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Editoriál: O ľudskej dôstojnosti

Vážené čitateľky / čitatelia,

v posledných troch rokoch som mal, spolu s mojou kolegyňou a kolegami, možnosť zaoberať sa problematikou ľudskej dôstojnosti pod záštitou projektu KEGA 006UK-4/2014. Musím povedať, že to bola obohacujúca skúsenosť. Dovoľte mi, aby som sa s Vami podelil o niekoľko úvah na túto tému.

Rešpektovanie ľudskej dôstojnosti je fundamentálnym východiskom starostlivosti o pacienta. Túto frázu, alebo jej rôzne podoby, môžeme nájsť v mnohých dokumentoch, zákonoch, nariadeniach, kódexoch, ktoré sa týkajú zdravotnej starostlivosti. Avšak vysvetlenie významu toho, čo sa pod ľudskou dôstojnosťou rozumie je v nich zriedkavé. Ako však potom môžeme implementovať dôstojnosť do praxe, keď vlastne nerozumieme, čo to je? Na druhej strane však intuitívne cítime, že ľudská dôstojnosť je potrebný termín, ktorý napríklad zastrešuje ciele paliatívnej starostlivosti. Čo teda znamená? Úprimne povedané, na to je naozaj ťažké odpovedať.

Niektorí kritici ľudskej dôstojnosti sú skeptickí k jej použitiu v zdravotníctve. Odkazujú nám, že je to klišé – prázdna fráza, ktorá nič neznamená alebo je to vnútorne sám sