pridobivanja in razširitve pridobljenih informacij, vključevanja zaposlenih in omogočanje mentorstva pri uporabi na dokazih podprte prakse. Menedžment je ključni člen pri zagotavljanju virov in ustvarjanju pozitivne organizacijske kulture pri uvajanju na dokazih podprte prakse (Nilsen, Schildmeijer, Ericsson, Seing, & Birken, 2019; Gallagher-Ford, Koshy Thomas, Connor, Sinnott, & Melnyk, 2020; Birken & Currie, 2021).

V literaturi raziskovalci povezujejo več individualnih ovir, ki učinkujejo na odnos in implementacijo na dokazih podprte prakse v klinična okolja (Dessie et al., 2020; Aynalem, Yazew, & Gebrie, 2021). Dagne, Beshah, Kassa, & Dagnaw (2021) ugotavljajo, da se izobraževanje iz raziskovanja in dokazih podprte prakse v zdravstveni negi pokažejo kot dejavniki, povezani tako s prepričanji kot implementacijo na dokazih podprte prakse. S prepričanji in implementacijo na dokazih podprte prakse je povezanih več demografskih dejavnikov, kot so leta zaposlitve v zdravstveni negi in stopnja izobrazbe (Tomotaki, Fukahori, & Sakai, 2020). Bole (2018) ugotavlja, da je magistrska izobrazba medicinskih sester na primarni ravni pozitivno povezana z odnosom do na dokazih podprti praksi in implementacijo dokazov. Tudi Aynalem et al. (2021) opozarjajo na pomen magistrske izobrazbe, saj je ob ustreznih spodbudah pogostost iskanja dokazov in branje znanstvenih člankov pogostejše takoj po končanem magistrstvu, medtem ko razmerje postane

negativno s številom let po opravljenem magistrstvu, kar kaže na pomanjkanje načrtovanega kontinuiranega profesionalnega izobraževanja in prisotnega mentorstva pri uvajanju na dokazih podprte prakse v kliničnih okoljih (Dessie et al., 2020).

Globalni problem, s katerim se danes sooča večina zdravstvenih sistemov, je pomanjkanje medicinskih sester (Haddad, Annamaraju, & Toney-Butler, 2020), ki vodi v preobremenjenost na delovnem mestu in tudi v pomanjkanje časa za iskanje in implementacijo dokazov v klinična okolja. Malo medicinskih sester prepozna pomembnost uporabe dokazov in raziskovanja v delovnem procesu. Velike obremenitve medicinskih sester so negativno povezane tako z odnosom kot samo implementacijo na dokazih podprte prakse. Tudi zadovoljstvo z delom in podporno delovno okolje oblikujeta odnos in implementacijo na dokazih podprte prakse (Fu, Wang, Hu, & Muir-Cochrane, 2020).

Namen in cilji

Za načrtovanje uvajanja na dokazih podprte prakse v slovenski zdravstveni negi je nujna ocena znanj na tem področju, prepričanja zaposlenih o uporabi dokazov pri kliničnem delu v zdravstveni negi in ocena dejanske implementacije dokazov raziskav. Pomembno je tudi prepoznavanje dejavnikov lokalnega okolja, ki lahko oblikujejo prepričanja in implementacijo na dokazih podprte prakse.

Namen raziskave je ugotoviti, kakšna prepričanja imajo zaposleni v zdravstveni negi o uporabi dokazov in kakšen je obseg implementacije na dokazih podprte prakse. Cilj raziskave je bil prepoznati značilne napovedne dejavnike, ki lahko pojasnijo dosežena prepričanja in implementacijo na dokazih podprte prakse med visokošolsko izobraženimi medicinskimi sestrami in zdravstveniki v bolnišnicah in zdravstvenih domovih.

Raziskovalno vprašanje: S katerimi dejavniki lahko pojasnimo dosežke anketirancev na področju prepričanj in implementacije na dokazih podprte prakse med visokošolsko izobraženimi medicinskimi sestrami, ki delujejo na treh ravneh zdravstvenega varstva?

Metode

Uporabili smo neeksperimentalni presečni raziskovalni načrt. Podatke smo zbirali s tehniko pisnega anketiranja.

Opis instrumenta

Strukturiran instrument raziskave je vključeval 51 zaprtih vprašanj. Prvi del vprašalnika je vseboval šestnajst vprašanj, ki so vključevala demografska vprašanja, podatke o udeležbi na izobraževanjih v zadnjih petih letih (odgovora Da. in Ne.), samooceno znanja o raziskovanju in z dokazi podprte prakse in zadovoljstvo z delom (lestvica 1 – nezadostno, 5 – odlično) in dostopnost do podatkovnih baz (odgovora: Da. in Ne.).

Za oceno prepričanj in implementacije na z dokazi podprte prakse smo uporabili lestvici »EBP Beliefs Scale and the Implementation Scale« (Melnyk, Fineout-Overholt, & Mays, 2008). Prvo avtorico smo pisno prosili za dovoljenje za uporabo obeh lestvic pred začetkom izvedbe raziskave. Kulturna prilagoditev, analiza veljavnosti in zanesljivost obeh lestvic je opisana v članku (Skela-Savič, Lobe, & Bole, 2022).

Lestvica prepričanj o na dokazih podprti praksi ali »EBP Beliefs Scale« vsebuje šestnajst prepričanj v obliki trditev, o katerih so se anketiranci oz. anketiranke opredelili oz. opredelile na petstopenjski Likertovi lestvici (1 – Sploh se ne strinjam., 2 – Se ne strinjam., 3 – Delno se ne strinjam, delno se strinjam., 4 – Se strinjam., 5 – Popolnoma se strinjam.). Vrednost koeficienta Cronbach alfa je znašala 0,909.

Lestvica implementacije na dokazih podprte prakse ali »EBP Implementation Scale« vsebuje devetnajst zaprtih trditev o implementaciji različnih nalog na področju na dokazih podprte prakse, o katerih so se anketiranci oz. anketiranke opredelili oz. opredelile na petstopenjski lestvici, ki meri pogostost uporabe ključnih elementov na dokazih podprte prakse v zadnjih osmih tednih (1 – Nikoli v osmih tednih., 2 – Od enkrat do trikrat v osmih tednih., 3 – Od štirikrat do šestkrat v osmih tednih., 4 – Od sedemkrat do osemkrat v osmih tednih., 5 – Več kot osemkrat v osmih tednih.). Vrednost koeficienta Cronbach alfa je znašala 0,969.

Opis vzorca

V raziskavo smo povabili vse slovenske javne bolnišnice (27) in vse slovenske zdravstvene domove (67). Sodelovanje je potrdilo dvajset bolnišnic in 29 zdravstvenih domov. Ciljno prebivalstvo so bili

visokošolsko izobraženi kadri v zdravstveni negi v zdravstvenih zavodih, ki so privolili v raziskavo ($N = 2773$). Po metodi cenzusa smo razdelili 1650 anketnih vprašalnikov v bolnišnicah in 1123 v zdravstvenih domovih, skupno 2773. Stopnja odgovora je bila 36,57 % ($n = 1014$). Odzivnost zdravstvenih domov je bila 32,4 % ($n = 329$), kliničnih centrov 22,2 % ($n = 245$), splošnih bolnišnic 19,9 % ($n = 202$) in specializiranih bolnišnic 19,6 % ($n = 199$). 39 anketnih vprašalnikov (5,1 %) ni vključevalo podatka o zdravstveni ustanovi. V raziskavi je sodelovalo 887 (89,5 %) žensk in 104 (10,5 %) moških. Povprečna delovna doba v zdravstveni negi je znašala 17,10 let ($s = 10,1$). Glede na stopnjo izobrazbe je v raziskavi sodelovalo 90 višjih medicinskih sester (9 %), 809 diplomiranih medicinskih sester (80,8 %) in 102 magistrrov/magistic zdravstvene nege ali drugih smeri (10,2 %).

Zbiranje in obdelava podatkov

Dovoljenja za raziskavo in zbiranje podatkov smo natančneje opisali v psihometrični analizi instrumentov izvedene raziskave (Skela-Savič, Bole, & Lobe, 2022). Pri izvedbi raziskave smo upoštevali etične smernice (Social Research Association, 2021). Podatke smo obdelali s programom SPSS 22 (SPSS Inc., Chicago, IL, ZDA). Uporabili smo opisno statistiko, parni t-test, Pearsonovo korelacijo, test ANOVA in linearno regresijo. Statistična značilnost je bila merjena na ravni $p < 0,05$.

Rezultati

Na področju raziskovanja se je v zadnjih petih letih izobraževalo 325 (38,8 %) anketirancev, največ

Tabela 1: Povezave med demografskimi in drugimi značilnostmi anketirancev
Table 1: Correlation between respondents' demographic and other characteristics

Spremenljivke/ Variable	n	Da/Yes n (%)	Ne/No n (%)	Leta dela/ Work experience t (p)	Stopnja izobrazbe/ Education χ^2 (p)	Zdravstveni zavod/ Healthcare centre χ^2 (p)
Izobraževanje (raziskovanje)	837	325 (38,8)	512 (61,2)	4,024 ($<0,001$)	43,924 ($<0,001$)	45,099 ($<0,001$)
Izobraževanje (DPP)	823	280 (34)	543 (66)	4,281 ($<0,001$)	27,421 ($<0,001$)	33,143 ($<0,001$)
Dostopnost podatkovne baze	950	339 (35,7)	611 (64,3)	0,226 (0,821)	3,606 (0,165)	37,841 ($<0,001$)
	n	\bar{x}	s	Leta dela/Work experience r (p)	Stopnja izobrazbe/ Education F(p)	Zdravstveni zavod/ Healthcare centre F(p)
Samooocena znanja (raziskovanje)	968	2,98	0,923	-0,065 (0,045)	25,338 ($<0,001$)	10,032 ($<0,001$)
Samooocena znanja (DPP)	969	3,02	0,935	0,039 (0,230)	12,052 ($<0,001$)	3,925 (0,008)
Zadovoljstvo z delom	975	3,77	0,818	0,156 ($<0,001$)	1,421 (0,242)	0,366 (0,778)

Legenda/Legend: n – število/number; r – korelacijski koeficient/correlation coefficient; t – vrednost t testa/t-test value; χ^2 – hi kvadrat test/chi-square test; p – statistična značilnost/statistical significance; DPP – na dokazih podprta praksa/evidence-based practice

njih na primarni ravni (44,1 %) in v specialističnih bolnišnicah (38,7 %) ter pomembno manj v splošnih bolnišnicah (28,2 %) in kliničnih centrih (17,6 %), razlika je statistično značilna. Značilno največ so se izobraževali anketiranci s strokovnim magisterijem (70,7 %). O dokazih podprte prakse se je izobraževalo

34 % vključenih, največ njih v specialističnih bolnišnicah (36,7 %) in na primarni ravni (35,6 %) ter pomembno manj v splošnih bolnišnicah (23,8 %) in kliničnih centrih (15,9 %), razlika je statistično značilna. Značilno največ se je izobraževalo anketirancev s strokovnim magisterijem (59,6 %).

Tabela 2: Opisni rezultati prepričanij in implementacije na dokazih podprte prakse
Table 2: Descriptive results of beliefs regarding evidence-based practice

<i>Trditve/Statements</i>	<i>n</i>	\bar{x}	<i>s</i>	<i>%</i>
1. Menim, da uporaba na dokazih podprte prakse (DPP) vodi do najboljše oskrbe pacientov.	987	4,09	0,80	79,0
2. Dobro poznam korake uporabe DPP.	982	3,26	0,99	40,6
3. Prepričan/-a sem, da lahko implementiram DPP.	975	3,38	0,90	45,5
4. Menim, da je kritična presoja dokazov obstoječih raziskav pomembna stopnja v procesu DPP.	974	3,79	0,84	67,7
5. Prepričan/-a sem, da na dokazih osnovane smernice lahko izboljšajo delo v kliničnih okoljih.	983	4,01	0,78	77,7
6. Menim, da lahko hitro in učinkovito poiščem najboljše dokaze za odgovore na klinična vprašanja.	980	3,50	0,83	49,5
7. Menim, da lahko premagam težave pri implementaciji DPP.	978	3,39	0,82	42,7
8. Prepričan/-a sem, da lahko hitro in učinkovito implementiram DPP.	975	3,25	0,84	34,9
9. Prepričan/-a sem, da bo uporaba DPP izboljšala moje delo s pacienti.	976	3,73	0,84	63,6
10. Vem, kako meriti rezultate kliničnega dela.	975	3,34	0,93	43,8
11. Menim, da DPP vzame preveč časa.	962	3,19	0,87	32,2
12. Prepričan/-a sem, da lahko pridobim najboljše vire, da lahko implementiram DPP.	960	3,19	0,83	30,7
13. Menim, da je uporaba na DPP zahtevna.	968	3,27	0,86	36,5
14. Zadosti dobro vem, kako implementirati DPP, da usvojim spremembe v praksi.	970	3,12	0,87	30,0
15. Vem, da zmorem implementirati DPP v svoje delo.	973	3,35	0,83	41,3
16. Verjamem, da je moje delo na dokazih podprto.	754	3,54	0,84	52,0
Izvedena spremenljivka »prepričanja«		3,47	0,54	
1. Uporabim dokaz raziskave za spremembo svoje klinične prakse.	940	1,99	1,02	9,1
2. Kritično ocenim dokaze izvedenih raziskav.	939	2,06	1,05	10,1
3. Oblikujem PICO-vprašanje o lastni klinični praksi.	888	1,82	1,01	7,7
4. Neformalno razpravljam o dokazih raziskav s sodelavci oz. sodelavkami.	928	2,34	1,13	16,0
5. Zberem podatke o pacientovih težavah.	935	2,93	1,34	34
6. Delim dokaze raziskav v obliki poročila ali predstavitev z več kot dvema sodelavcema oz. sodelavkama.	926	2,05	1,14	12,6
7. Vrednotim izide uvedenih sprememb v praksi.	927	2,20	1,15	14,6
8. Delim smernice za DPP s sodelavci.	931	2,16	1,12	13,7
9. Delim dokaze raziskav s pacientom/družinskimi člani.	919	1,99	1,11	9,0
10. Delim dokaze raziskav s člani oz. članicami multidisciplinarnega tima.	928	2,18	1,11	13,2
11. Preberem znanstveni članek.	939	2,50	1,12	21,5
12. Ko preberem znanstveni članek, kritično ocenim izvedeno raziskavo.	933	2,46	1,15	17,1
13. Uporabim zbirke sistematičnih pregledov raziskav iz podatkovnih baz.	928	2,12	1,14	12,7
14. Uporabim izdelane nacionalne smernice.	935	2,45	1,26	24,7
15. Uporabim DPP-smernice ali pregledne raziskave za spremembo dela v klinični praksi, kjer delam.	920	2,20	1,14	15,3
16. Vrednotim delovanje v zdravstveni negi z zbiranjem izidov zdravstvene obravnave pacientov.	930	2,35	1,20	18,5
17. Dobljene rezultate/podatke delim s sodelavci oz. sodelavkami.	933	2,35	1,20	18,8
18. Sprememim svoje delovanje glede na rezultate pri delu s pacienti oz. pacientkami.	936	2,48	1,20	20,5
19. Promoviram uporabo DPP sodelavcem.	937	2,12	1,18	14,0
Izvedena spremenljivka »implementacija«		2,23	0,90	

Legenda/Legend: *n* – število/number; \bar{x} – povprečna vrednost/average; *s* – standardni odklon/standard deviation; % – odstotek/percentage

Dostop do podatkovnih baz (Cinahl, Web of Science, Proquest, idr.) je imelo 339 (35,7 %) anketirancev, vendar ta ni povezan s stopnjo izobrazbe, je pa povezan z delom v specialistični bolnišnici, pri čemer ima dostop 51,3 % anketiranih, dostop v splošni bolnišnici je v 31,6 %, kliničnem centru v 28,9 % in zdravstvenem domu 31,3 %. Skoraj polovica (49,4 %) anketirancev je zadovoljstvo s poklicnim delom ocenila kot prav dobro, 25,6 % kot dobro in 16,3 % kot odlično. Večje zadovoljstvo z delom so navedli starejši anketiranci (Tabela 1).

Znanje o raziskovanju je bilo značilno najvišje samoocenjeno pri anketirancih s strokovnim magisterijem ($\bar{x} = 3,57$, $s = 0,807$) in na primarni ravni ($\bar{x} = 3,18$, $s = 0,951$), enak trend se kaže pri samooceni znanja o dokazih podprti praksi pri anketirancih s strokovnim magisterijem ($\bar{x} = 3,44$, $s = 0,811$), na primarni ravni ($\bar{x} = 3,11$, $s = 0,943$) in v kliničnem centru ($\bar{x} = 3,11$, $s = 0,932$). Ugotovili smo tudi pozitivni učinek izobraževanja v zadnjih petih letih na višino samoocene znanj, saj ima izobraževanje o raziskovanju pozitivni učinek na samooceno znanja ($\bar{x} = 3,45$, $s = 0,785$; $t = 12,680$, $p < 0,001$), enako ugotovimo pri samooceni znanj o na dokazih podprti praksi ($\bar{x} = 3,50$, $s = 0,809$; $t = 11,771$, $p < 0,001$).

Samoocena znanja o raziskovanju je višja ($\bar{x} = 3,09$; $s = 0,894$) pri dostopnosti podatkovnih baz ($t = 2,593$, $p = 0,010$) in je pozitivno povezana z zadovoljstvom pri delu ($r = 0,218$, $p < 0,001$). Dostopnost do podatkovnih baz kaže enak trend tudi pri znanju o dokazih podprti praksi ($\bar{x} = 3,13$, $s = 0,903$), prav tako je zadovoljstvo z delom značilno povezano z znanjem o dokazih podprti praksi ($r = 0,288$, $p < 0,001$). V nadaljevanju: udeležba na izobraževanju v zadnjih petih letih učinkuje na zadovoljstvo z delom, saj so bolj zadovoljni tisti zaposleni ($\bar{x} = 3,92$, $s = 0,712$), ki so se izobraževali o raziskovanju ($t = 4,901$, $p < 0,001$) in na dokazih podprti praksi ($\bar{x} = 3,94$, $s = 0,704$; $t = 4,876$, $p < 0,001$). Starost v letih je značilno pozitivno povezana z večino spremenljivk, razen z znanjem o raziskovanju, saj so mlajši svoje znanje ocenili višje (Tabela 1).

Povprečna vrednost prepričanj o na dokazih podprti praksi je 3,47 ($s = 0,54$). Najbolj se strinjajo z dvema trditvama, in sicer da »na dokazih podprta praksa vodi do najboljše oskrbe pacientov« ($\bar{x} = 4,09$, $s = 0,80$) in »na dokazih temelječe smernice lahko izboljšajo delo v kliničnih okoljih« ($\bar{x} = 4,01$, $s = 0,78$). Združeni odgovori strinjanja in popolnega strinja so nekoliko bolj optimistični vsaj za nekaj prepričanj. Več kot 50 % anketirancev ocenjuje, da je njihovo delo na dokazih

Tabela 3: Povezave in razlike med značilnostmi anketiranih, prepričanji in implementacijo na dokazih podprte prakse

Table 3: Correlations and differences between characteristics, beliefs and implementation of evidence-based practice

Korelacija/Correlations	Prepričanja o DPP/ Beliefs of EBP	Implementacija DPP/ Implementation of EBP
	r	r
leta dela	-0,144**	-0,109*
znanje (raziskovanje)	0,430**	0,238**
znanje (na dokazih podprta praksa)	0,470**	0,245**
zadovoljstvo z delom	0,267**	0,127**
izobrazba	\bar{x} ($p < 0,001$)	\bar{x} ($p = 0,171$)
višja medicinska sestra ($n = 64$)	3,4063	2,3008
diplomirana medicinska sestra ($n = 635$)	3,4367	2,2033
magistrica zdravstvene nege ($n = 80$)	3,7204	2,3903
izobraževanje v zadnjih petih letih (odgovor: Da.)	\bar{x} ($p < 0,001$)	\bar{x} ($p < 0,001$)
raziskovanje: Da. ($n = 258$)	3,6590	2,4531
raziskovanje: Ne. ($n = 394$)	3,3408	2,0793
na dokazih podprta praksa: Da. ($n = 215$)	3,6892	2,4556
na dokazih podprta praksa: Ne. ($n = 390$)	3,3463	2,1147
dostop do podatkovnih baz (odgovor: Da.)	\bar{x} ($p = 0,001$)	\bar{x} ($p = 0,060$)
Da. ($n = 271$)	3,5527	2,3084
Ne. ($n = 475$)	3,4166	2,1813
zdravstveni zavod	\bar{x} ($p = 0,293$)	\bar{x} ($p < 0,001$)
splošna bolnišnica ($n = 157$)	3,4080	2,0192
specializirana bolnišnica ($n = 151$)	3,4471	2,1816
klinični center ($n = 176$)	3,4412	2,1782
zdravstveni dom ($n = 279$)	3,5141	2,4235

Legenda/Legend: n – število/number; r – korelacijski koeficient/correlation coefficient; p – statistična značilnost/statistical significance; n – število odgovorov/number of answers; DPP – na dokazih podprta praksa/evidence-based practice;** – statistična značilnost pod 0,05

Tabela 4: Regresijski model pojasnitve prepričanij in implementacije na dokazih podprte prakse
Table 4: Correlations and differences between demographic and other independent variables and factors of beliefs and implementation

Prepričanja o DPP/Beliefs of EBP		R² = 0,289	
	β	<i>p</i>	
spremenljivke			
leta dela	-0,124	0,001	
znanje o raziskovanju	0,162	0,004	
znanje o na dokazih podprti praksi	0,249	< 0,001	
zadovoljstvo z delom	0,117	0,001	
stopnja izobrazbe (strokovni magisterij)	0,077	0,037	
izobraževanje o raziskovanju (zadnjih 5 let)	0,045	0,344	
izobraževanje o na dokazih podprti praksi (zadnjih pet let)	0,092	0,049	
Implementacija na dokazih podprte prakse/Implementation of EBP		R² = 0,169	
	β	<i>p</i>	
spremenljivke			
prepričanja o na dokazih podprti praksi	0,306	< 0,001	
znanje o raziskovanju	0,012	0,851	
znanje o na dokazih podprti praksi	0,046	0,462	
zadovoljstvo z delom	0,010	0,809	
izobraževanje o raziskovanju (zadnjih pet let)	-0,080	0,126	
izobraževanje o na dokazih podprti praksi (zadnjih pet let)	-0,011	0,835	
Zdravstveni zavod (zdravstveni dom)	0,132	0,001	

Legenda/Legend: β – regresijski koeficient/regression coefficient; R² – korelacijski koeficient/correlation coefficient; *p* – statistična značilnost/statistical significance

podprto, vendar se to ne pokaže pri odgovorih v zvezi z znanjem o dokazih podprte prakse (trditve 2, 6, 12,) in njeno implementacijo (trditve 3, 7, 8, 11, 13, 14, 15). Opažen je manko znanj za spremljanje lastnega dela in izdelave kliničnih ekspertiz (trditve 10).

Povprečna vrednost implementacije je nizka (\bar{x} = 2,23, *s* = 0,89). Nizka je realizacija aktivnosti zbiranja podatkov o pacientovih težavah, ki je vsakodnevna delovna obveza in je hkrati največkrat izvedena aktivnost po oceni anketiranih, saj jo vsaj 7x ali več v osmih tednih izvede 34 % anketiranih. Ena četrtnina upošteva pri delu nacionalne smernice, ena petina pa spremeni svoje delo glede na rezultate pri delu. Vrednotenje dela in spremljanje izidov je pogosteje prisotno pri manj kot petini anketiranih. Rezultati, ki kažejo na pogostost branja znanstvenih člankov, kritično oceno dokazov in uporabo različnih virov o dokazih podprti praksi in usmerjenosti k izidom, so prav tako nizki.

Statistično značilne povezave med spremenljivkami in razlike med primerjanimi skupinami podatkov v tabeli 3 so bile osnova za oblikovanje linearnega regresijskega modela. Rezultati linearne regresije (Tabela 4) kažejo, da je konstrukt stališč, ki opisuje prepričanja o dokazih podprte prakse, mogoče najbolje pojasniti s samooceno znanja o dokazih podprte prakse (β = 0,249) in s samooceno znanja o raziskovanju (β = 0,162). Statistično značilni so še naslednji dejavniki, navedeni po moči pojasnitve vrednosti β : leta zaposlitve, zadovoljstvo z delom, izobraževanje o dokazih podprte prakse v zadnjih petih letih in izobrazba strokovni magisterij. Vsi dejavniki so pozitivno usmerjeni (Tabela 4).

Konstrukt stališč, ki opisuje implementacijo na dokazih podprte prakse, najboljše pojasnijo dosežki anketirancev o prepričanjih o dokazih podprti praksi (β = 0,306) in zaposlitev glede na vrsto zdravstvenega zavoda (β = 0,132). Na našem vzorcu se kot delovno okolje, v katerem je največ implementacije na dokazih podprte prakse in z njo povezanih aktivnosti, statistično značilno pokaže zaposlitev v zdravstvenem domu (Tabela 6).

Razprava

Raziskava o prepričanjih in implementaciji na dokazih podprte prakse med visokošolsko izobraženimi zaposlenimi v zdravstveni negi je prva te vrste raziskava, ki je v vzorec zajela vse tri ravni zdravstvenega varstva v Sloveniji. Med vključenimi anketiranci oz. anketirankami v raziskavo ni bilo značilnih razlik glede na vrsto zdravstvenega zavoda v njihovih dosežkih v izobrazbi, letih dela v zdravstvenem zavodu in izkazanem zadovoljstvu pri delu, kar je pomemben podatek za razumevanje rezultatov raziskave.

Dobra tretjina anketirancev se je v zadnjih petih letih izobraževala iz raziskovanja in na dokazih podprte prakse. Ugotavljamo, da se vključeni v raziskavo s primarne ravni in specialističnih bolnišnicah pogosteje izobražujejo s področja iz raziskovanja in na dokazih podprte prakse kot zaposleni v splošnih bolnišnicah in kliničnih centrih. Presenečenje raziskave je, da so se najmanj na obeh področjih izobraževali vključeni v raziskavo iz obeh kliničnih centrov. To sta terciarni ustanovi, v katerih

poteka zahtevnejša zdravstvena obravnava in s tem tudi zdravstvena nega, redki primeri obolenj, visokošolsko izobraževanje zdravstvenih delavcev in večina temeljnega in aplikativnega raziskovanja, kar pa se ne kaže v izobraževanju medicinskih sester na področju raziskovanja in dokazih podprte prakse. Rezultat ni v skladu s statusom in odgovornostjo za razvoj zdravstvene nege, ki jo oba klinična centra nosita. Tudi splošne bolnišnice osvojijo pomembno nižji rezultat, kot ju primarna raven in specializirane bolnišnice. Raziskava, ki bi primerjale različna področja zaposlitev medicinskih sester v zdravstvenem sistemu in njihovo usposobljenost na dokazih podprto prakso, je malo, več je spoznanj na posameznih področjih delovanja. Tako raziskava Yoo, Kim, Kim, Kim, & Ki, (2019), izvedena v eni od terciarnih bolnišnic v Južni Koreji, pokaže, da se je 73,5 % anketiranih udeležilo izobraževanja o raziskovanju in 46,6 % o dokazih podprti praksi, kar je pomembno večji dosežek, kot je v opazovanih kliničnih centrih v naši raziskavi. Crawford et al. (2020) primerjajo rezultate na dokazih podprtega delovanja med medicinskimi sestrami v bolnišnicah in tistimi, ki delajo v ambulantah, pri čemer so prve osvojile boljši rezultat, kot so ga medicinske sestre v ambulantah. Naša raziskava pokaže ravno drugače, in sicer da vključenost v štiriindvajseturno bolnišnično obravnavo ni dejavnik pozitivnih prepričanj in uspešne implementacije na dokazih podprte prakse in so medicinske sestre na primarni ravni osvojile značilno boljše rezultate pri implementaciji na dokazih podprte prakse.

Ugotovimo, da dostopnost do podatkovnih baz ni povezana z možnostmi izobraževanja, je pa povezana s samooceno znanj o raziskovanju. Samoocena znanja o raziskovanju in dokazih podprti praksi je pozitivno povezana s stopnjo izobrazbe, najvišjo samooceno osvojijo magistricice in magistri zdravstvene nege. Bolj so z delom zadovoljni tisti zaposleni, ki so se v zadnjih petih letih izobraževali oz. izobraževale na enem od področij ali obeh. Mlajši so navedli višje samoocene znanja o raziskovanju. Povzamemo lahko, da so prepoznani že številni dejavniki, ki spodbujajo ali zavirajo na dokazih podprto prakso, Gallagher - Ford et al. (2020) so jih povzeli v spremenljivke, kot so čas, tradicija in kultura, primanjkljaj znanja o dokazih podprti praksi in premalo resursov za vključevanje mentorjev na področju uvajanja na dokazih podprte prakse. Naša raziskava poudari pomen izobraževanj v zadnjih petih letih o raziskovanju in dokazih podprti praksi, kar učinkuje na samooceno znanj. Končan magisterij zdravstvene nege ali drugih smeri in povezanost s samooceno znanj ponovno opozori, kako pomembno je, da se v kliničnih okoljih sistematizirajo delovna mesta za napredno zdravstveno nego (Skela-Savič, 2020), saj bodo samo tako pomembno prispevala k razvoju zdravstvene nege in izvajanju naprednih, z dokazi podprtih storitev v zdravstveni negi.

Rezultati prepričanj o dokazih podprti praksi pokažejo sicer pozitivno usmerjenost v dokazih podprto prakso, vendar so anketiranci neodločeni pri svojih prepričanjih v lastno znanje. Več kot polovica jih ocenjuje, da je njihovo delo na dokazih podprto, kar se ne pokaže s samooceno znanja o dokazih podprte prakse. Prepričanja o dokazih podprte prakse so značilno pogostejša pri mlajših anketirancih in so pozitivno povezana s samooceno znanja o raziskovanju in dokazih podprte prakse, udeležbo na izobraževanju na obeh področjih v zadnjih petih letih, doseženo stopnjo izobrazbe magisterij zdravstvene nege, dostopnostjo do podatkovnih baz in zadovoljstvom z delom. Tudi Dagne et al. (2021) potrjujejo povezanost izobraževanja o raziskovanju in dokazih podprte prakse s prepričanji (Tomotaki, Fukahori, & Sakai, 2020), Bole & Skela-Savič (2019) ter stopnjo izobrazbe.

Rezultati implementacije na dokazih podprte prakse so izjemno slabi, celostno gledano se opisane aktivnosti implementacije uporabljajo 1–3x v osmih tednih, kar ne govori o sistematičnem načinu tako na področju uporabe znanj o dokazih, drugih različnih virov, kot so raziskave, smernice, spreminjanje prakse, usmerjenost k izidom idr. Zelo preseneča realizacija aktivnosti zbiranja podatkov o pacientovih težavah, ki je vsakodnevna delovna obveza, vendar jo izvaja le tretjina anketiranih.

Le ena četrtnina uporablja pri delu nacionalne smernice, petina spremeni svoje delo glede na rezultate pri delu. Vrednotenje dela in spremljanje izidov je pogostejše prisotno pri manj kot petini anketiranih. Branje znanstvenih člankov in ocena uporabnosti teh za klinično delo in usmerjenost k izidom zdravstvene nege so, žal, prej izjema kot pravilo. Implementacija na dokazih podprte prakse je značilno večja pri mlajših anketirancih in je pozitivno povezan s samooceno znanja o raziskovanju in dokazih podprte prakse, udeležbo na izobraževanju na obeh področjih v zadnjih petih letih, zadovoljstvom z delom in zaposlitvijo v zdravstvenem domu. Aynalem, Yazew, & Gebrie (2021) ugotavljajo, da je iskanje dokazov, to je branje znanstvenih člankov, neposredno povezano z magistrsko stopnjo izobrazbe. Pomanjkanje znanja za razvoj zdravstvene nege v naši raziskavi je mogoče pripisati pomanjkanju vrednot aktivizma in profesionalizma ter kompetenc, ki bi bile usmerjene v razvoj in profesionalizacijo zdravstvene nege (Skela-Savič, Hvalič-Touzery, & Pesjak, 2017). To pomanjkanje pomembno oblikuje stopnjo implementacije v Sloveniji, ki je podpovprečna (Skela-Savič, Pesjak, & Lobe, 2016; 2020; Bole & Skela-Savič, 2019). Razloge za tak rezultat je treba iskati tudi v organizacijski kulturi v zdravstveni negi, ki jo Singleton (2017) uvrsti med organizacijske ovire v zdravstveni negi, ko zaposleni v zdravstveni negi niso opolnomočeni z vsemi zahtevanimi resursi za izboljševanje in spremembe v tradicionalni zdravstveni negi, kar kaže predvsem na pomanjkanje enotnega izobraževanja in enotnega standardiziranega sestavnega dela

minimalnih temeljnih kompetenc na dokazih podprte prakse v dodiplomskih in podiplomskih izobraževanjih (Albarqouni, et al., 2018; Skela-Savič et al., 2020). Na podobno problematiko so pred leti opozarjali v ZDA, kjer so začeli z obveznim izobraževanjem o na dokazih podprte prakse leta 2005 (Gallagher - Ford et al. 2020), v Sloveniji pa šele ob implementaciji dopolnitev evropske direktive (Direktive Evropske unije) za regulirane poklice (Directive 2013/55/EU). Prenovljeni študijski programi glede na zahteve Direktive 2013/55/EU (Directive 2013/55/EU) se v Sloveniji izvajajo od leta 2016 naprej, zato imajo diplomirane medicinske sestre in zdravstveniki, ki so se izobraževali predtem, velik deficit v znanju, kar je treba ustrezno obravnavati v okviru kontinuiranega profesionalnega izobraževanja in obveznega izobraževanja za obnavljanja licenc za delo v zdravstveni negi (Skela-Savič, 2017; Skela-Savič et al. 2020) in načrtovanju kontinuiranega profesionalnega izobraževanja in mentorstva na dokazih podprte prakse v kliničnih okoljih (Dessie et al., 2020).

Na eksplikativni ravni analize rezultatov ugotovimo, da je prepričanja o dokazih podprte prakse mogoče pojasniti z znanjem o dokazih podprte prakse, znanjem o raziskovanju, mlajšimi anketiranci, zadovoljstvom z delom, izobraževanjem o dokazih podprte prakse in strokovnim magisterijem. Implementacijo na dokazih podprte prakse na eksplikativni ravni pojasnita le dve spremenljivki, to sta prepričanja o dokazih podprte prakse in zaposlitev v zdravstvenem domu. Yoo et al. (2019) ugotavlja pomembnost znanja, ki oblikuje prepričanje o dokazih podprte prakse in organizacijsko pripravljenostjo. Uspešnost implementacije je pogojena z vzpostavitvijo strategije izobraževanja za izboljšanje znanja o dokazih podprte prakse in oblikovanjem organizacijske kulture, ki podpira prehod na nov način delovanja v zdravstveni negi na nivoju celotne zdravstvene organizacije. Prav zadnje omenjeno se pokaže tudi v naši raziskavi, saj zdravstveni domovi osvojijo značilno boljše rezultate pri implementaciji, kot jih specializirane in splošne bolnišnice ter klinični centri. Odgovor na tak rezultat je mogoče pripisati razvoju specialnih znanj za visokošolsko izobražene medicinske sestre in zdravstvenike na področju družinske medicine, pri čemer se od leta 2011 izvaja postopni prenos del in nalog (ang. *task-shifting*) med specialisti družinske medicine in diplomiranimi medicinskimi sestrami in zdravstveniki (Skela-Savič, 2020), ki jih Maier, Aiken, & Busse (2017) ocenjujejo kot intervencije, ki se izvajajo samostojno pod nadzorom družinskih zdravnikov. Primerjava vsebin izvedenih izobraževanj za opravljanje intervencij v ambulanti družinske medicine s smernicami in kompetencami napredne prakse, ki jih je izdal Mednarodni svet medicinskih sester (ICN, 2020), jasno pokaže, da izvedeni moduli izobraževanja za »referenčne medicinske sestre« niso na nivoju kompetence napredne zdravstvene nege (Skela-Savič, 2020), saj izobraževanja ne usvojijo količine in kompetenc strokovnega magisterija. Vendar, ne glede na to ugotovitev, je to bilo področje, ki

se je glede na ostala področja dela v zdravstvu najbolj razvijalo. Namreč: medicinske sestre so se izobraževale na modularnih izobraževanjih za pridobitev naziv specialna znanja in bile razporejene na nova delovna mesta, s čimer jim je bila dodeljena določena stopnja avtonomije pri delu. Opravljena raziskava pokaže, da samo to učinkuje na implementacijo na dokazih podprte prakse na eksplorativni in eksplikativni ravni analize. Podobna izobraževanja so se na primarni ravni izvajala v centrih za krepitev zdravja, prav tako je ustanovitev urgentnih centrov bila povezana s pridobivanjem dodatnih znanj, dvigom stopnje izobrazbe, oblikovanjem novih delovnih mest, podelitvijo avtonomije za določena dela in naloge idr.

Znanje o dokazih podprte prakse za veliko večino diplomiranih medicinskih sester in zdravstvenikov v Sloveniji ni bilo del dodiplomskega izobraževanja, je pa to danes pričakovana kompetenca v skladu z Direktivo Evropske unije (Directive 2013/55/EU) za reguliran poklic na področju splošne zdravstvene nege. Raziskava jasno pokaže na nezadostno znanje o dokazih podprte prakse, ki pojasni prepričanja in ta tudi implementacijo na dokazih podprte prakse. Singleton (2017) pomanjkljivo znanje navede kot ključno oviro na individualni ravni za doseganje na dokazih podprte prakse. Zato je izjemnega pomena, da management zdravstvene nege v strateški načrt razvoja zdravstvene nege v zdravstvenem zavodu in v karierni načrt vsake posamezne visokošolsko izobražene medicinske sestre vključi kontinuirana profesionalna izobraževanja o dokazih podprte prakse. Prav tako morajo izobraževanja o dokazih podprte prakse postati del obveznih vsebin za pridobitev in obnovitev licence za poklic, za kar je odgovorna Zbornica zdravstvene in babiške nege Slovenije.

Na organizacijski ravni se pokaže, da razvojne aktivnosti in uvajanje sprememb v zdravstveni negi in s tem povezana izobraževanja pomembno vplivajo na prepričanja o dokazih podprte prakse in tudi na njeno večjo implementacijo. Nacionalni projekt prenosa kompetenc od zdravnikov družinske medicine na diplomirane medicinske sestre na primarni ravni in s tem povezana modularna izobraževanja za specialna znanja je pomembno učinkoval na prepričanja in implementacijo na primarni ravni. Pomembno dejstvo je bilo tudi to, da je prenos kompetenc potekal s podporo Ministrstva za zdravje, kar pomeni tudi politično podporo uvedeni spremembi in oblikovanje novih delovnih mest. Zato je na menedžerjih zdravstvene nege in medicinskih sestrah raziskovalkah in akademičarkah, da v okviru potreb dolgožive družbe zasnujejo strateške razvojne projekte 2020–2030, v njih vgradijo izobraževanja o dokazih podprte prakse in uvajanju sprememb ter utemeljijo kompetence in delovna mesta za klinične specializacije in napredno zdravstveno nego, ki jih v Sloveniji še ni. Le s predlaganim integriranim načinom lahko v prihodnosti pričakujemo razvoj zdravstvene nege, ki bo

z dokazi podprta, osnove tega znanja bo pa imela vsaka diplomirana medicinska sestra in zdravstvenik, nosilci na dokazih podprte prakse bodo pa magistric, magistri in doktorice, doktorji zdravstvene nege in drugih zdravstvenih ved. Na pomembnost sodelovanja med znanostjo in napredno klinično prakso za vzpostavitev na dokazih podprte prakse opozarja tudi raziskava Migliore, Chouinard, & Woodlee (2020), medtem ko Oh & Yoo (2020) ugotavljata, da je za implementacijo na dokazih podprte prakse treba razviti spodbudne sistematične programe uvajanja, ki so podprti z izobraževanjem in postavitvijo mentorjev za uvajanje na dokazih podprte prakse. Tak način mora podpirati organizacijska kultura zdravstvenega zavoda.

Omejitve raziskave je več. Presečna raziskava nam ne omogoča dokazovanja vzročnosti, zato nismo prepoznali dejanskih vzrokov za dobljene rezultate o prepričanjih in implementaciji na dokazih podprte prakse v zdravstveni negi, temveč smo pridobili napovedne dejavnike, ki jih je treba preveriti na eksperimentalni in longitudinalni ravni. Omejitve so v neenakih skupinah glede na stopnjo izobrazbe, spol in zastopanost anketiranih iz zdravstvenih zavodov glede na raven zdravstvene obravnave. Mednarodne raziskave o delovni sili v zdravstveni negi kažejo, da ima Slovenija najmanj visokošolsko izobraženih medicinskih sester na število prebivalcev (Albreht et al., 2021; OECD, 2021). To dejstvo lahko učinkuje na dosežke naše raziskave, vendar ga v tej raziskavi nismo proučevali. Želeli bi si večje odzivnosti na raziskavo. Obdelava podatkov po posameznih bolnišnicah ni mogoča zaradi prevelikih razlik v odzivnosti po bolnišnicah. Čeprav smo kot vzorčenje izbrali metodo cenzusa, spoznanj zaradi omenjenih omejitev ne moremo posploševati na vse visokošolsko izobražene kadre v zdravstveni negi. Udeležba je bila anonimna in prostovoljna, vendar ne moremo izključiti, da so k raziskavi pristopili tisti, ki so bolj naklonjeni razvoju zdravstvene nege, ali tisti, ki razvoja ne podpirajo. Oba instrumenta gradita na samooceni, kar pomeni, da je to pogled posameznika oz. posameznice in je pri interpretaciji treba biti previden. Rezultati regresijskega modela dopuščajo še veliko možnosti za raziskovanje še nepojasnjenih dejavnikov.

Zaključek

Z raziskavo smo pridobili vedenje o napovednih dejavnikih, s katerimi lahko na vzorcu medicinskih sester in zdravstvenikov na vseh treh ravneh zdravstva pojasnimo prepričanja in implementacijo na dokazih podprte prakse v zdravstveni negi. Kot ključna ugotovitev je pomanjkanje znanja o raziskovanju in na dokazih podprte prakse in pomen izobraževanja na magistrski ravni za razvoj prepričanj in s tem tudi izboljšanje implementacije na dokazih podprte prakse. Karierni razvoj medicinskih sester na primarni ravni, ki je usmerjen v prevzem novih nalog in je povezan s podiplomskim izobraževanjem in samostojnim

delovanjem v zdravstveni negi, se pokaže kot pomemben dejavnik implementacije na dokazih podprte prakse.

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Prispevek avtorjev/Author contributions

Vsi avtorji so sodelovali pri zasnovi in oblikovanju dela, pridobivanju dela in analizi, kritičnem pregledu dela, dokončni odobritvi različice objavljenega članka. Prva in zadnja avtorja sta sodelovala pri interpretaciji podatkov./All authors participated in the conception and design of the paper, implementation of the study and its analysis, critical review of the paper, and approval of the final version of the manuscript. The first and last authors participated in the interpretation of the data.

Literatura

- Albarqouni, L., Hoffmann, T., Straus, S., Olsen, N. R., Young, T., Ilic, D. ... Glasziou, P. (2018). Core competencies in evidence-based practice for health professionals: Consensus statement based on a systematic review and delphi survey. *JAMA Network Open*, 1(2), Article e180281. <https://doi.org/10.1001/jamanetworkopen.2018.0281> PMID:30646073
- Albreht, T., Polin, K., Pribaković Brinovec, R., Kuhar, M., Poldrugovac, M., Ogrin Rehberger, P. ... Vracko, P. (2021). Slovenia: Health system review. *Health Systems in Transition*, 23(1), 72–83.
- Aynalem, Z. B., Yazew, K. G., & Gebrie, M. H. (2021). Evidence-based practice utilization and associated factors among nurses working in Amhara Region Referral Hospitals, Ethiopia. *PloS One*, 16(3), Article e0248834. <https://doi.org/10.1371/journal.pone.0248834> PMID:33740000; PMCID:PMC7978364

- Bole, U. (2018). *Odnos visokošolsko izobraženih medicinskih sester v primarnem zdravstvenem varstvu do na dokazih podprte prakse* (magistrsko delo). Fakulteta za zdravstvo Angele Boškin, Jesenice.
- Bole, U., & Skela-Savič, B. (2019). Odnos visokošolsko izobraženih medicinskih sester v primarnem zdravstvenem varstvu do na dokazih temelječe prakse. In K. Pesjak, S. Pivač, (Eds.), *12. mednarodna znanstvena konferenca Izzivi in potrebe družbe na področju preventivne in promocije zdravja na vseh ravneh zdravstvenega varstva, Hotel Astoria Bled, 6. junij 2019* (pp. 132–139). Jesenice: Fakulteta za zdravstvo Angele Boškin.
- Birken, S. A., & Currie, G. (2021). Using organization theory to position middle-level managers as agents of evidence-based practice implementation. *Implementation Science*, 16(1), 37. <https://doi.org/10.1186/s13012-021-01106-2> PMID:33836781; PMCID:PMC8034157
- Camargo, F. C., Iwamoto, H. H., Galvão, C. M., Pereira, G. A., Andrade, R. B., & Masso, G. C. (2018). Competences and barriers for the evidence-based practice in nursing: An integrative review. *Revista Brasileira de Enfermagem*, 71(4), 2030–2038. <https://doi.org/10.1590/0034-7167-2016-0617> PMID:30156693
- Cheng, L., Feng, S., Hu, Y., & Broome, M. E. (2018). Leadership practices of nurse managers for implementing evidence-based nursing in China. *Journal of Nursing Management*, 26(6), 671–678. <https://doi.org/10.1111/jonm.12594> PMID:29464807
- Crawford, C. L., Rondinelli, J., Zuniga, S., Valdez, R. M., Cullen, L., Hanrahan, K., & Titler, M. G. (2020). Testing of the nursing evidence-based practice survey. *Worldviews on Evidence-Based Nursing*, 17(2), 118–128. <https://doi.org/10.1111/wvn.12432> PMID:32233058
- Dagne, A. H., Beshah, M. H., Kassa, B. G., & Dagnaw, E. H. (2021). Implementation of evidence-based practice and associated factors among nurses and midwives working in Amhara Region government hospitals: A cross-sectional study. *Reproductive Health*, 18(1), 36. <https://doi.org/10.1186/s12978-021-01096-w> PMID:33579309; PMCID:PMC7881559
- Dessie, G., Jara, D., Alem, G., Mulugeta, H., Zewdu, T., Wagnaw, F. ... Burrowes, S. (2020). Evidence-based practice and associated factors among health care providers working in public hospitals in Northwest Ethiopia during 2017. *Current Therapeutic Research, Clinical and Experimental*, 93, Article 100613. <https://doi.org/10.1016/j.curtheres.2020.100613> PMID:33306046; PMCID:PMC7708748
- Dolezel, J., Zelenikova, R., Finotto, S., Mecugni, D., Patelarou, A., Panczyk, M. ... Jarosova, D. (2021). Core evidence-based practice competencies and learning outcomes for European nurses: Consensus statements. *Worldviews on Evidence-based Nursing*, 18(3), 226–233. <https://doi.org/10.1111/wvn.12506> PMID:34031973; PMCID:PMC8251814
- Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System ('the IMI Regulation'). Retrieved from <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:354:0132:0170:en:PDF>
- Fu, Y., Wang, C., Hu, Y., & Muir-Cochrane, E. (2020). The barriers to evidence-based nursing implementation in mainland China: A qualitative content analysis. *Nursing & Health Sciences*, 22(4), 1038–1046. <https://doi.org/10.1111/nhs.12763> PMID:32713063
- Gallagher-Ford, L., & Connor, L. (2020). Transforming healthcare to evidence-based healthcare: A failure of leadership. *The Journal of Nursing Administration*, 50(5), 248–250. <https://doi.org/10.1097/NNA.0000000000000878> PMID:32317566
- Gallagher-Ford, L., Koshy Thomas, B., Connor, L., Sinnott, L. T., & Melnyk, B. M. (2020). The effects of an intensive evidence-based practice educational and skills building program on EBP competency and attributes. *Worldviews on Evidence-Based Nursing*, 17(1), 71–81. <https://doi.org/10.1111/wvn.12397> PMID:32017438
- Haddad, L. M., Annamaraju, P., & Toney-Butler, T. J. (2020). Nursing shortage. In *StatPearls*. StatPearls Publishing. PMID:29630227
- International Council of Nurses (ICN) (2020). *Guidelines on advanced nursing practice*. Geneva: International Council of Nurses.
- Maier, C., Aiken, L., & Busse, R. (2017). Nurses in advanced roles in primary care: Policy levers for implementation. *OECD Health Working Papers*, 98. <https://doi.org/10.1787/a8756593-en>.
- Melnyk, B. M., Gallagher-Ford, L., Zellefrow, C., Tucker, S., Thomas, B., Sinnott, L. T., & Tan, A. (2018). The first U.S. study on nurses' evidence-based practice competencies indicates major deficits that threaten healthcare quality, safety, and patient outcomes. *Worldviews on Evidence-Based Nursing*, 15(1), 16–25. <https://doi.org/10.1111/wvn.12269> PMID:29278664

- Melnyk, B. M., Fineout-Overholt, E., & Mays, M. Z. (2008). The evidence-based practice beliefs and implementation scales: Psychometric properties of two new instruments. *Worldviews on Evidence-Based Nursing*, 5(4), 208–216.
<https://doi.org/10.1111/j.1741-6787.2008.00126.x>
PMid:19076922
- Migliore, L., Chouinard, H., & Woodlee, R. (2020). Clinical research and practice collaborative: An evidence-based nursing clinical inquiry expansion. *Military Medicine*, 185(Suppl 2), 35–42.
<https://doi.org/10.1093/milmed/usz447>
PMid:31912871
- Nilsen, P., Schildmeijer, K., Ericsson, C., Seing, I., & Birken, S. (2019). Implementation of change in health care in Sweden: A qualitative study of professionals' change responses. *Implementation Science*, 14(1), 51.
<https://doi.org/10.1186/s13012-019-0902-6>
PMid:31088483; PMCid:PMC6518624
- OECD (2021), Health at a Glance 2021: OECD Indicators (pp. 221–223). OECD Publishing, Paris.
<https://doi.org/10.1787/ae3016b9-en>.
- Oh, E. G., & Yoo, J. Y. (2020). Experiences of evidence-based practice mentors: A phenomenological study. *Contemporary Nurse*, 56(4), 331–343.
<https://doi.org/10.1080/10376178.2020.1736593>
PMid:32270744
- Shayan, S. J., Kiwanuka, F., & Nakaye, Z. (2019). Barriers associated with evidence-based practice among nurses in low- and middle-income countries: A systematic review. *Worldviews on Evidence-Based Nursing*, 16(1), 12–20.
<https://doi.org/10.1111/wvn.12337>
PMid:30604471
- Singleton J. K. (2017). Evidence-based practice beliefs and implementation in doctor of nursing practice students. *Worldviews on Evidence-Based Nursing*, 14(5), 412–418.
<https://doi.org/10.1111/wvn.12228>
PMid:28388829
- Skela-Savič, B., Lobe, B., & Bole, U. (2022). Prepričanja in implementacija na dokazih podprte prakse med visokošolsko izobraženimi medicinskimi sestrami in zdravstveniki v Sloveniji (1. del): Psihometrična analiza instrumentov. *Obzornik Zdravstvene Nege*, 56(3), 184–193.
<https://doi.org/10.14528/snr.2022.56.3.3116>
- Skela-Savič, B., Gotlib, J., Panczyk, M., Patelarou, A. E., Bole, U., Ramos-Morcillo, A. J. ... Ruzafa-Martínez, M. (2020). Teaching evidence-based practice (EBP) in nursing curricula in six European countries: A descriptive study. *Nurse Education Today*, 94, Article 104561.
<https://doi.org/10.1016/j.nedt.2020.104561>
PMid:32905986
- Skela-Savič, B., & Lobe, B. (2020). Differences in beliefs on and implementation of evidence-based practice according to type of health care institution: A national cross-sectional study among Slovenian nurses. *Journal of Nursing Management*, 29(5), 971–981.
<https://doi.org/10.1111/jonm.13234>
PMid:33305446
- Skela-Savič, B. (2020). It is time for clinical specialisations and advanced nursing practice: Marking the International Year of the Nurse and the Midwife. *Obzornik zdravstvene nege*, 54(1), pp. 4–11.
<https://doi.org/10.14528/snr.2020.54.1.3023>.
- Skela-Savič, B., Hvalič-Touzery, S., & Pesjak, K. (2017). Professional values and competencies as explanatory factors for the use of evidence-based practice in nursing. *Journal of Advanced Nursing*, 73(8), 1910–1923.
<https://doi.org/10.1111/jan.13280>
PMid:28205259.
- Skela-Savič, B., Pesjak, K., & Lobe, B. (2016). Evidence-based practice among nurses in Slovenian Hospitals: A national survey. *International Nursing Review*, 63(1), 122–131.
<https://doi.org/10.1111/inr.12233>
PMid:26748610.
- Social Research Association. (2021). *Research Ethics Guidance*. Retrieved from <https://the-sra.org.uk/common/Uploaded%20files/Resources/SRA%20Research%20Ethics%20guidance%202021.pdf>.
- Titler, M., LoBiondo-Wood, G., & Haber, J. (2019). Overview of evidence-based practice. In G. LoBiondo-Wood, J. Haber, & M. G. Titler (Eds.), *Evidence-based practice for healthcare and quality improvement*. Philadelphia: Elsevier.
- Tomotaki, A., Fukahori, H., & Sakai, I. (2020). Exploring sociodemographic factors related to practice, attitude, knowledge, and skills concerning evidence-based practice in clinical nursing. *Japan Journal of Nursing Science*, 17(1), Article e12260.
<https://doi.org/10.1111/jjns.12260>
PMid:31173465.
- World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *Journal of the American Medical Association*, 310(20), 2191–2194.
<https://doi.org/10.1001/jama.2013.281053>
PMid:24141714
- Yoo, J. Y., Kim, J. H., Kim, J. S., Kim, H. L., & Ki, J. S. (2019). Clinical nurses' beliefs, knowledge, organizational readiness and level of implementation of evidence-based practice: The first step to creating an evidence-based practice culture. *PLoS One* 14(12), Article e0226742.
<https://doi.org/10.1371/journal.pone.0226742>
PMid:31877147; PMCid:PMC6932768

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Izvirni znanstveni članek/Original scientific article

Zadovoljstvo pacientov z dostopnostjo zdravstvenih storitev v obdobju epidemije covid-19: opisna raziskava

Patient satisfaction with access to health services during the COVID-19 pandemic:
A descriptive study

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Ključne besede: zadovoljstvo uporabnikov; zdravstveni sistem; zdravstveni delavci; epidemija; SARS-CoV-2

Key words: user satisfaction; health system; health professionals; pandemic; SARS-CoV-2

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IZVLEČEK

Uvod: Hitro širjenje nove vrste koronavirusa (SARS-CoV-2) in visoko število hospitalizacij sta ustavila javno življenje na globalni ravni. Zaradi omejevanja gibanja v času pandemije je prišlo do omejitev obiskovanja zdravstvenih ustanov in izvajanja neposrednega zdravstvenega varstva. Namen raziskave je bil ugotoviti zadovoljstvo pacientov z dostopnostjo do zdravstvenih storitev v času epidemije covid-19 v Sloveniji.

Metode: Uporabljena je bila opisna neeksperimentalna metoda empiričnega raziskovanja. Merski instrument je predstavljal spletni vprašalnik, ki ga je med decembrom 2020 in februarjem 2021 izpolnilo 226 oseb. Uporabljen je bil priložnostni vzorec odraslih oseb. Podatki so bili analizirani z opisno statistiko ter neparametričnim Mann-Whitneyjevim U-testom in Kruskal-Wallisovim testom.

Rezultati: Anketiranci najbolj cenijo prijazen in spoštljiv odnos zdravstvenih delavcev ter razpoložljivost za hitro pomoč. Negativno ocenjujejo telefonsko nedosegljivost, čakanje v čakalnicah ter kratek čas obravnave pri zdravniku. Rezultati nakazujejo manjšo stopnjo zadovoljstva z dostopnostjo zdravstvenih storitev v času epidemije covid-19 ($Me = 86,50$). Rezultati kažejo pozitivno stališče moških o dostopnosti zdravstvenih storitev ($U = 1297,5, p < 0,05$), med ostalimi skupinami ni bilo statistično pomembnih razlik ($p < 0,05$).

Diskusija in zaključek: Ugotovite kažejo, da se v času od pojava virusa SARS-CoV-2 v Sloveniji zaupanje do zdravstva in zdravstvenih storitev in njuna dostopnost nista izrazito spremenila. Ponekod po svetu se je v tem času še dodatno razvilo področje telemedicine, ki jo je treba tudi v Sloveniji bolj uveljaviti. V prihodnje je smiselno raziskati, kako je epidemija vplivala na psihofizično zdravje ljudi v naši državi.

ABSTRACT

Introduction: With the rapid spread of a new type of coronavirus (SARS-CoV-2) and the resulting high number of hospitalisations, public life worldwide was brought to a standstill. During the pandemic, restrictions on movement made the usual practice of visiting health facilities and receiving direct health care difficult. The aim of this study was to determine patient satisfaction with access to health services during the COVID-19 pandemic in Slovenia.

Methods: A descriptive, non-experimental research method was used. The measurement instrument was an online questionnaire completed by a total of 226 respondents between December 2020 and February 2021. Data were analysed using descriptive statistics, and the non-parametric Mann-Whitney U and Kruskal Wallis test. A p-value ≥ 0.05 was considered significant.

Results: Respondents mostly appreciated the friendly and respectful attitude of health professionals and the availability of emergency care. Inability to reach health services by telephone, waiting in waiting rooms and the short time spent in the doctor's office were negatively evaluated. The results show a slightly negative attitude towards the access to health services during the COVID-19 pandemic ($Me = 86.50$). The results also show a positive attitude in men regarding the access to health services ($U = 1297.5, p < 0.05$). There were no statistically significant differences between other groups ($p < 0.05$).

Discussion and conclusion: We found that in the time since the SARS-CoV-2 outbreak in Slovenia, trust and access to health care and health services have not changed significantly. During this time, some parts of the world have seen continued development of telemedicine, the use of which should become more prevalent in Slovenia as well. In the future, it would be useful to investigate how the pandemic has affected the psychophysical health of people in Slovenia.

Uvod

Območje Slovenije je virus SARS-CoV-2, ki povzroča bolezen covid-19, formalno dosegel 4. marca 2020 s prvim potrjenim primerom v naši državi. Po svetu se je razglasila pandemija (Kamenšek, Fošnarič, & Žibert, 2021). Zaradi hitre širitve virusa se je aprila 2020 ustavilo javno življenje po vsem svetu. Omejevanje širjenja okužb in ohranjanje zdravstvenih kapacitet v Sloveniji ter po svetu zagotavljamo z omejevalnimi ukrepi, ti pa prinašajo negativne posledice, ki so lahko na strani zdravstvenega stanja pacienta dolgoročne ali trajne (Žagar et al., 2020). Ukinjanje zdravstvenih storitev je imelo velik vpliv na kronično bolne, saj ti zaradi strahu pred okužbo niso poiskali ustrezne zdravstvene pomoči in so z obiskom zdravnika predolgo odlašali (Sinclair, Nolte, White, & Detering, 2020). V času pandemije je bil dostop do zdravstvenega varstva otežen zaradi uvajanja strogih zakonskih ukrepov ter omejevanja mobilnosti posameznikov. Države so pričele uveljavljati karantene ob prečkanju državnih meja in ob stiku z okuženo osebo, policijske ure ter množična testiranja državljanov. Uporaba zaščitnih mask v zaprtih in tudi zunanjih prostorih je postala obvezna, omejilo se je število oseb v zaprtih prostorih ter uveljavilo začasno prepoved opravljanja dejavnosti v gostilnah, barih, trgovinah s tehniko in tekstilom ter frizerskih in kozmetičnih salonih. Pričelo se je tudi delo in šolanje od doma (Državna uprava RS, 2021).

Posledice omejitev gibanja v času pandemije privedejo do socialnih in ekonomskih težav ter težav v zdravstvu, kar zaplete tudi običajne prakse obiskovanja zdravstvenih ustanov in izvajanje neposrednega zdravstvenega varstva. Nekatere storitve v zdravstvenih institucijah, predvsem na področju preventive, popolnoma nehajo delovati oziroma delujejo z omejenim delovnim časom, da bi zmanjšali tveganja za prenos okužbe z novim koronavirusom med pacienti in zaposlenimi (Ahmed et al., 2020; Cole, 2020; Prosen, Ličen, & Karnjuš, 2020; Oražem, Oblak, Španić, & Ritoša, 2020; Sinclair et al., 2020). Cole (2020) meni, da je epidemija na zdravstveni sistem vplivala s tolikšno mero, da bo prišlo do trimesečnega zaostanka na področju kirurgije. Prav tako so se znatno zmanjšale izvedbe preventivnih programov: presejalni testi za raka dojke, debelega črevesja in raka materničnega vratu so se na primer v primerjavi z januarjem 2020 julija 2020 zmanjšali za več kot 86 % (Cole, 2020). Žagar et al. (2020) ugotavljajo, da se je v Sloveniji v času epidemije znatno zmanjšalo število napotitev na prve ali kontrolne onkološke preglede; padec naj bi bil 33–85 %. Za 30 % naj bi se zmanjšalo tudi število prijav na novo odkritih rakavih obolenj, upad naj bi bil tudi na področju diagnostičnih preiskav (48 % upad rentgenskih preiskav, 76 % upad mamografije brez presejalnih preiskav, 42 % upad ultrazvočnih preiskav). Aragona et al. (2020)

v svojem delu opozarjajo na pomembno zmanjšanje števila obiskov v ambulantah za duševno zdravje, kar bi lahko imelo dolgoročno negativne učinke na potek zdravljenja in ponovitev duševnih bolezni.

Medicinske sestre in ostali zdravstveni delavci so se znašli v posebnih okoliščinah. Izredne epidemiološke razmere od medicinskih sester zahtevajo posebno znanje in predstavljajo pomemben izziv z vidika njihove profesionalne vloge. Medicinske sestre v omenjeni situaciji prevzemajo nove oziroma razširjene vloge, postajajo koordinatorke aktivnosti v žariščih izrednih razmer, informatorke, čustvena in psihološka podpora, triažirajo. Vse te vloge so postavljene v drugačen kontekst, kot so ga bile vajene. Zaradi epidemije se namreč spremeni organizacija, prihaja do težavnih delovnih pogojev, akutne množične obolevnosti in s tem povečane psihične obremenitve na strani zdravstvenih delavcev (Prosen et al., 2020).

Vsakodnevno delovanje zdravstvenega sistema se v času epidemije zmanjša, izvajajo se le nujni postopki in zdravljenje onkoloških pacientov (Stanimirovič & Matetič, 2020; Stanimirovič, 2021). Veliko težavo zaradi pomanjkanja kadra, zdravstvene opreme in kapacitet bolnišnic ter urgentnih centrov sta predstavljala tudi triaža pacientov in etično odločanje, kako in komu pravično razdeliti omejena sredstva zdravljenja (Briški, Ambrož, & Salecl, 2020). Delo zdravstvenih delavcev je bilo zaradi epidemije izredno težko, zaradi nevarnosti pred širjenjem okužbe so se obiski zdravstvenih ustanov zmanjšali. Aplikacija eZdravje in njene storitve (eRecept, eNaročanje) postanejo pomemben način za zagotavljanje hitrih, učinkovitih in varnih zdravstvenih storitev ter nudenje ustrezne komunikacije tako med zdravstvenimi delavci kot med njimi in prebivalstvom. Izvajalci omenjene aplikacije poročajo o izjemnem povečanju uporabe v času pojava epidemije tako s strani zdravstvenih delavcev kot prebivalcev (Stanimirovič & Matetič, 2020; Stanimirovič, 2021). Med ukrepi za zmanjševanje tveganja okužb je bilo tudi telefonsko sledenje pacientov, ena izmed oblik telemedicine. Zanj so izrazili zanimanje tudi zdravniki in onkološki pacienti z območja Slovenije (Oražem et al., 2020). Telemedicina je veda, ki se razvija vzporedno z razvojem informacijske tehnologije. V zadnjem desetletju je doživela vrsto praktičnih aplikacij v različnih okoljih. Vključuje komunikacijo zdravstvenih delavcev med seboj in s pacienti, prenos podatkov na daljavo ter druge sodobne informacijske tehnologije. Telemedicina bistveno spreminja način izvajanja zdravstvenih storitev, saj odpira možnosti dostopa do konziliarnih, diagnostičnih in terapevtskih storitev na daljavo (Fležar, 2014; Štrancar Fatur & Golob, 2014).

Kakovost zdravstvene oskrbe je pomemben del učinkovitega sistema zdravstvenega varstva pacientov. Da bi kakovost zdravstvene oskrbe dvignili, je potrebno nenehno ocenjevanje zadovoljstva njenih

uporabnikov, saj gre za enega najpomembnejših dejavnikov določitve uspeha zdravstvene ustanove ter pomemben pokazatelj kakovosti zdravstvene obravnave (Senić & Marinković, 2013; Manzoor, Wei, Hussain, Asif, & Shah, 2019; Deriba et al., 2020;). Pandemija virusa SARS-CoV-2 je v svetu pomembno vplivala na kakovost obravnave in privedla do nezadovoljstva uporabnikov zdravstvenih storitev, saj mnogim ni bila zagotovljena ustrezna zdravstvena obravnava. Zadovoljstvo opisujemo kot predstavo pacientovih prepričanj o tem, kaj je idealna oskrba ter z opažanji o dejansko prejeti oskrbi. Za izboljšanje zdravstvenih storitev je izrednega pomena poznavanje želja pacientov (Deriba et al., 2020).

Namen in cilji

Namen in cilj raziskave je bil ugotoviti zadovoljstvo državljanov Slovenije z dostopom do zdravstvenih storitev v času pandemije covid-19 v Sloveniji. Na podlagi tega smo zastavili naslednji raziskovalni vprašanja:

- Kakšna je stopnja zadovoljstva anketiranih z dostopnostjo zdravstvenih storitev v času epidemije covid-19 v Sloveniji?
- Kakšen je vpliv demografskih značilnosti anketirancev na zadovoljstvo z dostopnostjo zdravstvenih storitev?

Metode

Uporabljena je bila opisna neeksperimentalna metoda empiričnega raziskovanja. Podatki so bili zbrani z anketiranjem.

Opis instrumenta

Uporabili smo vprašalnik iz raziskave »Zadovoljstvo državljanov Republike Slovenije z zdravstvenimi storitvami v Sloveniji« (Terglav, Selak, Vrdelja, Kaučič, & Gabrovec, 2019). Od avtorjev smo predhodno dobili dovoljenje za njegovo uporabo. Vprašalnik je sestavljen iz 35 trditvev, razdeljenih v štiri sklope: prvi sklop vključuje demografske podatke (pet trditvev); drugi sklop obravnava obisk zdravnika v času od februarja do decembra 2020 in samooceno zdravstvenega stanja (4 trditvev); tretji sklop vključuje vprašanja glede dostopnosti obravnave, komunikacije in kakovosti storitve (15 trditvev); četrti sklop vključuje vprašanja glede zadovoljstva z zdravstvenim sistemom (10 trditvev). Anketiranci so trditve ocenjevali na podlagi petstopenjske Likertove lestvice (1 – sploh se ne strinjam; 2 – se ne strinjam; 3 – niti niti; 4 – se strinjam; 5 – povsem se strinjam). Končni rezultat predstavlja vsoto povprečnih vrednosti vseh trditvev, ki smo jih pretvorili v točke. Meja med zadovoljstvom in nezadovoljstvom z dostopnostjo zdravstvenih storitev je določena kot mediana, kar predstavlja

86,5 točke (ocene 25–125 točk, pri čemer ocena 125 nakazuje izredno zadovoljstvo, ocena 25 pa izredno nezadovoljstvo z dostopnostjo zdravstvenih storitev). Cronbach koeficient alfa za celoten vprašalnik znaša 0,85, kar kaže na visoko stopnjo zanesljivosti (Takavol & Dennick, 2011).

Opis vzorca

V raziskavi je bil uporabljen priložnostni vzorec odraslih oseb v Sloveniji. Povezavo do spletnega vprašalnika smo objavili na družbenem omrežju Facebook ter stike prosili, da anketo posredujejo naprej. Ravno tako smo anketo posredovali po elektronski pošti. Skupaj je vprašalnik v celoti izpolnilo 167 oseb (31 %). V celotnem vzorcu je v raziskavi sodelovalo največ žensk (88,1 %). Povprečna starost anketiranih je bila 33,85 leta ($s = 11,344$). Najmlajši anketiravec je bil star 18 let, najstarejši pa 69 let. Mlajše od 18 let smo izključili iz raziskave. Največ anketirancev je bilo zaposlenih (69,6 %) z dokončano poklicno šolo, srednjo šolo oziroma gimnazijo (38,7 %). Podrobnosti o demografskih in drugih podatkih prikazujemo v Tabeli 1.

Vsaj eno ali več kroničnih bolezni je imelo 27 (12,5 %) anketiranih, brez kroničnih bolezni je bilo 184 (85,2 %) anketiranih, 5 (2,3 %) anketiranih pa ne ve, ali imajo kronično bolezen. V večji meri anketiranci svoje zdravje ocenjujejo kot zelo dobro in dobro (91,6 %), 8,4 % anketirancev pa meni, da je njihovo zdravje slabo oziroma niti dobro niti slabo.

V obdobju med februarjem in decembrom 2020 je osebnega zdravnika obiskalo 51 (24,6 %) anketiranih, zdravnika specialista 48 (23,2 %) anketiranih, osebnega zdravnika in specialista 65 (31,4 %) anketiranih, 43 (20,8 %) anketiranih pa je odgovorilo, da zdravnika niso potrebovali. V enakem obdobju je od 0–5-krat zdravnika obiskalo 183 (85,0 %) anketirancev, 6–10-krat 27 (13,0 %) anketirancev ter 10- in večkrat 6 (2,0 %) anketiranih. Med prisotnostjo kroničnih nenalezljivih bolezni ter povišano frekvenco obiska zdravnika nismo ugotovili statistično pomembne razlike med skupinama ($\chi^2(13) = 21,249, p > 0,068$).

Opis poteka raziskave in obdelave podatkov

Pri zbiranju podatkov smo uporabili spletni vprašalnik s pomočjo odprtokodne spletne aplikacije za anketiranje EnKlikAnketa (1KA, 2017). Anketiranje je potekalo od decembra 2020 do februarja 2021. Podatki so bili analizirani z opisno statistiko ter zaradi nenormalne porazdelitve podatkov (Kolmogorov-Smirnov test, $p < 0,05$) z Mann-Whitneyjevim U-testom ter Kruskal-Wallisovim testom. Obdelava podatkov je potekala s pomočjo programa SPSS, verzija 22 (SPSS Inc., Chicago, Illinois, ZDA). Upoštevana stopnja statistične značilnosti je bila $p < 0,05$.

Tabela 1: Demografske in druge značilnosti vzorca
Table 1: Demographic and other characteristics of the sample

Spremenljivka/Variable	n	%
Spol		
Moški	27	11,9
Ženski	199	88,1
Starostna skupna		
< 20 let	8	3,5
21–30 let	110	48,7
31–40 let	55	24,3
41–50 let	34	15,0
51–60 let	10	4,4
> 61 let	9	4,0
V kateri regiji živite?		
Primorska	121	53,8
Notranjska	44	19,6
Gorenjska	16	7,1
Štajerska	25	11,1
Dolenjska	12	5,3
Koroška	2	0,9
Prekmurje	5	2,2
Najvišja dosežena izobrazba		
Osnovna šola ali manj	4	1,8
Poklicna šola/srednja šola	87	38,7
Višja/visoka šola	73	32,4
Univerzitetna izobrazba/magisterij stroke	53	23,6
Znanstveni magisterij/doktorat	8	3,6
Zaposlitveni status		
Dijak/-inja	3	1,3
Študent/-ka	31	13,8
Zaposlen/-a	156	69,6
Brezposeln/-a	12	5,4
Samozaposlen/-a	8	3,6
Upokojenec/-ka	12	5,4
Katerega zdravnika ste obiskali v času od februarja do decembra 2020?		
Osebni zdravnik	51	24,6
Specialist	48	23,2
Osebni zdravnik in specialist	65	31,4
Drugo	34	20,8
Kako bi na splošno ocenili vaše zdravje?		
Zelo dobro	64	29,8
Dobro	133	61,9
Niti dobro niti slabo	17	7,9
Slabo	1	0,5

Legenda/Legend: n – število/number; % – odstotek/percentage

Rezultati

Rezultati kažejo (Tabela 2), da anketiranci, ki nimajo kroničnih nenalezljivih bolezni, v večjem odstotku svoje zdravje opisujejo kot »zelo dobro« ali »dobro«. Anketiranci, ki imajo znane kronične nenalezljive bolezni, svoje zdravje ocenjujejo kot »dobro«. Poleg tega obstaja statistično pomembna

razlika med prisotnostjo kroničnih nenalezljivih bolezni in samooceno zdravja ($\chi^2 = 26,542$; $p < 0,05$), kar pomeni, da anketiranci, ki imajo eno izmed kroničnih nenalezljivih bolezni, svoje zdravje tudi slabše ocenjujejo.

Rezultati nakazujejo nezadovoljstvo z dostopnostjo zdravstvenih storitev v času epidemije covid-19, saj je vsota povprečnih vrednosti 86,26 ($Me = 86,50$).

Tabela 2: Vpliv prisotnosti kroničnih nenalezljivih bolezni na oceno zdravja**Table 2:** Impact of the presence of chronic non-communicable diseases on health assessment

Prisotnost kroničnih nenalezljivih bolezni/Presence of chronic non-communicable diseases	Ocena zdravja/Health assessment				χ^2	p
	Zelo dobro/ Very well	Dobro/ Well	Niti dobro niti slabo / Neither good or bad	Slabo/ Bad		
Da					26,5	0,000
n	0	20	6	1		
%	0	74,1	22,2	3,7		
Ne						
n	63	110	10	0		
%	34,4	60,1	5,5	0		

Legenda/Legend: n – število/number; % – odstotek/percentage; χ^2 – hi-kvadrat test/chi square test; p – statistična značilnost/statistical significance

Tabela 3: Vpliv demografskih značilnosti anketirancev na zadovoljstvo z dostopnostjo zdravstvene obravnave v času epidemije covid-19: Mann-Whitneyjev U-test, Kruskal-Wallisov test**Table 3:** Impact of respondents' demographic characteristics on their satisfaction with access to medical treatment during the COVID-19 pandemic: Mann-Whitney U-test, Kruskal Wallis test

Spremenljivke/Variable	Stališča o dostopnosti zdravstvenih storitev v času epidemije covid-19/ Satisfaction with access to health services during the COVID-19 pandemic			
	\bar{x} (s)	Me	Statistika/Statistics	p
Spol				
Moški	89,88(12,234)	92,50	1297,5*	0,016
Ženski	82,74(14,662)	86,00		
Starostna skupina				
< 20 let	87,33 (8,359)	87,50	6,985**	0,222
21–30 let	83,03(14,474)	86,00		
31–40 let	80,97(14,567)	83,00		
41–50 let	88,85(14,187)	91,00		
51–60 let	85,13(16,539)	91,50		
> 61 let	82,75(17,128)	86,00		
Zaposlitveni status				
Dijak/-inja	90,00(6,245)	88,00	6,979**	0,222
Študent/-ka	81,77(16,227)	86,00		
Zaposlen/-a	84,83(14,138)	88,00		
Brezposeln/-a	74,29(14,739)	80,00		
Samozaposlen/-a	77,40(11,480)	79,00		
Upokojenec/-ka	83,50(18,064)	86,00		
Dosežena izobrazba				
Osnovna šola ali manj	93,33(8,386)	89,00	6,110**	0,191
Poklicna/srednja šola	80,39(17,123)	85,00		
Višja/visoka šola	87,06(9,960)	88,00		
Univerzitetna izobrazba/magisterij stroke	82,85(15,564)	82,00		
Znanstveni magisterij/doktorat	88,17(7,679)	91,00		
Regija bivanja				
Primorska	83,32(14,243)	86,00	7481**	0,279
Notranjska	84,60(11,703)	88,00		
Gorenjska	89,75(14,436)	94,00		
Štajerska	79,70(17,400)	83,00		
Dolenjska	82,63(18,071)	87,00		
Prekmurje	90,40(20,959)	98,00		

Legenda/Legend: \bar{x} – povprečje/average; s – standardni odklon/standard deviation; Me – mediana/median; * – vrednost Mann-Whitney/valued Mann-Whitney; ** – vrednost Kruskal-Wallis/ Kruskal-Wallis value; p – statistična značilnost/statistical significance

Anketiranci so kritično ocenili dostopnost ambulant po telefonskih linijah ($\bar{x} = 2,59$, $s = 1,348$) ter čakanje v čakalnicah ($\bar{x} = 2,53$, $s = 1,158$). Bolj pozitivno so ocenili trajanje obravnave ($\bar{x} = 3,63$, $s = 1,052$) ter točnost ure pregleda ($\bar{x} = 3,39$, $s = 1,160$). Večina anketiranih je menila, da jih zdravstveno osebje naziva z »gospod« oziroma »gospa« ter ima spoštljiv odnos ($\bar{x} = 4,27$, $s = 0,852$); da osebje pri komunikaciji z njimi uporablja besede, kot so »izvolite«, »prosim«, »hvala« ($\bar{x} = 4,22$, $s = 0,895$), ter da so navodila zdravstvenega osebja dana na jasen in razumljiv način ($\bar{x} = 4,16$, $s = 0,829$). Pozitivno so ocenili tudi trditev o zaupanju zdravnikovi strokovni odločitvi glede njihovega zdravljenja ($\bar{x} = 3,93$, $s = 0,869$), trditve o vključenosti v odločanje o svojem zdravljenju ($\bar{x} = 3,73$, $s = 0,996$) ter trditev o občutku zaupanja zdravstvenemu osebju ($\bar{x} = 3,83$, $s = 0,918$). Anketiranci izražajo pozitivna stališča tudi glede dostopnosti hitre pomoči ($\bar{x} = 4,04$, $s = 0,855$).

Za ugotavljanje statistično pomembnih razlik v zadovoljstvu anketirancev z dostopnostjo zdravstvenih storitev v času epidemije covid-19 in demografskih podatkih smo uporabili Mann-Whitneyjev U-test in Kruskal-Wallisov test. Rezultate prikazujemo v Tabeli 3.

Rezultati (Tabela 3) kažejo, da je bolj pozitivna stališča o dostopnosti zdravstvenih storitev mogoče zaznati pri anketirancih v starostni skupini od 51 do 60 let, zaposlenih in dijakih, pri osebah z znanstvenim magisterijem oziroma doktoratom ter pri anketirancih, ki živijo v prekmurski in gorenjski regiji. Bolj negativna stališča izražajo anketiranci v starostni skupini od 31 do 40 let, samozaposleni, osebe z univerzitetno izobrazbo oziroma magisterijem stroke in anketiranci v štajerski regiji. Vendar pri omenjenih spremenljivkah med skupinami ni statistično značilnih razlik v stališčih ($p > 0,05$). Statistično pomembne razlike je mogoče opaziti pri spolu anketirancev, pri čemer so moški izražali bolj pozitivna stališča o dostopnosti zdravstvene obravnave v času pandemije covid-19 kot ženske ($U = 1297,5$, $p < 0,05$).

Drugi del vprašalnika se je nanašal na zadovoljstvo pacientov z zdravstvenim sistemom. Do obstoječega zdravstvenega sistema anketiranci izražajo zadovoljstvo ($\bar{x} = 2,92$, $s = 1,103$). Bolj kritično so ocenili trditev »Za zdravstveno varstvo sem pripravljen prispevati več kot do sedaj« ($\bar{x} = 2,64$, $s = 1,068$) in tudi trditev, da so o spremembah v zdravstvu dobro informirani ($\bar{x} = 2,86$, $s = 1,014$), da so te podane na razumljiv način ($\bar{x} = 2,81$, $s = 0,932$) in da so pozitivne ($\bar{x} = 2,84$, $s = 0,926$). Anketiranci so pozitivneje ocenili trditvi, da na podlagi informacij o predlaganih spremembah v zdravstvu vedo, kaj te zanje pomenijo ($\bar{x} = 2,98$, $s = 0,937$), ter da si na podlagi informacij o predlaganih spremembah v zdravstvu lahko ustvarijo mnenje o predlaganih ukrepih na področju zdravstvenega sistema ($\bar{x} = 3,12$, $s = 0,920$).

Zelo pozitivno ocenjeni sta bili trditvi »Potrebne so spremembe obstoječega zdravstvenega sistema«

($\bar{x} = 4,05$, $s = 0,910$) in »Podpiram sistem javnega zdravstvenega sistema« ($\bar{x} = 4,23$, $s = 0,878$). Manj so zadovoljni s sistemom zasebnega zdravstvenega varstva ($\bar{x} = 2,98$, $s = 1,226$).

Diskusija

Zagotavljanje zadovoljstva pacientov pri dostopanju do zdravstvenih storitev je prvi in izredno pomemben korak, ki ugodno prispeva k zaupanju v zdravstveni sistem in usposobljenost stroke. Z namenom ugotavljanja, ali se je v času epidemije covid-19 dostopnost zdravstvene obravnave in zaupanje do nje spremenilo, smo izvedli raziskavo, ki smo jo primerjali z že obstoječim delom iz obdobja pred pojavom novega virusa (Terglav et al., 2019).

Rezultati naše raziskave kažejo na zmerno nezadovoljstvo anketirancev, kar pa se v primerjavi z raziskavo pred pandemijo ni izrazito spremenilo (Terglav et al., 2019). Isti avtorji so še ugotovili, da anketirani v največji meri cenijo prijazen in spoštljiv odnos ter razpoložljivost hitre pomoči. Kritično so ocenili čakanje na obravnavo, nedosegljivost po telefonu ter kratek čas obravnave pri zdravniku (Terglav et al., 2019). V prvem raziskovalnem vprašanju nas je zanimalo, kakšna je stopnja zadovoljstva anketirancev z dostopnostjo zdravstvenih storitev v času pandemije covid-19 v Sloveniji. Anketiranci še vedno ocenjujejo, da se zdravstveno osebje do njih vede spoštljivo in jim podaja jasna navodila. Prav tako ocenjujejo, da jim je v nujnih primerih na voljo hitra zdravstvena pomoč. Največje odstopanje v rezultatih smo zaznali pri trditvah, ki se navezujejo na dostopnost zdravstvenega osebja po telefonu in na dolžino čakanja na pregled v čakalnici. Ti dve trditvi so anketiranci ocenili z očitno slabšo oceno kot v predhodni raziskavi (Terglav et al., 2019), medtem ko se je točnost ure pregleda nekoliko izboljšala. Takšne razlike v rezultatih bi lahko pripisali slabši odzivnosti na telefonske klice, ker institucije v času epidemije covid-19 paciente vedno bolj nagovarjajo, naj svojega izbranega zdravnika raje pokličejo, kot pa osebno pridejo v institucijo. Ena izmed rešitev omenjenih težav na področju zdravstvenega varstva je po navedbah Bisswasa et al. (2020) uporaba telemedicine. Ramaswamy et al. (2020) v svoji raziskavi ugotavljajo visoko zadovoljstvo pacientov z uporabo telemedicine. V Sloveniji telemedicina še ni tako razvita, zato je večina obravnav potekala telefonsko, kar lahko sklepamo iz dejstva, da so anketiranci v naši raziskavi slabše ocenili trditev »Zlahka sem dobil/a telefonsko zvezo z ambulanto«.

Predpostavljamo, da so trditve glede točnosti ure pregleda anketiranci bolje ocenili zaradi bolj organiziranega naročanja na zdravstvene dejavnosti ali zaradi manjšega števila ljudi v ambulantah, ki je posledica omejevanja števila ljudi v zaprtih prostorih. Glede zaupanja zdravstvenemu osebju in posvečanja

zdravnika pacientu med obravnavo so rezultati obeh raziskav primerljivi (Terglav et al., 2019).

Podobne raziskave navajajo, da se prebivalci izogibajo zdravstvenim storitvam zaradi strahu pred okužbo z virusom SARS-CoV-2. Za zdravniška posvetovanja se tako namesto osebnega stika v ambulantah raje poslužujejo telefonskega klica (Ahmed et al., 2020). Ta je v času omejitev gibanja in dostopanja do primarnih ravni zdravstvenega varstva edina vez med prebivalstvom in zdravstvenim osebjem (Žagar et al., 2020). V ZDA so problem rešili s pomočjo »virtualnih čakalnic«. Pacienti se ob prihodu na pregled po telefonu registrirajo, dajo svoje podatke in v avtomobilu počakajo na poziv (Cohen, 2020). Na območju ZDA in ponekod po svetu se je osebni obisk zdravnika preselil na internet (Cole, 2020). Pacienti so v stik z zdravniki prihajali po e-pošti, telefonu in videoklicu (Deriba et al., 2020). Na splošno so bili s to obliko zdravstvene obravnave zadovoljni (Imlach et al., 2020). Omejen dostop do zdravstvenih storitev z namenom preprečevanja širjenja okužb zmanjša tveganje za prenos virusa, vendar lahko poslabša stanje kroničnih nenalezljivih bolezni pri pacientih, saj prihaja do odpovedi kontrolnih pregledov in laboratorijskih preiskav (Schrack, Wanigatunga, & Juraschek, 2020). Približno polovica anketiranih je tudi v Etiopiji izražala naklonjenost do zdravljenja kroničnih nenalezljivih bolezni z uporabo telemedicine (Deriba et al., 2020). Tudi v Sloveniji je bila izvedena raziskava s področja onkologije, v kateri pacienti in zdravniki večinoma izražajo zanimanje za telemedicino in menijo, da bi ta lahko bistveno pripomogla k izboljšanju zdravstvene oskrbe med epidemijo. Vsaj polovica anketiranih zdravnikov in tretjina pacientov pa bi telemedicino uporabljala tudi v prihodnje (Oražem et al., 2020).

Iz tujine poročajo o znatni zmanjšanosti koriščenja urgentnih zdravstvenih storitev (Zhang et al., 2020). Obisk urgentnega centra se je na primer v Hong Kongu v času pandemije močno zmanjšal, pacienti so poročali o nezadovoljstvu zaradi večurnega čakanja na zdravstveno oskrbo. Ta je v času epidemije znašala pet ur, medtem ko so leto prej na zdravstveno obravnavo čakali približno eno uro. Raziskovalci to posledico pripisujejo pomanjkanju resursov, tudi kadrovskih. Pacienti so zaradi strahu pred okužbo, omejitev gibanja in zaradi prepričanja, da morajo dati prednost pacientom, ki bolehalo za covidom-19, raje odlašali z obiskom zdravstvenih institucij (Zhang et al., 2020). V poznejših valovih epidemije se je zaradi slabše dostopnosti zdravstvenih storitev na primarni ravni ter odpovedi nenujnih pregledov obisk urgentnih centrov v Sloveniji močno povečal (Petraović et al., 2021).

Z drugim raziskovalnim vprašanjem smo želeli ugotoviti, kakšen je vpliv demografskih značilnosti anketirancev na zadovoljstvo z dostopnostjo zdravstvenih storitev. Največ anketirancev je ženskega spola, starih med 21 in 30 let ter zaposlenih. Večina je brez kroničnih nenalezljivih bolezni ter svoje zdravje opisuje kot dobro

ali zelo dobro. Ugotovili smo, da te značilnosti anketiranih nimajo bistvenega vpliva na stopnjo zadovoljstva. Nekoliko izstopa le spol, saj moški v primerjavi z ženskami izražajo nekoliko več zadovoljstva. Enako sta ugotovila Skär & Söderberg (2018): ženske izražajo večje nezadovoljstvo kot moški. V raziskavi iz Nepala pa najdemo drugačne ugotovitve: z zdravstvenimi storitvami in njihovo dostopnostjo so bolj zadovoljne ženske (Adhikari, Raj Paudel, Raj Mishra, Shrestha, & Upadhyaya, 2021). V eni izmed raziskav opažajo tudi, da so ženske v primerjavi z moškimi izrazile znatno višjo raven preventivnega vedenja in s tem višjo stopnjo tesnobe, ranljivosti (Velikonja, Erjavec, Verdenik, Hussein, & Velikonja, 2021).

Zdravje je želja vsakega posameznika, vendar se lahko hitro zgodi, da postanemo pacient in s tem uporabnik zdravstvenih storitev. Uporabniki zdravstvenih storitev so najpomembnejši element zdravstvenega sistema. Namen zdravstvene dejavnosti je ohranitev in izboljšanje zdravja, preprečevanje in odkrivanje bolezni ter zdravljenje bolezni in rehabilitacija poškodb (Zakon o zdravstveni dejavnosti, 1992). Enajsti člen Zakona o pacientovih pravicah (2008) govori o primerni, kakovostni in varni zdravstveni obravnavi. Kakovostna zdravstvena obravnavo je tista, ki dosledno dosega izide zdravljenja, primerljive najboljšim praksam in standardom ter z upoštevanjem temeljnih načel kakovosti. Mednje štejemo uspešnost, varnost, pravočasnost, kontinuiteto, učinkovitost, enakopravnost in osredotočenost na pacienta (Zakon o pacientovih pravicah, 2008).

Rezultate moramo interpretirati previdno, saj predpostavljamo, da je bil spletni vprašalnik dostopnejši za mlajšo populacijo kot za starejšo. Poleg tega je bil vzorec izjemno nehomogen, kar bi lahko vplivalo na rezultate. Zaradi majhnega priložnostnega vzorca anketirancev rezultatov ne moremo posploševati na splošno populacijo. Za natančnejše rezultate o raziskovalni tematiki bi bilo treba izvesti večjo raziskavo z večjim vzorcem.

Zaključek

V Sloveniji je bil dostop do zdravstvenih storitev v času epidemije covid-19 omogočen, vendar okrnjen zaradi preprečevanja širjenja virusa. Poleg zadovoljstva z dostopnostjo zdravstvenih storitev smo ocenjevali tudi zadovoljstvo z obstoječim zdravstvenim sistemom. Ugotovili smo, da večina anketiranih izraža rahlo nezadovoljstvo z zdravstvenim sistemom in si na tem področju želi sprememb. V primerjavi z raziskavo, izvedeno pred epidemijo, nismo ugotovili pomembnejših razlik glede zadovoljstva z dostopnostjo zdravstvenih storitev. Pri pregledu literature in iskanju podatkov o dostopnosti zdravstvenih storitev na področju Slovenije smo opazili, da veliko zdravstvenih ustanov izvaja podobne raziskave, vendar rezultati še niso prikazani. V prihodnje bi bilo smiselno izvesti

raziskavo, v kateri bi ugotavljali, ali je epidemija pustila posledice na psihičnem oziroma fizičnem zdravju državljanov Slovenije.

Nasprotje interesov/Conflict of interest

Avtorji izjavljajo, da ni nasprotja interesov./The authors declare that no conflicts of interest exist.

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Prispevek avtorjev/Author contributions

Avtorji so sodelovali pri idejnem načrtovanju, pri pisanju metodologije in interpretaciji podatkov. Prvi trije avtorji so raziskavo izvedli ter opravili statistično analizo podatkov. Zadnja avtorja sta opravila kritično revizijo prispevka. Vsi avtorji so prebrali in odobrili končni prispevek./The authors were involved in conceptual planning, elaboration of the methodology, and interpretation of the data. The first three authors conducted the research and performed the statistical analysis of the data. The last two authors conducted a critical review of the paper. All authors read and approved the final paper.

Literatura

Adhikari, M., Raj Paudel N., Raj Mishira, S., Shrestha A., & Upadhyaya, D. P. (2021). Patient satisfaction and its socio-demographic correlates in a tertiary public hospital in Nepal: A cross-sectional study. *BMC Health Services Research*, 21(135), 1-10. <https://doi.org/10.1186/s12913-021-06155-3>
PMid:33579283; PMCID:PMC7881603

Ahmed, S. A. K.S., Ajisola, M., Azeem, K., Bakibinga, P., Chen, Y. F., Choudhury, N. N. ... Yusuf, R. (2020). Impact of the societal response to COVID-19 on access to healthcare for non-COVID-19 health issues in slum communities of Bangladesh, Kenya, Nigeria and Pakistan: Results of pre-COVID and COVID-19 lockdown stakeholder engagements. *BMJ Global Health*, 5(8), 1-10. <https://doi.org/10.1136/bmjgh-2020-003042>
PMid:32819917; PMCID:PMC7443197

Aragona, M., Barbato, A., Cavani, A., Costanzo, G., Mirisola, C. (2020). Negative impacts of COVID-19 lockdown on mental health service access and follow-up adherence for immigrants and individuals in socio-economic difficulties. *Public Health*, 186(2020), 52-56.

<https://doi.org/10.1016/j.puhe.2020.06.055>
PMid:32771661; PMCID:PMC7409736

Bisswas, S., Adhikari, S., Gupta, N., Garg, R., Bharti, S., Kumar, V. ... Bhatnagar, S. (2020). Smartphone-based telemedicine service at palliative care unit during nationwide lockdown: Our initial experience at a tertiary care cancer hospital. *Indian Journal of Palliative Care*, 26(1), 31-35.

https://doi.org/10.4103/IJPC.IJPC_161_20
PMid:33088083; PMCID:PMC7535006

Briški, L., Ambrož, M., & Salecl, R. (2020). Koga reševati v času epidemije: Etični in kazenskopравни vidiki triaže. *Revija za kriminalistiko in kriminologijo*, 71(3), 183-193.

Cohen, J. K. (2020). Virtual waiting rooms help keep patients 6 feet apart. *Modern Healthcare*, 50(25), 30.

Cole, B. (2020). The impact of the COVID-19 Pandemic on Access to Health Care. *National Academy of Social Insurance*, 17, 1-31. Retrieved January 18, 2021 from <https://www.nasi.org/research/2020/impact-covid-19-pandemic-access-health-care>.

Deriba, B. S., Geleta, T. A., Beyane, R. S., Mohammed, A., Tesema, M., & Jemal, K. (2020). Patient satisfaction and associated factors during COVID-19 pandemic in North Shoa Health Care Facilities. *Patient Prefer Adherence*, 14, 1923-1934. <https://doi.org/10.2147/PPA.S276254>
PMid:33116436; PMCID:PMC7568627

Državna uprava Republike Slovenije, 2021. Ukrepi za zajezitev širjenja okužb. Retrieved July 1, 2020 from <https://www.gov.si teme/koronavirus-sars-cov-2/ukrepi-za-zajezitev-sirjenja-okuzb/>

Fležar, M. (2014). Medicinski vidiki uporabnosti telemedicine s poudarkom na telekonzultacijah v urgentni medicini. In K. Štrancar Fatur, & P. Golob (Eds.), *Telemedicina: izzivi v urgenci in čezmejnem območju: zbornik strokovnega posveta standardnega projekta IntegrAid, Portorož 20. junij 2014* (pp. 9-19). Izola: Splošna bolnišnica, projekt IntegrAid.

Imlach, F., McKinlay, E., Middleton, L., Kennedy, J., Pledger, M., Russell, L. ... McBride-Henry, K. (2020). Telehealth consultations in general practice during a pandemic lockdown: Survey and interviews on patient experiences and preferences. *BMC Family Practice*, 21(1), 1-14. <https://doi.org/10.1186/s12875-020-01336-1>
PMid:33308161; PMCID:PMC7733693

Kamenšek, T., Fošnarič, M., & Žibert, J. (2021). The role of epidemiological modeling of Covid-19 in the health system. *Obzornik zdravstvene nege*, 55(2), 72-75. <https://doi.org/10.14528/snr.2021.55.2.3091>

- Kodeks etike v zdravstveni negi in oskrbi Slovenije in Kodeks etike za babice Slovenije. (2014). Ljubljana: Zbornica zdravstvene in babiške nege Slovenije – Zveza strokovnih društev medicinskih sester, babic in zdravstvenih tehnikov Slovenije.
- Manzoor, F., Wei, L., Hussain, A., Asif, M., & Shah, S. I. A. (2019). Patient satisfaction with health care services: An application of physician's behavior as a moderator. *International Journal of Environmental Research and Public Health*, 16(18), 1–16.
<https://doi.org/10.3390/ijerph16183318>
PMid:31505840; PMCID:PMC6765938
- Oražem, M., Oblak, I., Španič, T., & Ratoša, I. (2020). Pogledi bolnikov in onkologov na uvajanje telemedicine v času epidemije covid-19. *Onkologija*, 24(2), 6–11.
- Petravič, L., Noč, N., Keršič, A., Dovečar, M., Lučič Šrajcar, L., Prosen, G., & Strnad, M. (2021). Aktivnosti in pomoč študentov na urgenci v času COVID-19: Opis organizacije dela študentov v urgentnem centru UKC Maribor. In B. Gabrovec, I. Eržen, A. Trop Skaza, M. Fafangel, M. Vrdelja & Š. Selak (Eds.), *Javno zdravje in COVID-19: Zbornik povzetkov in recenziranih prispevkov. Ljubljana 29. september 2021* (pp. 123–127). Ljubljana: Nacionalni inštitut za javno zdravje.
- Prosen, M., Ličen, S., & Karnjuš, I. (2020). Prilagoditev in psihometrična validacija Lestvice profesionalnih kompetenc medicinskih sester v izrednih razmerah v času epidemije SARS-CoV-2 (COVID-19) v Sloveniji. *Obzornik zdravstvene nege*, 54(2), 113–121.
<https://doi.org/10.14528/snr.2020.54.2.3037>
- Ramaswamy, A., Yu, M., Drangsholt, S., Ng, E., Culligan, P.-J., Schlegel, P.-N. & Hu, J.-C. (2020). Patient satisfaction with telemedicine during the COVI-19 pandemic: Retrospective cohort study. *Journal of Medical Internet Research*, 22(9).
<https://doi.org/10.2196/20786>
PMid:32810841; PMCID:PMC7511224
- Schrack, J. A., Wanigatunga, A. A., & Juraschek, S. P. (2020). After the COVID-19 pandemic: The next wave of health challenges for older adults. *Journals of Gerontology*, 75(9), 121–122.
<https://doi.org/10.1093/gerona/glaa102>
PMid:32315025; PMCID:PMC7188185
- Senić, V., Marinković, V. (2013). Patient care, satisfaction and service quality in health care. *International Journal of Consumer Studies*, 37(3), 312–319.
<https://doi.org/10.1111/j.1470-6431.2012.01132.x>
- Sinclair, C., Nolte, L., White, P. B., & Detering, M. K. (2020). Advance care planning in Australia during the COVID-19 outbreak: Now more important than ever. *Internal Medicine Journal*, 50(8), 918–923.
<https://doi.org/10.1111/imj.14937>
PMid:32881275; PMCID:PMC7436410
- Skär, L., & Söderberg, S. (2018). Patients' complaints regarding healthcare encounters and communication. *Nursing Open*, 2018(5), 224–232.
<https://doi.org/10.1002/nop2.132>
PMid:29599998; PMCID:PMC5867282
- Stanimirović, D. (2021). eHealth patient portal: Becoming an indispensable public health Tool in the time of Covid-19. *Studies in health technology and informatics*, 281, 880–884.
<https://doi.org/10.3233/SHTI210305>
- Stanimirović, D., & Matetić, V. (2020). Can the COVID-19 pandemic boost the global adoption and usage of eHealth solutions. *Journal of Global Health*, 10(2), 1–5.
<https://doi.org/10.7189/jogh.10.0203101>
PMid:33304567; PMCID:PMC7714317
- Štrancar Fatur, K., & Golob, P. (2014). Telemedicina: Izzivi v urgenci in na čezmejnem območju. In K. Štrancar Fatur & P. Golob (Eds.), *Telemedicina: Izzivi v urgenci in na čezmejnem območju: Zbornik strokovnega posveta standardnega projekta IntegrAid, Portorož 20 junij 2014* (p. 1). Izola: Splošna bolnišnica, projekt IntegrAid.
- Takavol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2011(2), 53–55.
<https://doi.org/10.5116/ijme.4dfb.8dfd>
PMid:28029643; PMCID:PMC4205511
- Terglav, Z. B., Selak, Š., Vrdelja, M., Kaučič, M. B., & Gabrovec, B. (2019). Zadovoljstvo državljanov Republike Slovenije z zdravstvenimi storitvami v Sloveniji. *Obzornik zdravstvene nege*, 53(2), 112–118.
<https://doi.org/10.14528/snr.2019.53.1.318>
- Velikonja, K. N., Erjavec, K., Verdenik, I., Hussein, M., & Velikonja, V.G. (2021). Association between preventive behaviour and anxiety at the start of the Covid-19 pandemic in Slovenia. *Zdravstveno varstvo*, 60(1), 17–24.
<https://doi.org/10.2478/sjph-2021-0004>
PMid:33488818; PMCID:PMC7780767
- Zakon o pacientovih pravicah (ZPacP)*, 2008. Uradni list Republike Slovenije št. 15.
- Zakon o zdravstveni dejavnosti (ZZDej)*, 1992. Uradni list Republike Slovenije št. 23.
- Zhang, Y.N., Chen, Y., Wang, Y., Li, F., Pender, M., Wang, N., Yang, F. ... Fu, C. W. (2020). Reduction in healthcare services during the COVID-19 pandemic in China. *BMJ Global Health*, 5(11), 1–10.
<https://doi.org/10.1136/bmjgh-2020-003421>
PMid:33184065; PMCID:PMC7662138

Žagar, T., Tomšič, S., Fafangel, M., Krajc, M., Mihor, A., Zadnik, V. (2020). CRP projekt: Vpliv epidemije COVID-19 na obvladovanje raka v Sloveniji. In: *Obvladovanje raka v času COVIDA-19 v luči preventive: XXVIII. seminar „In memoriam dr. Dušana Reje“: Ljubljana, 3. december 2020* (pp. 146–151). Ljubljana: Zveza slovenskih društev za boj proti raku.

World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *Journal of the American Medical Association*, 310(20), 2191–2194. <https://doi.org/10.1001/jama.2013.281053>
PMid:24141714

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Pregledni znanstveni članek/Review article

The impact of the covid–19 pandemic on nurses' and physicians' mental health: A literature review

Pomen pandemije covid-19 za duševno zdravje medicinskih sester in zdravnikov: pregled literature

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Key words: self-image; fear; pandemia; prevention; nurses; physicians

Ključne besede: samopodoba; strah, preventiva; medicinske sestre, zdravniki

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ABSTRACT

Introduction: The covid-19 pandemic is characterised by an increased risk of post-traumatic stress disorder in healthcare professionals. The purpose of this systematic review was to identify the impact of the covid-19 pandemic on the mental health of healthcare professionals.

Methods: A systematic review of the literature was conducted. The literature search took place from November 2020 to January 2021. The search was conducted in the Pubmed, Ebsco, Ovid and Google Scholar databases, using the following combinations of keywords: self-image, fear, pandemic, prevention, nurses, physicians. The relevant records were selected on the basis of inclusion and exclusion criteria. The course of the literature review is shown using the PRISMA diagram. A thematic analysis was conducted with open coding of the results.

Results: From the total search set, 14 articles were selected for final analysis. The prevalence of anxiety among nurses and physicians ranged from 12.3 to 35.6%. The prevalence of anxiety was higher in nurses, with the symptoms of anxiety being significantly lower in male nurses than in their female colleagues.

Discussion and conclusion: The pandemic has left a significant psychological burden on nurses and physicians. There is therefore an urgent need to include preventive psychoeducational measures such as "briefing" and "teambuilding" in supervising mental health of nurses and physicians.

IZVLEČEK

Uvod: Pandemijo covid-19 povezujemo s povečanim tveganjem za posttraumatsko stresno motnjo pri zdravstvenih delavcih. Namen sistematičnega pregleda literature je prepoznati vpliv pandemije covid-19 na duševno zdravje v tej populaciji.

Metode: Uporabljen je bil sistematičen pregled literature. Iskanje je potekalo od novembra 2020 do januarja 2021. Vključene so bile naslednje iskalne zbirke podatkov: Pubmed, Ebsco, Ovid in Google Scholar. Pri iskanju so bile uporabljene kombinacije ključnih besed: samopodoba, strah, preventiva, medicinske sestre, zdravniki. Uporabili smo diagram PRISMA za prikaz poteka pregleda literature. Tematska analiza je potekala na način kodiranja rezultatov.

Rezultati: Iz celotnega iskalnega niza več tisoč člankov smo v končno analizo prenesli štirinajst člankov. Prevalenca anksioznosti med zdravstvenimi delavci je 12,3–35,6 %. Zdravstveni delavci moškega spola so imeli bistveno blažje simptome tesnobe kot ženske. Stopnja tesnobe je bila višja v zdravstveni negi, vendar so bili pri moških manj izraziti simptomi tesnobe kot pri ženskah.

Diskusija in zaključek: Pandemija covid-19 je povzročila duševne obremenitve zdravstvenih delavcev. Za obvladovanje duševnega zdravja pri medicinskih sestrah in zdravnikih je treba vključiti preventivne psihoedukativne ukrepe, kot sta briefing in teambuilding.



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Introduction

The fight against the pandemic has had an indirect impact on the mental health of the general population (Krishnamoorthy, Nagarajan, Kumar, Saya, & Menon, 2020). Exposure to acute stress can manifest behaviourally (avoidance, recklessness, detachment, withdrawal, irritability), emotionally (numbness, anxiety, anger, fear, mood swings, low self-esteem), and cognitively (concentration disorders, memory disorders, wakefulness, intrusive thoughts) (Galehdar, Kamran, & Toulabi, 2020; Paiano et al., 2020). A correlation has been detected between the covid-19 pandemic and the prevalence of mental health disorders in healthcare institutions (Carmassi, Foghi, & Dell'Oste, 2020; Muller, Hafstad, & Himmels, 2020; Tsamakidis, Rizos, & Manolis, 2020). The constant rise in the number of people infected, the increase in deaths, the lack of targeted medicines, the extensive media coverage, the heavy workload, the lack of personal protective equipment and the feeling of insufficient support in the wider social environment can all contribute to the psychological distress of physicians and nurses in particular (Daugherty & Arble, 2020; Li, Li, & Xiang, 2020; Paiano, Jaques, & Bezzera, 2020). It is therefore important to identify and address the mental health needs of nurses and physicians who express such concerns or show signs of distress in a timely manner (Krishnamoorthy et al., 2020).

Aims and objectives

The aim of this systematic review was to determine the impact of the covid-19 pandemic on the mental health of nurses and physicians. A specific objective of the study was to determine the prevalence of psychological symptoms and risk factors for the development of mental health disorders in nurses and physicians during the pandemic. The main preventative measures for reducing mental distress must be based on the recognition mental distress symptoms so that effective interventions can be developed to reduce the mental health burden of the covid-19 pandemic. The following research questions were investigated:

– What were nurses and physicians' experiences of

psychological symptoms of mental health distress during the covid-19 pandemic?

– Do individual nurses and physicians with pronounced mental health problems need support and guidance to cope with the consequences of the pandemic?

Methods

A literature review was prepared following PRISMA recommendations (Shamseer et al., 2015).

Review methods

The literature search was conducted in the Pubmed, Ebsco, Ovid, and Google Scholar international databases. The following inclusion criteria were applied: the topic of the covid-19 pandemic and its impact on the mental health of nurses and physicians, exclusively systematic literature reviews, articles accessible in full text published in 2020 or later in English or Slovenian. Using a combination of keywords and the Boolean operator AND, we designed the following search strategy: ("sars-cov-2" AND "covid-19") AND ("nurses" AND "physician") AND (AND "mental health" AND "mental disorders"). The literature search took place between November 2020 and January 2021. The literature review was based on the inclusion and exclusion criteria shown in Table 1.

Results of the review

Our database search identified 558.532 records: PubMed ($n = 7.835$), EBSCO ($n = 22.569$), Ovid ($n = 70.728$) and Google Scholar ($n = 487.400$). After removing the hits ($n = 120$) that did not meet the pre-defined inclusion criteria, a total of 558.532 hits remained included. A total of 588.418 records were excluded after the removal of duplicates and on account of title and summary inconsistencies. In the next step, we reviewed the context of the first thousand hits ordered by relevance in each database and selected articles based on content inadequacy assessment. As shown in Figure 1, a total of 14 articles were included in the final analysis. The process of obtaining articles suitable for our research can be seen in Figure 1, where we used the PRISMA (Preferred

Tabela 1: Inclusion and exclusion criteria

Tabela 1: Vključitveni in izključitveni kriteriji

Criteria/Kriteriji	Inclusion criteria/Vključitveni kriteriji	Exclusion criteria/Izključitveni kriteriji
Topic	Covid-19 pandemic and nurses'/physicians' mental health.	Exclusively physical health, other healthcare professionals.
Type of research	Systematic literature review using quantitative and qualitative research.	Reports, comments, protocols, editorials, no relevant content.
Access	Full-text articles.	Incompletely accessible articles.
Time frame	Articles published since 2020.	Articles published before the covid-19 pandemic.
Language	English and Slovenian.	Other languages.

Reporting Item for Systematic review and Meta-Analysis) method to search the databases and check the usability of the sources included in the review.

Quality assessment of the review and the description of data processing

The fourteen articles included in our systematic literature review met all the specified inclusion criteria.

All records were peer-reviewed research papers from international scientific journals and were available in electronic form. The articles included in the analysis included a total of 329 research articles. Systematic literature reviews were assessed for adequacy for inclusion in the literature review, based on the guidelines proposed by Streubert & Carpenter (2011). The results were reviewed in several rounds. In the first round, we carefully reviewed the titles. If we were not

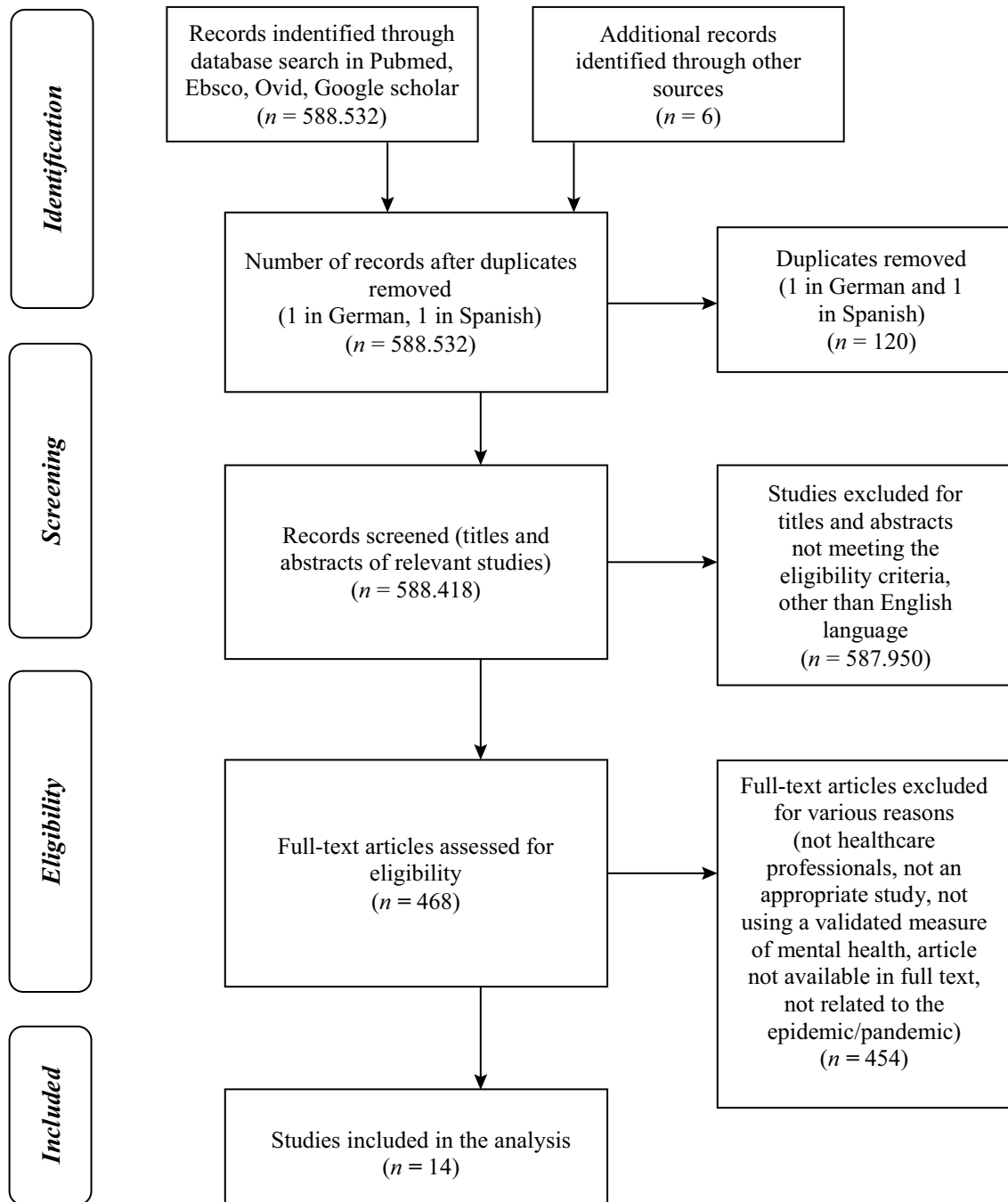


Figure 1: The PRISMA flow diagram of literature inclusion in the systematic review
Slika 1: PRISMA diagram vključene literature v sistematični pregled

able to decide whether to include or exclude a record according to its title, we also reviewed the abstract. In the second round, we read the abstract carefully, and in the third round, we read the articles and assessed their suitability for inclusion in the literature review. The assessed quality of articles varied: most of them were evaluated as good and suitable, two of them were evaluated as satisfactory. All the articles included in the final analysis were considered suitable based on similar experiences of healthcare professionals. We examined the quality of articles in terms of research limitations, source reliability, contribution structure and compliance with the purpose of our research. Data analysis was performed with the help of integrative thematic analysis (Aveyard & Bradbury-Jones, 2019). Coding units included key findings that were categorised into codes presented in Table 2. A thematic text analysis was conducted for this section of each source to be included in the final analysis. Codes with similar content were merged to form broader categories.

Results

Table 2 shows the scientific articles analysed. It presents the key factors identified for each source, i.e., the author, the research design and the sample used. Based on the key factors, the results are presented in three thematic categories: incidence of mental health disorders; covid-19 pandemic and impact on mental health; and nurses' and physicians' ways of coping with mental disorders.

Of the fourteen studies included in this review, six studies (Krishnamoorthy et al., 2020; Muller et al., 2020; Hooper, Saulsman, Hall, & Waters, 2020; Luo, Guo, Yu, Jiang, & Wang, 2020; Carmassi et al., 2020; Allan et al., 2020) assessed the impact on the mental health of nurses and physicians during the covid-19 pandemic; three studies (Shaukat, Mansoor, & Razzak, 2020; Sanghera et al., 2020; Vizheh et al., 2020) and five of them assessed the risk factors for developing PTSD and examined the impact of covid-19 on the mental health of nurses and physicians (Billings, Chi Fung Ching, Gkofa, Greene, & Bloomfield, 2021; Cabarkapa, Nadjidai, Murgier, & Chee, 2020; Fernandez et al., 2020; Monteiro da Silva, Benjamim, de Medeiros Carvalho, & Rolim Neto, 2021; Sahebi, Nejati-Zarnaqi, & Moayedi 2021). All of the studies were systematic reviews, and seven of them also included a meta-analysis. The studies compared frontline nurses and physicians. Seven articles (Al Thobaity & Alshammari, 2020; Benfante, Di Tella, Romeo, & Castelli, 2020; Bilings et al., 2020; Daugherty & Arble, 2020) discussed the incidence of mental health disorders among nurses and physicians working on the frontline during the covid-19 pandemic.

Most articles included the prevalence of the most common mental disorders such as anxiety (12.3–5.6%), poor sleep quality or insomnia (33.8–36.1%), burnout

(3.1–43.0%), acute stress reaction (5.2–32.9%), and post-traumatic stress disorder (7.4–37.4%). It has been reported (Vizheh et al., 2020) that in Spain, 63% of nurses and physicians experienced mental health disorders. Muller et al. (2020) reported that about 30% of nurses and physicians experienced fear and worry when caring for covid-19 patients.

Krishnamoorthy et al. (2020) note that during the pandemic, the burden of mental health disorders was about 25% higher among nurses and physicians compared to the general population. Sleep deprivation was 40% higher among frontline nurses. Four articles (Bhui, Dinos, Galant-Miecznikowska, de Jongh, & Stansfeld, 2020; Gorini et al., 2020; Greenberg, Docherthy, Gnanapragasm, & Wessley, 2020; Huffman et al., 2020) reported the unpredictability of daily workloads, frequent management of patients, unexpected critical cases, and high levels of risk factors for stress. Only the well-being of nurses and physicians can ensure a sustainable response in the fight against the pandemic. Male nurses' anxiety symptoms were significantly less severe ($\beta = -0.25$; $p < 0.001$) than those of their female colleagues ($\beta = -0.45$; $p < 0.001$). The prevalence of anxiety and depression was higher among nurses (26.88%) than physicians (14.29%) (Krishnamoorthy et al., 2020). Data from a study on the psychological state of nurses and physicians show a higher burden of psychological symptoms among Italian nurses, with a 13% risk of suicide (Zhou et al., 2020). Muller et al. (2020) report that less than 1% of all nurses or physicians had initiated any kind of psychological or psychiatric treatment.

Some of the articles analysed (Morgantini et al., 2020; Paiano et al., 2020; Prescott et al., 2020; Raudenska et al., 2020; Walton, Murray, & Christian, 2020) also report healthcare professionals' feelings of fear due to lack of effective personal protective equipment and extended quarantine duration. A higher prevalence of anxiety and depression was identified among younger nurses (≤ 30 years old), women, single people and those with existing comorbidities (Krishnamoorthy et al., 2020). Perceptions of inadequate protective measures were found to be a risk factor for the development of more severe mental health disorders (Monteiro da Silva, Benjamin, de Medeiros Carvalho, & Rolim Neto, 2021).

Some systematic reviews (Cabarkapa et al., 2020; Carmassi et al., 2020; De Kock, et al., 2020; Pouralizadeh, et al., 2020; Tsamakis et al., 2020; Sahebi, Nejati-Zarnaqi, & Moayedi, 2020) report a progressive deterioration of mental health among nurses and physicians at all levels of health care. Nurses predominate, probably due to prolonged and direct exposure to infection when working with covid-19 infected patients, especially in intensive care units, where the needs of infected patients are greatest (Fernandez et al., 2020). Gorini et al. (2020) report that 34.5% of nurses and physicians were not satisfied with

Table 2: *Analysed sources***Tabela 2:** *Analizirani viri*

<i>Author, year, country/ Avtor, leto, država</i>	<i>Research method/ Raziskovalna metoda</i>	<i>Research purpose/ Namen raziskave</i>	<i>Key findings/ Ključne ugotovitve</i>
Allan et al., 2020 United Kingdom	Systematic literature review and meta-analysis	The prevalence of stress-related mental health disorders in healthcare professionals	Prevalence of anxiety (12.3%; $n = 1257$); Post-traumatic symptoms of distress were severe and may determine the risk factors for developing mental disorders. The estimated prevalence of mental disorders in nurses is around 21%.
Billings et al., 2021 United Kingdom	Systematic literature review	Healthcare professionals' experiences of working on the frontline during covid-19	Reporting on elevated workloads that impact on psychosocial well-being of healthcare professionals; Healthcare professionals stated that clear, direct and compassionate communication is an important factor influencing the phenomenon of mental disorders.
Cabarkapa et al., 2020 Australia	Systematic literature review	The psychological impact of covid-19 on frontline healthcare professionals	Suicidal ideation in 6.5% of healthcare professionals, 34% with mild and 6.2% with severe mental health disturbances; being a nurse and female represents a higher risk for mental challenges (higher levels of fear and psychological morbidity).
Carmassi et al., 2020 Italy	Systematic literature review and meta-analysis	Post-traumatic stress disorder symptoms in healthcare workers facing the coronavirus outbreaks	One in six healthcare professionals has developed a significant mental health response; stress symptoms related to physical symptoms; maladaptive coping strategies result in worse outcomes of mental health in healthcare professionals.
Fernandez et al., 2020 Australia	Systematic literature review	Implications for covid-19 and nurses' experiences in acute care hospital settings	Social interactions can reduce stress and anxiety; rapidly changing advice and knowledge about the contagion increased the stress levels; inadequate training in caring for covid-19 patients elevates burnout.
Hooper et al., 2021 Ireland	Systematic literature review	Preventing psychological impact and positive mental health domains	Anxiety (30%), burnout (28%) and post-traumatic stress disorder (13%); increased working hours were directly related to anxiety levels; pre-existing psychiatric disorders before the pandemic are associated with high levels of depressive symptoms; lower support and job stress are directly related to emotional exhaustion.
Krishnamoorthy et al., 2020 India	Systematic literature review and meta-analysis	Prevalence of psychological morbidities among healthcare professionals	Poor sleep quality (40%), stress (34%), mental distress (34%), insomnia (30%); severe shortage of personal protective equipment has been detected.
Luo et al., 2020 China	Systematic review and meta-analysis	Impact of coronavirus disease on healthcare professionals	Risk factors for higher psychological impact were substantially similar among all healthcare professionals; pre-existing psychological conditions were found to have a greater impact on healthcare professionals, fear and frustration being the most common.
Monteiro da Silva et al., 2020 Brazil	Systematic literature review and meta-analysis	Psychological effects caused by the covid-19 pandemic	Higher prevalence of mental health disorders, mainly due to stress, insomnia, fear of the disease and infectiousness; warning about not neglecting the mental health of healthcare professionals by age because of work experience.
Muller et al., 2020 Norway	Systematic literature review	Impact of covid-19 pandemic on healthcare professionals	A 46% prevalence of anxiety, 41% of distress, and 30% of insomnia; widespread symptoms show a direct link between mental health and decreased appetite, digestive problems and fatigue, as well as sleep quality and other cognitive functions.
Sahebi et al., 2021 Iran	Systematic literature review and meta-analysis	The prevalence of anxiety and depression among healthcare workers during the covid-19 pandemic:	Anxiety among healthcare professionals during the covid-19 pandemic was 24.94%; an evaluation of risk factors for psychological disorders such as anxiety and depression among healthcare professionals in order to equip them with practical coping strategies.

<i>Author, year, country/ Avtor, leto, država</i>	<i>Research method/ Raziskovalna metoda</i>	<i>Research purpose/ Namern raziskave</i>	<i>Key findings/ Ključne ugotovitve</i>
Sanghera et al., 2020 United Kingdom	Systematic literature review and meta-analysis	Mental health of healthcare professionals during the pandemic	Prevalence of mental health outcomes: anxiety 12.3–35.6%; acute stress reaction 5.2–32.9%, insomnia 33.8–36.1%, and occupational burnout 3.1–43.0%; high prevalence of insomnia and sleep deprivation in nurses.
Shaukat et al., 2020 Pakistan	Systematic literature review	Impact of covid-19 on healthcare professionals	Findings suggest high levels of stress, anger, fear, insomnia in healthcare professionals; female nurses were more affected by mental health consequences; the consequences show increased emotional disturbance, uncertainty and stigmatisation of the pandemic.
Vizheh et al., 2020 Iran	Systematic literature review	The mental health of healthcare professionals	Prevalence of anxiety 24.1–44.6%, stress 30–38%; 63% of healthcare professionals reported experiencing mental disturbance (burnout, fear, frustration, sleep deprivation or low quality of sleep); mental disturbances were more common in nurses compared to the physicians.

Legend/Legenda: % – percentage/odstotek; n – number/število

the provision and inadequacy of personal protective equipment. On the other hand, Krishnamoorthy et al. (2020) report social support of almost 50% for those on the frontline of managing the pandemic. Yet, only 19.6% reported receiving psychological counselling.

Discussion

Due to the widespread occurrence of the disease and the increased number of deaths, nurses and physicians are usually found to experience a higher psychological burden during pandemics. Frontline healthcare professionals show a significantly higher prevalence of psychological problems compared non-frontline workers. Familiarity with the virus, lack of training in dealing with outbreaks, and constantly changing infection control measures have been associated with low self-efficacy and higher stress levels (Sahebi et al., 2020; Simms, Fear, & Greenberg, 2020). Nurses and physicians consistently report several risk factors that increase in such highly lethal outbreaks, such as the frequent unpredictability of daily caseloads, frequently caring for multiple patients and dealing with unexpected critical cases, high-demand and low-control situations related to working conditions (Gorini et al., 2020; Pouralizadeh et al., 2020).

The fact that we have attempted to provide the first comprehensive review of the burden of mental disorders during the covid-19 pandemic among nurses and physicians represents a significant advantage of this literature review. There has been a lack of such studies in countries other than China and Italy. People under lockdown should be counselled on stress management methods and coping strategies. Employment organisations should be able to provide effective and protective mental health support. Poor communication with management and feeling underappreciated were most commonly represented among healthcare professionals. Many participants highlighted unfavourable working

conditions, such as working hours, environment and under-staffing, as the causes of work stress, which had a negative impact on their professional engagement (Krishnamoorthy et al., 2020). Muller et al. (2020) report on work disengagement of nurses and physicians, some even considering leaving their profession. Stable mental health of nurses also depends on the availability and provision of adequate personal protective equipment, which would prevent them from becoming physically infected or transmitting infections to others.

Coping with the pandemic without adequate protective equipment can severely affect the mental health status of nurses and physicians in terms of safety (Simms et al., 2020; Zhou et al., 2020). The results of our examination of mental health predictors show that separation distress and emotional symptoms were associated with poorer mental health and coping skills. Symptoms of mental distress were more severe in healthcare professionals than in the general population. The main findings of our review show that nurses and physicians have a high prevalence of mental health disorders, most commonly anxiety and sleep deprivation (Allan et al., 2020). It is important to promote the psychological well-being of nurses and physicians to improve their mental health status (Daugherty et al., 2020; Vindrola-Padros et al., 2020). These results also support previous studies suggesting that in health crisis situations men may suffer longer-term psychological harm. One possible explanation would be that men tend to recognise or experience distress later than women (Gorini et al., 2020). It seems that mental health disorders can affect patient care and consequently increase treatment costs. There is a lack of evidence-based interventions and prevention strategies to prevent mental health disorders in nurses and physicians during pandemics (Luo et al., 2020).

A strong collegial relationship was significantly associated with better coping skills among frontline nurses and physicians. As collaboration can be defined

as an act of cooperation in order to be effective, it needs to take place in an atmosphere of mutual trust and respect (Karlsson & Fraenkl, 2020; Li et al., 2020). It is important to provide sufficient resources in the form of mental health counselling, as well as personal protective equipment to effectively alleviate anxiety, stress and depression among nurses and physicians (Li et al. 2020). This literature review found a satisfactory number of studies that met the inclusion criteria. In future searches, it would be advisable to focus on older literature related to other health crises. It is important to conduct more cohort studies to track the pattern of mental health symptoms at different time points of pandemics and to understand long-term impacts of pandemics or epidemics among nurses and physicians. The analysis is limited to three aspects, namely the occurrence of mental health disorders among nurses and physicians, their ways of coping with mental health disorders, and the impact of the pandemic on their mental health. However, questions remain regarding the differences in the ways of coping with mental health disorders, the duration and adaptation to mental disorders, as well as absenteeism and rehabilitation in the post-pandemic period. Further cross-sectional studies would help address the problem of mental disorders and conceptualise solutions to the problem of maintaining optimal mental health among nurses and physicians in clinical setting.

Conclusion

This literature review highlights the urgent need for further research, including more extensive follow-up investigation of mental disorders. The review shows a relatively high prevalence of anxiety among nurses and physicians. Preventive measures should include shorter shifts, recruitment of new staff and mental health support mechanisms. Risk factors could be reduced through social support and protective interventions. To continue providing high quality patient care, nurses and physicians need to receive psychosocial support in order to protect their mental well-being. Age and pre-existing chronic conditions make a person more vulnerable to the effects of a pandemic. Future studies should address the link between these factors and mental health outcomes. The covid-19 pandemic has taken a severe psychological toll on nurses, physicians, as well as the general public. Psychological interventions are therefore urgently needed. Future studies should aim to increase the effectiveness of psychological interventions among healthcare professionals with mental health problems.

Conflicts of interest/Nasprotje interesov

The authors declare that no conflict of interest exists./Avtorja izjavljata, da ni nasprotje interesov.

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Ethical approval/Etika raziskovanja

The study required no special authorisation from the ethics committee. The study was conducted in accordance with the principles of the Helsinki-Tokyo Declaration (World Medical Association, 2013) and the Code of Ethics for Nurses and Nurse Assistants of Slovenia (2014)./Raziskava ni potrebovala posebne dovoljenja komisije za etiko. Raziskava je pripravljena v skladu z načeli Helsinško-tokijske deklaracije (World Medical Association, 2013) in s Kodeksom etike v zdravstveni negi in oskrbi v Sloveniji (2014).

Author contributions/Prispevek avtorjev

The first author, under the mentorship of the second author, prepared the conceptual design, a selective overview of the literature, data processing and the evaluation and justification of the results. The second author participated in directing the contents of theoretical work and directed the contents of the theoretical part, confirmed the methodology and evaluated the displayed results./Prvi avtor je pod mentorstvom drugega avtorja pripravil idejno zasnovo, selektivni pregled literature, obdelavo podatkov ter evalvacijo in utemeljitev rezultatov. Soavtorica je sodelovala pri usmerjanju vsebine teoretičnega dela, usmerjala je vsebine teoretičnega dela, potrdila metodologijo ter evalvirala prikazane rezultate.

Literature

Allan, S., Bealey, R., Birch, J., Cushing, T., Parke S., Sergi, G. ... Meiser-Stedman, R. (2020). The prevalence of common and stress-related mental health disorders in healthcare workers based in pandemic-affected hospitals: A rapid systematic review and meta-analysis. *European Journal of Psychotraumatology*, 11(1), 1–12. <https://doi.org/10.1080/20008198.2020.1810903> PMID:33244359; PMCID:PMC7678680

Al Thobaity, A., & Alshammari, F. (2020). Nurses on the frontline against the COVID-19 pandemic: An integrative review. *Dubai Medical Journal*, 3(2), 87–92. <https://doi.org/10.1159/000509361> PMCID:PMC7490501

Aveyard, H., Bradbury-Jones, C. (2019). An analysis of current practices in undertaking literature reviews in nursing: Findings from a focused mapping review and synthesis. *BMC Medical Research Methodology*, 19(105), 1–9. <https://doi.org/10.1186/s12874-019-0751-7> PMID:31096917; PMCID:PMC6524227

- Benfante, A., Di Tella, M., Romeo, A., & Castelli, L. (2020). Traumatic stress in healthcare workers during COVID-19 pandemic: A review of the immediate impact. *Frontiers Psychology*, 11(1), 1–7.
<https://doi.org/10.3389%2Ffpsyg.2020.569935>
PMid:33192854; PMCID:PMC7645025
- Bhui, K., Dinos, S., Galant- Miecznikowska, M., de Jongh, B., & Stansfeld, S. (2016). Perception of work stress causes and effective interventions in employees working in public, private and non-governmental organisations: A qualitative study. *Psychological Bulletin Journal*, 40(6), 318–325.
<https://doi.org/10.1192%2Fpb.bp.115.050823>
PMid:28377811; PMCID:PMC5353523
- Billings, J., Chi Fung Ching, B., Gkofa, V., Greene, T., & Bloomfield, M. (2021). Experiences of frontline healthcare workers and their views about support during covid-19 and previous pandemics: a systematic review and qualitative meta-synthesis. *BMC Health Services Research*, 21, Article 923.
<https://doi.org/10.1186/s12913-021-06917-z>
PMid:34488733; PMCID:PMC8419805
- Cabarkapa, S., Nadjidai, S., Murgier, J., & Chee, H. (2020). The psychological impact of COVID-19 and other viral epidemics on frontline healthcare workers and ways to address it: A rapid systematic review. *Brain Behavior & Immunity*, 8(1), 1–10.
<https://doi.org/10.1016/j.bbih.2020.100144>
PMid:32959031; PMCID:PMC7494453
- Carmassi, C., Foghi, C., Dell'Oste, V., Cordone, A., Bertelloni, CA., Bui, E., & Dell'Osso, L. (2020). PTSD symptoms in healthcare workers facing the three coronavirus outbreaks: What can we expect after the COVID- 19 pandemic. *Psychiatry Research*, 292(2), 1–10.
<https://doi.org/10.1016/j.psychres.2020.113312>
PMid:32717711; PMCID:PMC7370915
- Daugherty, A., & Arble, E. (2020). Prevalence of mental health symptoms in residential healthcare workers in Michigan during the covid-19 pandemic. *Psychiatric Research*, 291(1), 1–2.
<https://doi.org/10.1016/j.psychres.2020.113266>
PMid:32623265; PMCID:PMC7324917
- De Kock, J., Latham, H. A., Leslie, S. J., Grindle, M., Munoz, S. A., Ellis, L. ... O'Malley, C. (2020). A rapid review of the impact of COVID-19 on the mental health of healthcare workers: Implications for supporting psychological well-being. *BMC Public Health*, 1(2), 1–18.
<https://doi.org/10.1016/j.psychres.2020.113441>
PMid:32898840; PMCID:PMC7462563
- Fernandez, R., Lord, H., Halcomb, E., Moxham, L., Middleton, R., Alananzeh, I., & Ellwood, L. (2020). Implications for COVID-19: A systematic review of nurses' experiences of working in acute care hospital settings during a respiratory pandemic. *International Journal of Nursing Studies*, 111(1), 1–18.
<https://doi.org/10.1016/j.ijnurstu.2020.103637>
PMid:32919358 PMCID:PMC7206441
- Galehdar, N., Kamran, A., Toulabi, T., & Heydari, H. (2020). Exploring nurses' experiences of psychological distress during care of patients with COVID-19: A qualitative study. *BMC Psychiatry*, 20(4), 2–9.
<https://doi.org/10.1186/s12888-020-02898-1>
PMid:33023535; PMCID:PMC7538040
- Gorini, A., Fiabane, E., Sommaruga, M., Barbieri, S., Sottotetti, F., La Rovere, M. T. ... Gabanelli, P. (2020). Mental health and risk perception among Italian healthcare workers during the second month of the COVID-19 pandemic. *Archives of Psychiatric Nursing*, 1(1), 537–544.
<https://doi.org/10.1016/j.apnu.2020.10.007>
PMid:33280678; PMCID:PMC7577253
- Greenberg, N., Docherty, M., Gnanapragasm, S., & Wessely, S. (2020). Managing mental health challenges faced by health care workers during covid-19 pandemic. *British Medical Journal*, 368(1), 1–4.
<https://doi.org/10.1136/bmj.m1211>
PMid:32217624
- Hooper, J., Saulsman, L., Hall, T., & Waters, F. (2020). Addressing the psychological impact of Covid-19 on healthcare workers: Learning from a systematic review of early interventions for frontline responders. *BMJ Open*, 11(5), 1–15.
<https://doi.org/10.3390/ijerph18136695>
PMid:34020974; PMCID:PMC8142676
- Huffman, E., Athanasiadis, D., Anton, N., Haskett, L., Doster, D., Stefanidis, D., & Lee, N. (2020). How resilient is your team: Exploring healthcare providers' well-being during the COVID-19 pandemic. *American Journal of Surgery*, 1(1), 277–284.
<https://doi.org/10.1016/j.amjsurg.2020.09.005>
PMid:3299404;1 PMCID:PMC7486626
- Karlsson, U., & Fraenkel, C. J. (2020). Covid-19: Risks to healthcare workers and their families. Mistakes made in the first wave must not be repeated in the second. *BMJ Open*, 371(1), 1–2.
<https://doi.org/10.1136/bmj.m3944>
PMid:33115772
- Krishnamoorthy, Y., Nagarajan, R., Kumar Saya, G., & Menon, V. (2020). Prevalence of psychological morbidities among general population, healthcare workers and COVID-19 patients amidst the COVID-19 pandemic: A systematic review and meta- analysis. *Psychiatry Research*, 293(2), 1–11.
<https://doi.org/10.1016%2Fj.psychres.2020.113382>
PMid:32829073; PMCID:PMC7417292
- Li, X., Li, S., Xiang, M., Fang, Y., Qian, K., Xu, J. ... Wang, B. (2020). The prevalence and risk factors of PTSD symptoms among medical assistance workers during the COVID-19 pandemic. *Journal of Psychosomatic Research*, 39(1), 1–7.
<https://doi.org/10.1016/j.jpsychores.2020.110270>
PMid:33070044; PMCID:PMC7536549

- Luo, M., Guo, L., Yu, M., Jiang, W., & Wang, H. (2020). The psychological and mental impact of coronavirus disease 2019 (COVID-19) on medical staff and general public: A systematic review and meta-analysis. *Psychiatry Research*, 291(1), 1–9. <https://doi.org/10.1016/j.psychres.2020.113190> PMID:32563745; PMCID:PMC7276119
- Morgantini, L., Naha, U., Wang, H., Francavilla, S., Acar, O., Flores, J. ... Weine, S. (2020). Factors contributing to healthcare professional burnout during the COVID-19 pandemic: A rapid turnaround global survey. *Plos One*, 1(15), 9–11. <https://doi.org/10.1371/journal.pone.0238217> PMID:32881887; PMCID:PMC7470306
- Monteiro da Silva, R., Benjamim, C.J.R., de Medeiros Carvalho, P., & Rolim Neto, M. L. (2021). Psychological effects caused by the COVID-19 pandemic in health professionals: A systematic review with meta-analysis. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 104(1), 1–7. <https://doi.org/10.1016/j.pnpbp.2020.110062> PMID:32771337; PMCID:PMC7409979
- Muller, A., Hafstad, E., Himmels, J. P. W., Smedslund, G., Flottorp, S., Stenslad, S. ... Vist, G. E. (2020). The mental health impact of the covid-19 pandemic on healthcare workers, and interventions to help them: A rapid systematic review. *Psychiatry Research*, 293(3), 1–11. <https://doi.org/10.1016/j.psychres.2020.113441> PMID:32898840; PMCID:PMC7462563
- Paiano, M., Jaques, A. E., Bezerra Nacamura, P., Salci, M. A., Trindade Radovanovic, C. A., & Carreira, L. (2020). Mental health of healthcare professionals in China during the new coronavirus pandemic: An integrative review. *Revista Brasileira de Enfermagem*, 73(1), 1–8. <https://doi.org/10.1590/0034-7167-2020-0338> PMID:32965402
- Pouralizadeh, M., Bostani, Z., Maroufizadeh, S., Ghanbari, A., Khoshbakht, M., Amirhossein Alavi S., & Ashrafi, S. (2020). Anxiety and depression and the related factors in nurses of Guilan university of medical sciences hospital during COVID-19: A web-based cross-sectional study. *International Journal of Africa Nursing Science*, 13(1), 1–6. <https://doi.org/10.1016/j.ijans.2020.100233> PMID:32837911; PMCID:PMC7417274
- Prescott, K., Baxter, E., Lynch, C., Jassal, S., Bashir, A., & Gray, J. (2020). COVID-19: How prepared are front-line healthcare workers in England. *Journal of Hospital Infection*, 105(1), 142–145. <https://doi.org/10.1016/j.jhin.2020.04.031> PMID:32339615; PMCID:PMC7195134
- Raudenska, J., Steinerova, V., Javurkova, A., Urits, I., D Kaye, A., Viswanath, O., & Varrassi, G. (2020). Occupational burnout syndrome and post-traumatic stress among healthcare professionals during the novel coronavirus disease 2019 (COVID-19) pandemic. *Best Practice & Research: Clinical Anaesthesiology*, 34(3), 553–560. <https://doi.org/10.1016/j.bpa.2020.07.008> PMID:33004166; PMCID:PMC7367798
- Sahebi, A., Nejati-Zarnaqi, B., & Moayedi, S. (2021). The prevalence of anxiety and depression among healthcare workers during the COVID-19 pandemic: An umbrella review of meta-analysis. *Progress in Neuro-Psychopharmacology and Biological Psychiatry*, 107(1), 1–7. <https://doi.org/10.1016/j.pnpbp.2021.110247> PMID:33476692; PMCID:PMC7817526
- Sanghera, J., Pattani, N., Hashmi, Y., Varley, K., Srinivas Cheruvu, M., Bradley, A., & Burke, J. (2020). The impact of SARS-CoV-2 on the mental health of healthcare workers in a hospital setting: A systematic review. *Journal of Occupational Health*, 62(1), 1–16. <https://doi.org/10.1002/1348-9585.12175> PMID:33131192; PMCID:PMC7603426
- Shamseer, L., Moher, D., Shamsser, L., Clarke, M., Ghersi, D., Liberati, A. ... Stewart L. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) statement. *Systematic Review*, 4(1), 1–25. <https://doi.org/10.1136/bmj.g7647>
- Shaukat, N., Mansoor, A., & Razzak, J. (2020). Physical and mental health impacts of COVID-19 on healthcare workers: A scoping review. *International Journal of Emergency Medicine*, 13(40), 1–8. <https://doi.org/10.1186/s12245-020-00299-5> PMID:32689925; PMCID:PMC7370263
- Simms, A., Fear, N., & Greenberg, N. (2020). The impact of having inadequate safety equipment on mental health. *Occupational Medicine*, 70(4), 278–281. <https://doi.org/10.1093/occmed/kqaa101> PMID:32449770; PMCID:PMC7313819
- Streubert, H. J., & Carpenter, D. R. (2011). *Qualitative research in nursing: Advancing the Humanistic Imperative* (5th ed.). Philadelphia: Wolters kluwer.
- Tsamakis, K., Rizos, E., Manolis, A., Chaidou, S., Kypouropoulos, S., Spartalis, E. ... Triantafyllis, A. (2020). COVID-19 pandemic and its impact on mental health of healthcare professionals. *Experiment and Therapeutic Medicine*, 19(1), 3451–3453. <https://doi.org/10.3892/etm.2020.8646>
- Vindrola-Padros, C., Andrews, L., Dowrick, A., Djellouli, N., Fillmore, H., Gonzalez, E. B. ... Johnson, G. (2020). Perceptions and experiences of healthcare workers during the COVID-19 pandemic in the UK. *BMJ Open*, 1(2), 1–8. <https://doi.org/10.11/e040503> PMID:33154060; PMCID:PMC7646318

Vizheh, M., Qorbani, M., Arzaghi, S., Muhidin, S., Javanmard, Z., & Esmaeili, M. (2020). The mental health of healthcare workers in the COVID-19 pandemic: A systematic review. *Journal of Diabetes*, 1(1), 1967–1978.
<https://doi.org/10.1007/s40200-020-00643-9>
PMid:33134211; PMCID:PMC7586202

Walton, M., Murray, E., & Christian, M. (2020). Mental healthcare for medical staff and affiliated healthcare workers during the COVID-19 pandemic. *European Heart Journal-Cardiovascular Imaging*, 1(1), 241–247.
<https://doi.org/10.1177/2048872620922795>
PMid:32342698; PMCID:PMC7189614

Zhou, Y., Wang, W., Sun, Y., Qian, W., Liu, Z., Wang, R. ... Zhang, X. (2020). The prevalence and risk factors of psychological disturbances of frontline medical staff in china under the COVID-19 epidemic: Workload should be concerned. *Journal of Affective Disorders*, 277(1), 510–514.
<https://doi.org/10.1016/j.jad.2020.08.059>
PMid:32882508; PMCID:PMC7448730

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BABIC IN ZDRAVSTVENIH TEHNIKOV SLOVENIJE

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Beseda urednikov/Editorial note

Zahvala članom uredniškega odbora in recenzentom Obzornika zdravstvene nege A thank you to the editorial board and reviewers of the Slovenian Nursing Review

Mirko Prosen*

Obzornik zdravstvene nege je osrednja slovenska znanstvena revija s področja zdravstvene nege in babištva, ki izhaja že od leta 1967. Skozi desetletja je gradila svojo strukturo in obliko, stremela h kakovosti objav ter pomembno zaznamovala profesionalizacijo zdravstvene nege v Sloveniji. Kot pomembna znanstvena periodika na področju zdravstvene nege se je uveljavila ne le v slovenskem, ampak tudi v širšem mednarodnem prostoru. Velika zasluga zato gre stanovski organizaciji, preteklim urednicam revije in članom uredniškega odbora, recenzentom in nenazadnje zvestim bralcem, ki revijo danes listajo bodisi v tiskani ali spletni izdaji.

V reviji Obzornik zdravstvene nege si prizadevamo spodbujati mlade raziskovalce in avtorje k znanstvenemu publiciranju s konstruktivnimi recenzijami in podporo članov uredniškega odbora. V zadnjih letih je tudi opazna znatna rast bralcev in ogledov spletne izdaje revije, kar je pomembna spodbuda za razvijanje formata izdajanja v bodoče. Istočasno si tudi prizadevamo za vključevanje/indeksacijo revije v pomembne mednarodne baze podatkov. V letošnjem letu smo se na primer vpisali v bazo Sherpa Romeo in SCILIT. Tovrstne aktivnosti pomembno prispevajo k oddaji večjega deleža člankov v angleškem jeziku in postopnem povečevanju del tujih avtorjev.

Z zaključkom leta 2022 se izteka mandat članom uredniškega odbora in z novim letom pričanja delo uredniški odbor v novi sestavi. Izjemno smo hvaležni članom uredniškega odbora za dosedanje delo in skrbnost pri vodenju člankov v uredniškem postopku kot tudi vsem našim recenzentom za strokovne in natančne preglede člankov, kar je bistvenega pomena za kakovost objavljene znanstvene literature in napredek znanosti. Novemu uredniškemu odboru želimo v naslednjem mandatu uspešno delo, veliko zagona in inovativnih idej.

V imenu urednikov,

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NAVODILA AVTORJEM

Splošna navodila

Članek naj bo napisan v slovenskem ali angleškem jeziku, razumljivo in jedrnato. Revija sprejema izvirne znanstvene in pregledne znanstvene članke. Izvirni znanstveni članek, naj bo dolg največ 5000 besed in pregledni znanstveni članek največ 6000 besed, vključno z referencami. Avtorji naj uporabijo Microsoft Wordovi predlogi, ki sta dostopni na spletni strani uredništva (Naslovna stran in Predloga za izvirni znanstveni/pregledni članek). Vsi članki, ki so uvrščeni v uredniški postopek, so recenzirani s tremi anonimnimi recenzijami. Revija objavlja le izvirna, še neobjavljena znanstvena dela. Za trditve v članku odgovarja avtor oziroma avtorji, če jih je več (v nadaljevanju avtor), zato morajo biti podpisani s celotnim imenom in priimkom. Navesti je potrebno korespondenčnega avtor (s polnim naslovom, telefonsko številko in elektronskim naslovom), ki bo skrbel za komunikacijo z uredništvom in ostalimi avtorji. Avtor mora pri oddaji članka dosledno upoštevati navodila glede standardizirane znanstvene opreme, videza in tipologije dokumentov ter navodila v zvezi z oddajo članka. Članek bo uvrščen v nadaljnjo obravnavo, ko bo pripravljen v skladu z navodili uredništva.

Če članek objavlja raziskavo na ljudeh, naj bo v podpoglavju metod *Opis poteka raziskave in obdelave podatkov* razvidno, da je bila raziskava opravljena skladno z načeli Helsinško-Tokijske deklaracije, opisan naj bo postopek pridobivanja dovoljenj za izvedbo raziskave. Eksperimentalne raziskave, opravljene na ljudeh, morajo imeti soglasje komisije za etiko bodisi na ravni ustanove ali več ustanov, kjer se raziskava izvaja, bodisi na nacionalni ravni.

Naslov članka, izvleček, ključne besede, tabele (opisni naslov in legenda) ter slike (opisni naslov oziroma podpis in legenda) morajo biti v slovenščini in angleščini, leto velja tudi za angleško pisane članke, le da so v tem primeru našteje enote navedene najprej v angleščini in nato v slovenščini. Skupno število slik in tabel naj bo največ pet. Tabele in slike naj bodo v besedilu članka na ustreznem mestu. Za prikaz rezultatov v tabelah, slikah in besedilu je treba uporabljati statistične simbole, ki jih avtor najde na spletni strani revije, poglavje Navodila. Na vsako tabelo in sliko se mora avtor v besedilu sklicevati. Uporaba sprotnih opomb pod črto ni dovoljena.

Etična načela

Če uredništvo ugotovi, da rokopis krši avtorske pravice, se rokopis takoj izloči iz uredniškega postopka. Plagiatorstvo ugotavljamo s *Detektorjem podobnih vsebin* (DPV) in *CrossCheck Plagiarism Detection System*. Avtorji ob oddaji članka podpišejo *Izjavo o avtorstvu* in z njo potrdijo, da noben del prispevka do sedaj ni bil objavljen ali sprejet v objavo kjer koli drugje in v katerem koli jeziku.

V primeru etičnih kršitev se sproži postopek pregleda in razsojanja, ki ga vodi uredniški odbor revije. Na drugi stopnji etičnega presojanja razsodi Častno razsodišče Zbornice Zveze.

Opredelitev tipologije

Uredništvo razvrsti posamezni članek po veljavni tipologiji za vodenje bibliografij v sistemu COBISS (Kooperativni online bibliografski sistem in servisi) (dostopno na: http://home.izum.si/COBISS/bibliografije/Tipologija_slv.pdf). Tipologijo lahko predlagata avtor in recenzent, končno odločitev sprejme glavni in odgovorni urednik.

Metodološka struktura članka

Naslov, izvleček in ključne besede naj bodo v slovenščini in angleščini. Naslov naj bo skladen z vsebino članka in dolg največ 120 znakov. Oblikovan naj bo tako, da je iz njega razviden uporabljeni raziskovalni dizajn. Če naslovu sledi podnaslov, naj bosta ločena s podpičjem. Navedenih naj bo od tri do šest ključnih besed, ki natančneje opredeljujejo vsebino članka in ne nastopajo v naslovu. Izvleček naj bo strukturiran, vsebuje naj 150–220 besed. Napisan naj bo v tretji osebi. V izvlečku se ne citira.

Strukturirani izvleček naj vsebuje naslednje strukturne dele:

Uvod (Introduction): Navesti je treba ključna spoznanja dosedanjih raziskav, opis raziskovalnega problema, namen raziskave, v katerem so opredeljene ključne spremenljivke raziskave.

Metode (Methods): Navesti je treba uporabljeni raziskovalni dizajn, opisati glavne značilnosti vzorca, instrument raziskave, zanesljivost instrumenta, kje, kako in kdaj so se zbirali podatki in s katerimi metodami so bili obdelani in analizirani.

Rezultati (Results): Opisati je treba najpomembnejše rezultate raziskave, ki odgovarjajo na raziskovalni problem in namen raziskave. Pri kvantitativnih raziskavah je treba navesti vrednost rezultata in raven statistične značilnosti.

Diskusija in zaključek (Discussion and conclusion): Razpravljati je treba o ugotovitvah raziskave, navesti se smejo le zaključki, ki izhajajo iz podatkov, pridobljenih pri raziskavi. Navesti je treba tudi uporabnost ugotovitev in izpostaviti pomen nadaljnjih raziskav za boljše razumevanje raziskovalnega problema. Enakovredno je treba navesti tako pozitivne kot tudi negativne ugotovitve.

Struktura izvirnega znanstvenega članka (1.01)

Izvirni znanstveni članek je samo prva objava originalnih raziskovalnih rezultatov v takšni obliki, da se raziskava lahko ponovi ter ugotovitve preverijo.

Revija objavlja znanstvene raziskave, za katere zbrani podatki niso starejši od pet let ob objavi članka v reviji.

Uvod: V uvodu opredelimo raziskovalni problem, in sicer v kontekstu znanja in znanstvenih dokazov, v katerem smo ga razvili. Pregled obstoječe znanstvene literature mora utemeljiti potrebo po naši raziskavi in je osnova za oblikovanje namena in ciljev raziskave, raziskovalnih vprašanj oziroma hipotez in izbranega dizajna raziskave. Uporabimo znanstvena spoznanja in koncepte aktualnih mednarodnih in domačih raziskav, ki so objavljena kot primarni vir in niso starejša od deset oziroma pet let. Obvezno je citiranje in povzemanje spoznanj raziskav in ne mnenj avtorjev. Na koncu opredelimo namen in cilje raziskave. Priporočamo zapis raziskovalnih vprašanj (kvalitativna raziskava) oziroma hipotez (kvantitativna raziskava).

Metode: V uvodu metod navedemo izbrano raziskovalno paradigmo (kvantitativna, kvalitativna) in uporabljeni dizajn izbrane paradigme. Podpoglavja metod so: *opis instrumenta*, *opis vzorca*, *opis poteka raziskave in obdelave podatkov*.

Pri *opisu instrumenta* navedemo: opis sestave instrumenta, kako smo oblikovali instrument, spremenljivke v instrumentu, merske značilnosti (veljavnost, zanesljivost, objektivnost, občutljivost). Navedemo avtorje, po katerih smo instrument povzeli, ali navedemo literaturo, po kateri smo ga razvili. Pri kvalitativni raziskavi opišemo tehniko zbiranja podatkov, izhodiščna vprašanja, morebitno strukturo poteka zbiranja podatkov, kriterije veljavnosti in zanesljivosti tehnike zbiranja podatkov.

Pri *opisu vzorca* navedemo: opis populacije, iz katere smo oblikovali vzorec, vrsto vzorca, kolikšen je bil odziv vključenih v raziskavo, opis vzorca po demografskih podatkih (spol, izobrazba, delovna doba, delovno mesto ipd.). Pri kvalitativni raziskavi opredelimo še možnosti vključitve in izbrani način vključitve v raziskavo, vrsto vzorca, velikost vzorca in pojasnimo zasičenost vzorca.

Pri *opisu poteka raziskave in obdelave podatkov* navedemo etična dovoljenja za izvedbo raziskave, dovoljenja za izvedbo raziskave v organizaciji, predstavimo potek izvedbe raziskave, zagotovila za anonimnost vključenih ter prostovoljnost pri vključitvi v raziskavo, navedeno obdobje, kraj in način zbiranja podatkov, uporabljene metode analize podatkov, pri slednjem natančno navedemo statistične metode, program in verzijo programa statistične obdelave, meje statistične značilnosti. Pri kvalitativni raziskavi natančno opišemo celoten potek raziskave, način zapisovanja, zbiranja podatkov, število izvedb (opazovanj, intervjujev ipd.), trajanje izvedb, sekvence, transkripcijo podatkov, korake analize obdelave, tehnike obdelave in interpretacije podatkov ter receptivnost raziskovalca.

Rezultati: Rezultate prikažemo besedno oziroma v tabelah in slikah ter pazimo, da izberemo le en prikaz

za posamezen rezultat in da se vsebina ne podvaja. V razlagi rezultatov se osredotočamo na statistično značilne rezultate in tiste, ki so nas presenetili. Rezultate prikazujemo glede na stopnjo zahtevnosti statistične obdelave. Pri prikazu rezultatov v tabelah in slikah je za vse uporabljene kratice potrebna pojasnitev v legendi pod tabelo ali sliko. Rezultate prikažemo po postavljenih spremenljivkah, odgovorimo na raziskovalna vprašanja oz. hipoteze. Pri kvalitativnih raziskavah prikažemo potek oblikovanja kod in kategorij, za vsako kodo predstavimo eno do dve reprezentativni izjavi vključenih v raziskavo, ki najbolje predstavita oblikovano kodo. Naredimo shematični prikaz dobljenih kod in iz njih razvitih kategorij ter sodbo.

Diskusija: V diskusiji ugotovitve raziskave navajamo na besedni način (številčnih rezultatov ne navajamo).

Nizamo jih po posameznih spremenljivkah in z vidika postavljenih raziskovalnih vprašanj oz. hipotez, ki jih ne ponavljamo, temveč nanje besedno odgovarjamo. Rezultate v razpravi pojasnimo z vidika razumevanja, kaj lahko iz njih razberemo, razumemo in kako je to primerljivo z rezultati drugih raziskav in kaj to pomeni za uporabnost naše raziskave. Pri tem smo odgovorni in etični ter rezultate pojasnjujemo z vidika spoznanj naše raziskave in z vidika spoznanj, ki so preverljiva, splošno znana in primerljiva z vidika drugih raziskav. Pazimo na posploševanje rezultatov in se pri tem zavedamo omejitev raziskave z vidika instrumenta, vzorca in poteka raziskave. Upoštevamo načelo preverljivosti in primerljivosti. Oblikujemo rdečo nit razprave kot smiselne celote, komentiramo pričakovana in nepričakovana spoznanja raziskave. Na koncu razprave navedemo priporočila, ki so plod naše raziskave, in področja, ki jih nismo raziskali, pa bi jih bilo treba, ali pa smo jih, vendar naši rezultati ne dajejo ustreznih pojasnil. Navedemo omejitve raziskave.

Zaključek: Na kratko povzamemo ključne ugotovitve izvedene raziskave, povzamemo predloge za prakso, predlagamo možnosti nadaljnjega raziskovanja obravnavanega problema. V zaključku ne citiramo ali povzemamo.

Članek naj se zaključi s seznamom literature, ki je bila citirana ali povzeta v članku.

Struktura preglednega znanstvenega članka (1.02)

V kategorijo preglednih znanstvenih raziskav sodijo: sistematični pregled literature, pregled literature, analiza koncepta, razpravni članek (v nadaljevanju pregledni znanstveni članek). Revija objavlja pregledne znanstvene raziskave, za katere je bilo zbiranje podatkov končano največ tri leta pred objavo članka v reviji.

Pregledni znanstveni članek je pregled najnovejših raziskav o določenem predmetnem področju z namenom povzemanja, analiziranja, evalviranja ali

sintetizirati informacije, ki so že bile publicirane. V preglednem znanstvenem članku znanstvena spoznanja niso le navedena, ampak tudi razložena, interpretirana, analizirana, kritično ovrednotena in predstavljena na znanstvenoraziskovalen način. Na osnovi kvantitativne obdelave podatkov predhodnih raziskav (metaanaliza) ali kvalitativne sinteze (metasinteza) rezultatov predhodnih raziskav prinaša nova spoznanja in koncepte za nadaljnje raziskovalno delo. Struktura preglednega znanstvenega članka je enaka kot pri izvornem znanstvenem članku.

V **uvodu** predstavimo znanstveno, konceptualno ali teoretično izhodišče kot vodilo pregleda literature. Končamo z utemeljitvijo, zakaj je pregled potreben, zapišemo namen, cilje in raziskovalno vprašanje.

V **metodah** natančno opišemo uporabljeni raziskovalni dizajn pregleda literature. Podpoglavja metod so: *metode pregleda, rezultati pregleda, ocena kakovosti pregleda in opis obdelave podatkov. Metode pregleda* vključujejo razvoj, testiranje in izbor iskalne strategije, vključitvene in izključitvene kriterije za uvrstitev v pregled, raziskane podatkovne baze, časovno obdobje iskanja objav, vrste objav z vidika hierarhije dokazov, ključne besede, jezik pregledanih objav. *Rezultati pregleda* vključujejo število dobljenih zadetkov, število pregledanih raziskav, število vključenih raziskav in število izključenih raziskav. Uporabimo diagram poteka raziskave skozi faze pregleda, pri izdelavi si pomagamo z mednarodnimi standardi za prikaz rezultatov pregleda literature (npr. PRISMA-Preferred Reporting Items for Systematic Review and Meta-Analysis). *Ocena kakovosti pregleda in opis obdelave podatkov* vključuje oceno uporabljene iskalne strategije in kriterijev za dokončni nabor uporabljenih zadetkov, kakovost vključenih raziskav z vidika hierarhije dokazov ter način obdelave podatkov.

Rezultate prikažemo tabelarično kot analizo kakovosti vključenih raziskav. Tabela naj vključuje avtorje raziskave, leto objave raziskave, državo, kjer je bila raziskava izvedena, namen raziskave, raziskovalni dizajn, proučevane spremenljivke, instrument, velikost vzorca, ključne ugotovitve idr. Jasno naj bo razvidno, katere vrste raziskav glede na hierarhijo dokazov so vključene v pregled literature. Rezultate prikažemo besedno, v tabelah in slikah, navedemo ključna spoznanja glede na raziskovalni dizajn. Pri kvalitativni sintezi uporabimo kode in kategorije kot rezultat pregleda kvalitativne sinteze. Pri kvantitativni analizi opišemo uporabljene statistične metode obdelave podatkov iz vključenih znanstvenih del.

V **diskusiji** v prvem delu odgovorimo na raziskovalno vprašanje, nato komentiramo ugotovitve pregleda literature, kakovost vključenih raziskav, svoje ugotovitve primerjamo z rezultati drugih primerljivih raziskav, razvijemo nova spoznanja, ki jih je doprinesel pregled literature, njihovo teoretično, znanstveno in praktično uporabnost, navedemo omejitve raziskave, uporabnost v praksi in priložnosti za nadaljnje raziskovanje.

V **zaključku** poudarimo doprinos izvedenega pregleda, opozorimo na morebitne pomanjkljivosti v splošno uveljavljenem znanju in razumevanju, izpostavimo pomen bodočih raziskav, uporabnost pridobljenih spoznanj in priporočila za prakso, raziskovanje, izobraževanje, menedžment, pri čemer upoštevamo omejitve raziskave. Izpostavimo teoretični koncept, ki bi lahko usmerjal raziskovalce v prihodnosti. V zaključku ne citiramo ali povzemamo.

Navajanje literature

Vsako trditev, teorijo, uporabljeno metodologijo, koncept je treba potrditi s citiranjem. Avtorji naj uporabljajo *APA 6 - American Psychological (APA Style, 2021)* za navajanje avtorjev v besedilu in seznamu literature na koncu članka. Za navajanje avtorjev v **besedilu** uporabljamo npr.: (Pahor, 2006) ali Pahor (2006), kadar priimek vključimo v poved. Ko avtorje v besedilu navajamo prvič zapišemo do 5 avtorjev s priimki (zadnja dva priimka ločimo z »&«: (Stare & Pahor, 2010; Sharp, Novak, Aarons, Wittenberg, & Gittens, 2007). Če je avtorjev več kot 5 navedemo le prvega in dopišemo »et al.«: (Chen et al., 2007). V nadaljnjem tekstu pišemo kadar so 3 ali več avtorjev priimek prvega avtorja in »et al.« (več o uporabi najdete na strani <https://blog.apastyle.org/apastyle/2011/11/the-proper-use-of-et-al-in-apa-style.html>). Če navajamo več citiranih del, jih ločimo s podpičji in jih navedemo po kronološkem zaporedju, od najstarejšega do najnovejšega, če je med njimi v istem letu več citiranih del, jih razvrstimo po abecednem vrstnem redu: (Bratuž, 2012; Pajntar, 2013; Wong et al., 2014). Kadar citiramo več del istega avtorja, izdanih v istem letu, je treba za letnico dodati malo črko po abecednem redu: (Baker, 2002a, 2002b).

Kadar navajamo sekundarne vire, uporabimo »cited in«: (Lukič, 2000 cited in Korošec, 2014). Če pisec članka ni bil imenovan oz. je delo anonimno, v besedilu navedemo *naslov*, v oklepaju pa zapišemo »Anon.« ter letnico objave: *The past is the past* (Anon., 2008). Kadar je avtor organizacija oz. gre za korporativnega avtorja, zapišemo ime korporacije (Royal College of Nursing, 2010). Če ni leta objave, to označimo z »n. d.« (ang. no date): (Smith, n. d.). Pri objavi fotografij navedemo avtorja (Foto: Marn, 2009; vir: Cramer, 2012). Za objavo fotografij, kjer je prepoznavna identiteta posameznika, moramo pridobiti dovoljenje te osebe ali staršev, če gre za otroka.

V **seznamu literature** na koncu članka navedemo bibliografske podatke/reference za *vsa v besedilu citirana ali povzeta dela* (in samo ta!), in sicer po abecednem redu avtorjev. Sklicujemo se le na objavljena dela. Kadar je avtorjev do vključno sedem, moramo navesti vse avtorje. Pred zadnjim avtorjem damo znak &. V primeru, da je avtorjev 8 ali več, navedemo prvih šest avtorjev, dodamo tri pike in zadnjega avtorja. V primeru, da imamo med viri dva avtorja z istim priimkom in enakimi prvimi črkami imena, moramo avtorjevo polno ime napisati v oglatih oklepajih za začetnico imena.

Za oblikovanje seznama literature velja velikost črk 12 točk, enojni razmik, leva poravnava ter 12 točk prostora za referencami (razmik med odstavki, ang. paragraph spacing).

Pri citiranju, tj. dobesednem navajanju, citirane strani zapišemo tako v navedbi citirane publikacije v besedilu: (Ploč, 2013, p. 56); kot tudi pri ustrezni referenci v seznamu (glej primere v nadaljevanju). Če citiramo več strani iz istega dela, strani navajamo ločene z vejico (npr.: pp. 15–23, 29, 33, 84–86). Če je citirani prispevek dostopen na spletu, na koncu bibliografskega zapisa navedemo »Retrieved from« in datum dostopa ter zapišemo URL- ali URN-naslov (glej primere).

Avtorjem priporočamo, da pregledajo objavljene članke na temo svojega rokopisa v predhodnih številkah naše revije (za obdobje zadnjih pet let).

Ostali primeri citiranja so avtorjem na voljo na <https://apastyle.apa.org/>.

Primeri navajanja literature v seznamu

Citiranje knjige:

Nemac, D., & Mlakar-Mastnak, D. (2019). *Priporočila za telesno dejavnost onkoloških bolnikov*. Ljubljana: Onkološki inštitut.

Ricci Scott, S. (2020). *Essentials of maternity, newborn and women's health nursing* (5th ed.). Philadelphia: Lippincott Williams & Wilkins.

Citiranje poglavja oz. prispevka iz knjige, ki jo je uredilo več urednikov:

Kanič, V. (2007). Možganski dogodki in srčno-žilne bolezni. In E. Tetičkovič & B. Žvan (Eds.), *Možganska kap: do kdaj* (pp. 33–42). Maribor: Kapital.

Longman, L., & Heap, P. (2010). Sedation. In R. S. Ireland (Ed.), *Advanced dental nursing* (2nd ed., pp. 159–224). Hoboken: Blackwell Publishing.
<https://doi.org/10.1002/9781118786659.ch4>

Citiranje knjige, ki jo je uredil en ali več urednikov:

Farkaš-Lainščak, J., & Sedlar, N. (Eds.). (2019). *Ocena potreb, znanja in veščin bolnikov s srčnim popuščanjem in obremenitev njihovih neformalnih oskrbovalcev: znanstvena monografija*. Murska Sobota: Splošna bolnišnica.

Citiranje člankov iz revij:

East-Telling, C., Kingston, P., Taylor, L., & Emmerson, L. (2021). Ageing simulation in health and social care education: A mixed methods systematic review. *Journal of Advanced Nursing*, 77(1), 23–46.
<https://doi.org/10.1111/jan.14577>

Selfridge, M., Card, K. G., Lundgren, K., Barnett, T., Guarasci, K., Drost, A. ... Lachowsky, N. (2020). Exploring nurse-led HIV Pre-Exposure Prophylaxis in a community health care clinic. *Public Health Nursing*, 37(6), 871–879.
<https://doi.org/10.1111/phn.12813>

Oh, H.-K., & Cho, S.-H. (2020). Effects of nurses' shiftwork characteristics and aspects of private life on work-life conflict. *PLoS ONE*, 15(12), Article e0242379.
<https://doi.org/10.1371/journal.pone.0242379>

Marion, T., Reese, V., & Wagner, R. F. (2018). Dermatologic features in good film characters who turn evil: The transformation. *Dermatology Online Journal*, 24(9), Article 4. Retrieved December 4, 2019 from <https://escholarship.org/uc/item/1666h4z5>

Sundaram, V., Shah, P., Karvellas, C., Asrani, S., Wong, R., & Jalan, R. (2020). Share MELD-35 does not fully address the high waiting list mortality of patients with acute on chronic liver failure grade 3. *Journal of Hepatology*, 73(Suppl. 1), S8–S9.
[https://doi.org/10.1016/S0168-8278\(20\)30578-X](https://doi.org/10.1016/S0168-8278(20)30578-X)

Livingstone-Banks, J., Ordóñez-Mena, J. M., & Hartmann-Boyce, J. (2019). Print-based self-help interventions for smoking cessation. *Cochrane Database of Systematic Reviews*.
<https://doi.org/10.1002/14651858.CD001118.pub4>

Anonymous. (2010). Food safety shake-up needed in the USA. *The Lancet*, 375(9732), 2122.
[https://doi.org/10.1016/S0140-6736\(10\)60979-8](https://doi.org/10.1016/S0140-6736(10)60979-8)

Citiranje prispevka iz zbornika referatov:

Skela-Savič, B. (2008). Teorija, raziskovanje in praksa v zdravstveni negi: Vidik odgovornosti menedžmenta v zdravstvu in menedžmenta v visokem šolstvu. In B. Skela-Savič, B. M. Kaučič & J. Ramšak-Pajk et al. (Eds.), *Teorija, raziskovanje in praksa: trije stebri, na katerih temelji sodobna zdravstvena nega: zbornik predavanj z recenzijo. 1. mednarodna znanstvena konferenca, Bled 25. in 26. september 2008* (pp. 38–46). Jesenice: Visoka šola za zdravstveno nego.

Citiranje diplomskega, magistrskega dela in doktorske disertacije:

Ajlec, A. (2010). *Komunikacija in zadovoljstvo na delovnem mestu kot del kakovostne zdravstvene nege* (diplomsko delo). Univerza v Mariboru, Fakulteta za organizacijske vede, Maribor.

Rebec, D. (2011). *Samoocenjevanje študentov zdravstvene nege s pomočjo video posnetkov pri poučevanju negovalnih intervencij v specialni učilnici* (magistrsko delo). Univerza v Mariboru, Fakulteta za zdravstvene vede, Maribor.

Kolenc, L. (2010). *Vpliv sodobne tehnologije na profesionalizacijo poklica medicinske sestre* (doktorska disertacija). Univerza v Ljubljani, Fakulteta za družbene vede, Ljubljana.

Citiranje zakonov, kodeksov, pravilnikov in organizacij:

The Patient Protection and Affordable Care Act, Publ. L. No. 111-148, 124 Stat. 119 (2010). Retrieved from <https://www.govinfo.gov/content/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf>

Zakon o organizaciji in financiranju vzgoje in izobraževanja / ZOFVI/ (1996). Uradni list RS, št. 12 (13. 12. 1996). Retrieved from http://zakonodaja.gov.si/rpsi/r05/predpis_ZAKO445.html

Zakon o pacientovih pravicah /ZPacP/ (2008). Uradni list RS, št. 15 (29. 1. 2008). Retrieved from <http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4281>

World Health Organization. (2017). *Guideline: Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services*. Guideline Central. Retrieved from <https://www.guidelinecentral.com/share/summary/5acc36cc939f5#section-society>

American Nurses Association. (2015). *Code of ethics for nurses with interpretive statements*. Retrieved from <https://www.nursingworld.org/practice-policy/nursing-excellence/ethics/code-of-ethics-for-nurses/coe-view-only/>

Kodeks etike v zdravstveni negi in oskrbi Slovenije in Kodeks etike za babice Slovenije. (2014). Ljubljana: Zbornica zdravstvene in babiške nege Slovenije – Zveza strokovnih društev medicinskih sester, babic in zdravstvenih tehnikov Slovenije.

Citiranje elektronskih virov

American Society for the Prevention of Cruelty to Animals. (2019, November 21). *Justice served: Case closed for over 40 dogfighting victims*. Retrieved April 23, 2020 from <https://www.asPCA.org/news/justice-served-case-closed-over-40-dogfighting-victims>

NAVODILA ZA PREDLOŽITEV ČLANKA

Članek je treba oddati v e-obliki preko spletne strani revije. Revija uporablja *Open Journal System* (OJS), dostopno na: <http://obzornik.zbornica-zveza.si>. Avtor mora natančno slediti navodilom za oddajo članka in izpolniti vse zahtevane rubrike.

V primeru oddaje članka, ki ni skladen z navodili, si uredništvo pridružuje pravico do zavrnitve članka. Spreminjanje vrstnega reda avtorjev ali korespondenčnega avtorja tekom postopka objave članka ni dovoljeno, zato naprošamo avtorje, da skrbno pregledajo v dokumentu Naslovna stran vrstni red avtorjev.

Pred oddajo članka naj avtor članek pripravi v naslednjih treh ločenih dokumentih.

1. NASLOVNA STRAN, ki vključuje:

- naslov članka;
- avtorje v vrstnem redu, kot morajo biti navedeni v članku;
- popolne podatke o vseh avtorjih (ime, priimek, dosežena stopnja izobrazbe, habilitacijski naziv, zaposlitev, e-naslov, ORCID, Twitter) in podatek o tem, kdo je korespondenčni avtor; če je članek napisan v angleščini, morajo biti tako zapisani tudi vsi podatki o avtorjih; podpisi avtorjev; v sistem je vključena e-izjava o avtorstvu;
- informacijo, ali članek vključuje del rezultatov večje raziskave oz. ali je nastal v okviru diplomskega, magistrskega ali doktorskega dela (v tem primeru je prvi avtor vedno študent);
- izjave (statements): avtorji morajo ob oddaji rokopisa podati sledeče izjave (pri slovensko pisanem članku so vse izjave tako v slovenščini kot tudi v angleščini), ki bodo po zaključenem recenzentskem postopku in odločitvi za sprejem članka v objavo prikazane na koncu članka pred poglavjem *Literatura*.

Zahvala/Acknowledgements

Avtorji se lahko zahvalijo posameznikom, skupinam ali sodelujočim v raziskavi za sodelovanje v raziskavi (izbirno).

Nasprotje interesov/Conflict of interest

Avtorji so dolžni predstaviti kakršnokoli nasprotje interesov pri oddaji članka. V kolikor avtorji nimajo nobenih nasprotujočih interesov naj zapišejo naslednjo izjavo: »Avtorji izjavljajo, da ni nasprotja interesov.«

Financiranje/Funding

Avtorji so dolžni opredeliti kakršnokoli finančno pomoč pri nastajanju članka. Ta informacija je lahko podana z imenom organizacije, ki je financirala ali sofinancirala raziskavo, ter v primeru projekta z imenom in številko projekta. V kolikor ni bilo nobenega financiranja, naj avtorji zapišejo naslednjo izjavo: »Raziskava ni bila finančno podprta.«

Etika raziskovanja/Ethical approval

Avtorji so dolžni podati informacije o etičnih vidikih raziskave. V primeru odobritve raziskave s strani komisije za etiko zapišejo ime komisije za etiko in številko odločbe. V kolikor raziskava ni potrebovala posebnega dovoljenja komisije za etiko, so avtorji to dolžni pojasniti. Glede na posamezen tip raziskave lahko avtorji na primer zapišejo tudi naslednjo izjavo: »Raziskava je pripravljena v skladu z načeli Helsinško-Tokijske deklaracije (World Medical Association, 2013) in v skladu s Kodeksom etike v zdravstveni negi in oskrbi Slovenije (ali) Kodeksom etike za babice

Slovenije (2014),« v skladu s katero je treba v seznamu literature navajati oba vira.

Prispevek avtorjev/Author contributions

V primeru članka dveh ali več avtorjev so avtorji dolžni opredeliti prispevek posameznega avtorja pri nastanku članka, kot to določajo priporočila International Committee of Medical Journal Editors (ICMJE), dostopno na: <http://www.icmje.org/recommendations>. Vsak soavtor članka mora sodelovati v najmanj dveh strukturalnih delih članka (Uvod/Introduction, Metode/Methods, Rezultati/Results, Diskusija in zaključek/Discussion and conclusion). Za vsakega avtorja je treba napisati, v katerih delih priprave članka je sodeloval in kaj je bil njegov prispevek v posameznem delu.

2. IZJAVA O AVTORSTVU

Izjavo o avtorstvu in strinjanju z objavo prispevka, s podpisami avtorjev in razčlenitvijo delov pri katerih so sodelovali na podlagi ICMJE smernic h katerim je revija zavezana.

3. GLAVNI DOKUMENT, ki je anonimiziran in vključuje naslov članka (obvezno brez avtorjev in kontaktnih podatkov), izvleček, ključne besede, besedilo članka v predpisani strukturi, tabele, slike in literaturo. Avtorji lahko v članku uporabijo največ 5 tabel oziroma slik.

Obseg članka: članek naj vsebuje največ 5000 besed za kvantitativno in do 6000 besed za kvalitativno zasnovane raziskave. V ta obseg je vključen izvleček, tabele, slike in seznam literature. Število besed članka je treba navesti v dokumentu »Naslovna stran«.

Za **oblikovanje besedila članka** naj velja naslednje: velikost strani A4, dvojni razmik med vrsticami, pisava Times New Roman, velikost črk 12 točk in širina robov 25 mm. Obvezna je uporaba oblikovne predloge za članek (Word), dostopne na spletni strani Obzornika zdravstvene nege.

Tabele naj bodo označene z arabskimi zaporednimi številkami. Imeti morajo vsaj dva stolpca ter opisni naslov (nad tabelo), naslovno vrstico, morebitni zbirni stolpec in zbirno vrstico ter legendo uporabljenih znakov. V tabeli morajo biti izpolnjena vsa polja, obsegajo lahko največ 57 vrstic. Za njihovo oblikovanje naj velja naslednje: velikost črk 11 točk, pisava Times New Roman, enojni razmik, pred in za vrstico 0,5 točke prostora, v prvem stolpcu in vseh stolpcih z besedilom leva poravnava, v stolpcih s statističnimi podatki leva poravnava, vmesne pokončne črte pri prikazu neizpisane. Uredništvo si pridružuje pravico, da preobsežne tabele, v sodelovanju z avtorjem, preoblikuje.

Slike naj bodo oštevilčene z arabskimi zaporednimi številkami. Podpisi k slikam (pod sliko) in legende naj bodo v slovenščini in angleščini, pisava Times

New Roman, velikost 11 točk. Izraz slika uporabimo za grafe, sheme in fotografije. Uporabimo le dvodimenzionalne grafične črno-bele prikaze (lahko tudi šrafure) ter resolucijo vsaj 300 dpi (dot per inch). Če so slike v dvorazsežnem koordinatnem sistemu, morata obe osi (x in y) vsebovati označbe, katere enote / mere vsebujeta.

Članki niso honorirani. Besedil in slikovnega gradiva ne vračamo, kontaktni avtor prejme objavljeni članek v formatu PDF (Portable Document Format).

Predložitev članka s strani urednikov ali članov uredniškega odbora

Spodbudno je, da uredniki in člani uredniškega odbora Obzornika zdravstvene nege objavljajo v reviji. V izogib vsakršnemu konfliktu interesov, člani uredniškega odbora ne vodijo uredniškega postopka za svoj članek. Če eden izmed urednikov predloži članek v uredništvo, potem drugi urednik sprejema odločitve vezane na članek. Uredniki ali člani uredniškega odbora ne opravljajo recenzije ali vodijo uredniškega postopka sodelavcev iz institucije v kateri so zaposleni, pri čemer morajo paziti na nastanek potencialnih konfliktov interesov. Od vseh članov uredniškega odbora kot tudi urednikov se pričakuje, da bodo spoštovali zasebnost, sledili načelu pravičnosti in sporočali morebitne konflikte interesov, ki jih imajo do avtorjev oddanih člankov.

Sodelovanje avtorjev z uredništvom

Članek mora biti pripravljen v skladu z navodili in oddan prek spletne strani revije na <http://obzornik.zbornica-zveza.si>, to je pogoj, da se članek uvrsti v uredniški postopek. Če uredništvo presodi, da članek izpolnjuje kriterije za objavo v Obzorniku zdravstvene nege, bo poslan v zunanjo strokovno (anonimno) recenzijo. Recenzenti prejmejo besedilo članka brez avtorjevih osebnih podatkov, članek pregledajo glede na postavljene kazalnike in predlagajo izboljšave. Avtor je dolžan izboljšave pregledati in jih v največji meri upoštevati ter članek dopolniti v roku, ki ga določi uredništvo. Uredništvo predlaga avtorju, da popravke/spremembe v članku označi z rumeno barvo. V kolikor avtor članka ne vrne v roku, se članek zavrne. V kolikor avtor katere od predlaganih izboljšav ne upošteva, mora to pisno pojasniti. Po zaključenem recenzijem postopku uredništvo članek vrne avtorju, da popravke odobri, jih upošteva in pripravi čistopis. Čistopis uredništvo pošlje v jezikovni pregled.

Avtor prejme prvi natis v korekturo s prošnjo, da na njem označi vse morebitne tiskovne napake, ki jih označi v PDF-ju prvega natisa. Spreminjanje besedila v tej fazi ni sprejemljivo. Korekture je treba vrniti v treh delovnih dneh, v nasprotnem uredništvo meni, da se avtor s prvim natisom strinja.

NAVODILA ZA DELO RECENZENTOV

Recenzentovo delo je odgovorno in zahtevno. S svojimi predlogi in ocenami recenzenti prispevajo k večji kakovosti člankov, objavljenih v Obzorniku zdravstvene nege. Od recenzenta, ki ga uredništvo neodvisno izbere, se pričakuje, da bo odgovoril na vprašanja, ki so postavljena v obrazcu OJS, in ugotovil, ali so trditve in mnenja, zapisani v članku, verodostojni in ali je avtor upošteval navodila za objavlanje. Recenzent mora poleg znanstvenosti, strokovnosti in primernosti vsebine za objavo v Obzorniku zdravstvene nege članek oceniti metodološko ter uredništvo opozoriti na pomanjkljivosti. Ni treba, da se recenzent ukvarja z lektoriranjem, vendar lahko opozori tudi na jezikovne pomanjkljivosti. Pozoren naj bo na pravilno rabo strokovne terminologije. Posebej mora biti recenzent pozoren, ali je naslov članka jasen, ali ustreza vsebini; ali izvleček povzema bistvo članka; ali avtor citira (naj)novjšo literaturo in ali citira znanstvene raziskave avtorjev, ki so pisali o isti temi v domačih revijah; ali se avtor izogiba avtorjem, ki zagovarjajo drugačna mnenja, kot so njegova; ali navaja tuje misli brez citiranja; ali je citiranje literature ustrezno, ali se v besedilu navedena literatura ujema s seznamom literature na koncu članka. Dostopno literaturo je treba preveriti. Oceniti je treba ustreznost slik ter tabel, preveriti, če se v njih ne ponavlja tisto, kar je v besedilu že navedeno. Recenzentova dolžnost je opozoriti na morebitne nerazvezane kratice. Recenzent mora biti še posebej pozoren na morebitno plagiatstvo in krajo intelektualne lastnine.

S sprejetjem recenzije se recenzent zaveže, da jo bo oddal v predpisanem roku. Če to ni mogoče, mora takoj obvestiti uredništvo. Recenzent se obveže, da vsebine članka ne bo nedovoljeno razmnoževal ali drugače zlorabil. Recenzije so anonimne: recenzent je avtorju neznan in obratno. Recenzent bo v pregled prek sistema OJS prejel le vsebino članka brez imena avtorja. V sistemu OJS recenzent poda svoje strokovno

mnenje v recenzijskem obrazcu. Če ima recenzent večje pripombe, jih kot utemeljitev za sprejem ali morebitno zavrnitev članka na kratko opiše oz. avtorju predlaga nadaljnje delo, pri čemer upošteva njegovo integriteto. Zaradi večje preglednosti in lažjih dopolnitev s strani avtorja lahko recenzent svoje pripombe in morebitne predloge vnese v besedilo članka, pri tem uporabi možnost, ki jo ponuja Microsoft Word – sledi spremembam (Track changes). Recenzent mora biti pozoren, da pred uporabo omenjene možnosti prikrije svojo identiteto (slediti spremembam, spremeni ime/Track changes, change user name). Recenzentsko verzijo besedila članka z vključenimi anonimiziranimi predlogi nato recenzent naloži v sistem OJS in omogoči avtorju, da predloge dopolnitev vidi. Končno odločitev o objavi članka sprejme uredniški odbor.

Literatura

APA Style. (2021). Retrieved May 2nd, 2021, from <https://apastyle.apa.org/>

APA Style 6th Edition Blog: APA Style Experts. (2009). Retrieved May 2nd, 2021, from <https://blog.apastyle.org/apastyle/2011/11/the-proper-use-of-et-al-in-apa-style.html>

Kodeks etike v zdravstveni negi in oskrbi Slovenije in Kodeks etike za babice Slovenije. (2014). Ljubljana: Zbornica zdravstvene in babiške nege Slovenije – Zveza strokovnih društev medicinskih sester, babic in zdravstvenih tehnikov Slovenije.

World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *Journal of the American Medical Association*, 310(20), 2191–2194.

<https://doi.org/10.1001/jama.2013.281053>
PMid:24141714

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GUIDE FOR AUTHORS

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If the article reports on research involving human subjects, it should be evident from the methodology section that the study was conducted in accordance with the Declaration of Helsinki and Tokyo. All human subject research including patients or vulnerable groups, health professionals and students requires review and approval by the ethical committee on the institutional or national level prior to subject recruitment and data collection.

The title of the article, abstract and key words, tables (descriptive title and legend) and figures (descriptive title, notes and legend) must be submitted in Slovene as well as in English. The same applies to articles written in English, in which these elements must be presented first in the English language, followed by their translation into Slovene. A manuscript can include a total of five tables and/or figures. Tables and figures should be placed next to the relevant text. The results presented in the tables and figures should use symbols as required by the Author Guidelines, available on the journal website. The authors should refer to each table/figure in the text. The use of footnotes or endnotes is not allowed.

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A **structured abstract** is an abstract which has individually outlined and labelled sections for quick reference. It is structured under the following headings:

Introduction: This section indicated the main question to be answered, and states the exact objective of the paper and the major variables of the study.

Methods: This section provides an overview of the research or experimental design, the research instrument, the reliability of the instrument, the place, methods and time of data collection, and methods of data analysis.

Results: This section briefly summarises and discusses the major findings. The information presented in this

section should be directly connected to the research question and purpose of the study. Quantitative studies should include the statement of statistical validity and statistical significance of the results.

Discussion and conclusion: This section states the conclusions and discusses the research findings drawn from the results obtained. Presented in this section are also limitations of the study and the implications of the results for practice and relevant further research. Both positive and negative research findings should be adequately presented.

Structure of an Original Scientific Article (1.01)

An original scientific article is the first-time publication of original research results in a way which allows the research to be repeated and the findings checked. The research should be based on primary sources no older than five years at the time of the publication of the article.

Introduction: In the introductory part, the research problem is defined in the context of theoretical knowledge and scientific evidence. The review of scholarly literature on the topic provides the rationale behind the study and identifies the gap in the literature related to the problem. It justifies the purpose and aims of the study, research questions or hypotheses, as well as the method of investigation (research design, sample size and characteristics of the proposed sample, data collection and data analysis procedures). The research should be based on primary sources of recent national and international research no older than ten or five years respectively if the topic has been widely researched. Citation of sources and references to previous research findings should be included while the authors' personal views should not. Finally, the aims and objectives of the study should be specified. We recommend formulating research questions (qualitative research) or hypotheses (quantitative research).

Method: This section states the chosen paradigm (qualitative, quantitative) and outlines the research design. It typically includes sections on the research instrument; sample size and characteristics of the proposed sample; description of the research procedure; and data collection and data analysis procedures.

The *description of the research instrument* includes information about the structure of the instrument, the mode of instrument development, instrument variables and measurement properties (validity, reliability, objectivity, sensitivity). Appropriate citations of the literature used in research development should be included. In qualitative research, the data collection method should be stated along with the preliminary research questions, a possible format or structure of data collection and processing, the criteria of validity and reliability of data collection.

The *description of the sample* defines the population from which the sample was selected, the type of the sample, the response rate of the participants, the respondents' demographics (gender, level of educational attainment, length of work experience, post currently held, etc.). In qualitative research, the categories of the sampling procedure and inclusion criteria are also defined and the sample size and saturation is explained.

The *description of the research procedure and data analysis* includes ethical approvals to conduct the research, permission to conduct the research within the confines of an institution, description of the research procedure, guarantee of anonymity and voluntary participation of the research participants, the period and place of data collection, method of data collection and analysis, including statistical methods, statistical analysis software and programme version, limits of statistical significance. Qualitative research should include a detailed description of the methods of data collection and recording, number and duration of observations, interviews and surveys, sequences, transcription of data, steps in data analysis and interpretation, and receptiveness of the researcher.

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Discussion: The discussion section analyses the data descriptively (numerical data should be avoided) in relation to specific variables from the study. Results are analysed and evaluated in relation to the original research questions or hypotheses. The discussion part integrates and explains the results obtained and relates them to those of previous studies in order to determine their significance and applicative value. Ethical interpretation and communication of research results is essential to ensure the validity, comparability and accessibility of new knowledge. The validity of generalisations from results is often questioned due to the limitations of qualitative research (sample representativeness, research instrument, research proceedings). The principles of reliability and comparability should be observed. The discussion includes comments on the expected and unexpected

findings and the areas requiring further or in-depth research as indicated by the results of the study. The limitations of the research should be clearly stated.

Conclusion: Summarised in this section are the author's principal points and transfer of new findings into practice. The section may conclude with specific suggestions for further research building on the topic, conclusions and contributions of the study, taking into account its limitations. Citations of quotes, paraphrases or abbreviations should not be included in the conclusion. The article concludes with a list of all the published works cited or referred to in the text of the paper.

Structure of a Review Article (1.02)

Included in the category of review scientific research are: literature review, concept analyses, discussion-based articles (also referred to as a review article). The Slovenian Nursing Review publishes review scientific research, the data collection of which has been concluded a maximum of three years before article publication.

A review article represents an overview of the latest publications in a specific subject area, the studies of an individual researcher or group of researchers with the purpose of summarising, analysing, evaluating or synthesising previously published information. Research findings are not only described but explained, interpreted, analysed, critically evaluated and presented in a scholarly manner. A review article presents either qualitative data processing of previous research findings (meta-analyses) or qualitative syntheses of previous research findings (meta-syntheses) and thus provides new knowledge and concepts for further research. The organisational pattern of a review article is similar to that of the original scientific article.

The **introduction** section defines the scientific, conceptual or theoretical basis for the literature review. It also states the necessity for the review along with the aims, objectives and research question(s).

The **method** section accurately defines the research methods by which the literature search was conducted. It is further subdivided into: review methods, results of the review, quality assessment of the review and description of data processing.

Review methods include the development, testing and search strategy, predetermined criteria for the inclusion in the review, the searched databases, limited time period of published literature, types of publications according to hierarchy of evidence, key words and the language of reviewed publications.

The *results of the review* include the number of hits, the number of reviewed research studies, the number of included and excluded sources consulted. The **results** are presented in the form of a diagram of all the research stages of the review. International

standards for the presentation of the literature review results may be used for this purpose (e.g. PRISMA - Preferred Reporting Items for Systematic Review and Meta-Analysis).

Quality assessment of the review and description of data processing includes the assessment of the research approach and data obtained as well as the quality of included research studies according to the hierarchy of evidence, and the data processing method.

The results should be presented in the form of a table and should include a quality analysis of the sources consulted. The table should include the author(s) of each study, the year of publication, the country where the research was conducted, the research purpose and design, the variables studied, the research instrument, sample size, the key findings, etc.

It should be evident which studies are included in the review according to the hierarchy of evidence. The results should be presented verbally and visually (tables and figures), the main findings concerning the research design should also be included. In qualitative synthesis, the codes and categories should be used as a result of the qualitative synthesis review. In quantitative analysis, the statistical methods of data processing of the used scientific works should be described.

The first section of the **discussion** answers the research question which is followed by the author's observations on literature review findings and the quality of the research studies included. The author evaluates the review findings in relation to the results from other comparable studies. The discussion section identifies new perspectives and contributions of the literature review, and their theoretical, scientific and practical application. It also defines research limitations and indicates the potential applicability of the review findings and suggests further research.

The **conclusion** section emphasises the contribution of the literature review conducted, sheds light on any gaps in previous research, identifies the significance of further research, the translation of new knowledge and recommendations into practice, research, education, management by also taking into consideration its limitations. It also pinpoints the theoretical concepts which may guide or direct further research. Citation of quotes, paraphrases or abbreviations should not be included in the conclusion.

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Ricci Scott, S. (2020). *Essentials of maternity, newborn and women's health nursing* (5th ed.). Philadelphia: Lippincott Williams & Wilkins.

References for chapter/essay in a book edited by multiple editors:

Longman, L., & Heap, P. (2010). Sedation. In R. S. Ireland (Ed.), *Advanced dental nursing* (2nd ed., pp. 159–224). Hoboken: Blackwell Publishing.
<https://doi.org/10.1002/9781118786659.ch4>

Kanič, V. (2007). Možganski dogodki in srčno-žilne bolezni. In E. Tetičkovič & B. Žvan (Eds.), *Možganska kap: do kdaj* (pp. 33–42). Maribor: Kapital.

References for books edited by one or multiple authors:

Farkaš-Lainščak, J., & Sedlar, N. (Eds.). (2019). *Ocena potreb, znanja in veščin bolnikov s srčnim popuščanjem in obremenitev njihovih neformalnih oskrbovalcev: znanstvena monografija*. Murska Sobota: Splošna bolnišnica.

Journal article references:

Eost-Telling, C., Kingston, P., Taylor, L., & Emmerson, L. (2021). Ageing simulation in health and social care education: A mixed methods systematic review. *Journal of Advanced Nursing*, 77(1), 23–46.
<https://doi.org/10.1111/jan.14577>

Selfridge, M., Card, K. G., Lundgren, K., Barnett, T., Guarasci, K., Drost, A. ... Lachowsky, N. (2020). Exploring nurse-led HIV Pre-Exposure Prophylaxis in a community health care clinic. *Public Health Nursing*, 37(6), 871–879.
<https://doi.org/10.1111/phn.12813>

Oh, H.-K., & Cho, S.-H. (2020). Effects of nurses' shiftwork characteristics and aspects of private life on work-life conflict. *PLoS ONE*, 15(12), Article e0242379.
<https://doi.org/10.1371/journal.pone.0242379>

Marion, T., Reese, V., & Wagner, R. F. (2018). Dermatologic features in good film characters who turn evil: The transformation. *Dermatology Online Journal*, 24(9), Article 4. Retrieved December 4, 2019 from <https://escholarship.org/uc/item/1666h4z5>

Sundaram, V., Shah, P., Karvellas, C., Asrani, S., Wong, R., & Jalan, R. (2020). Share MELD-35 does not fully address the high waiting list mortality of patients with acute on chronic liver failure grade 3. *Journal of Hepatology*, 73(Suppl. 1), S8–S9. [https://doi.org/10.1016/S0168-8278\(20\)30578-X](https://doi.org/10.1016/S0168-8278(20)30578-X)

Livingstone-Banks, J., Ordóñez-Mena, J. M., & Hartmann-Boyce, J. (2019). Print-based self-help interventions for smoking cessation. *Cochrane Database of Systematic Reviews*. <https://doi.org/10.1002/14651858.CD001118.pub4>

Anonymous. (2010). Food safety shake-up needed in the USA. *The Lancet*, 375(9732), 2122. [https://doi.org/10.1016/S0140-6736\(10\)60979-8](https://doi.org/10.1016/S0140-6736(10)60979-8)

References for published conference proceedings:

Skela-Savič, B. (2008). Teorija, raziskovanje in praksa v zdravstveni negi: Vidik odgovornosti menedžmenta v zdravstvu in menedžmenta v visokem šolstvu. In B. Skela-Savič, B. M. Kaučič, J. Ramšak-Pajk et al. (Eds.), *Teorija, raziskovanje in praksa: trije stebri, na katerih temelji sodobna zdravstvena nega: zbornik predavanj z recenzijo. 1. mednarodna znanstvena konferenca, Bled 25. in 26. september 2008* (pp. 38–46). Jesenice: Visoka šola za zdravstveno nego.

References for diploma theses or master's theses and doctoral dissertations:

Ajlec, A. (2010). *Komunikacija in zadovoljstvo na delovnem mestu kot del kakovostne zdravstvene nege* (diplomsko delo). Univerza v Mariboru, Fakulteta za organizacijske vede, Maribor.

Rebec, D. (2011). *Samoocenjevanje študentov zdravstvene nege s pomočjo video posnetkov pri poučevanju negovalnih intervencij v specialni učilnici* (magistrsko delo). Univerza v Mariboru, Fakulteta za zdravstvene vede, Maribor.

Kolenc, L. (2010). *Vpliv sodobne tehnologije na profesionalizacijo poklica medicinske sestre* (doktorska disertacija). Univerza v Ljubljani, Fakulteta za družbene vede, Ljubljana.

References for laws, codes, regulations and organisations:

The Patient Protection and Affordable Care Act, Publ. L. No. 111-148, 124 Stat. 119 (2010). Retrieved from <https://www.govinfo.gov/content/pkg/PLAW-111publ148/pdf/PLAW-111publ148.pdf>

Zakon o organizaciji in financiranju vzgoje in izobraževanja / ZOFVII (1996). Uradni list RS, št. 12 (13. 12. 1996). Retrieved from http://zakonodaja.gov.si/rpsi/r05/predpis_ZAKO445.html

Zakon o pacientovih pravicah /ZPacP/ (2008). Uradni list RS, št. 15 (29. 1. 2008). Retrieved from <http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4281>

World Health Organization. (2017). *Guideline: Protecting, promoting and supporting breastfeeding in facilities providing maternity and newborn services*. Guideline Central. Retrieved from <https://www.guidelinecentral.com/share/summary/5acc36cc939f5#section-society>

American Nurses Association. (2015). *Code of ethics for nurses with interpretive statements*. Retrieved from <https://www.nursingworld.org/practice-policy/nursing-excellence/ethics/code-of-ethics-for-nurses/coe-view-only/>

Kodeks etike v zdravstveni negi in oskrbi Slovenije in Kodeks etike za babice Slovenije. (2014). Ljubljana: Zbornica zdravstvene in babiške nege Slovenije – Zveza strokovnih društev medicinskih sester, babic in zdravstvenih tehnikov Slovenije.

References for electronic resources:

American Society for the Prevention of Cruelty to Animals. (2019, November 21). *Justice served: Case closed for over 40 dogfighting victims*. Retrieved April 23, 2020 from <https://www.aspc.org/news/justice-served-case-closed-over-40-dogfighting-victims>

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References

APA Style. (2021). Retrieved May 2nd, 2021, from <https://apastyle.apa.org/>

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World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *Journal of the American Medical Association*, 310(20), 2191–2194. Retrieved from <http://www.wma.net/en/20activities/10ethics/10helsinki/DoH-Oct2013-JAMA.pdf>
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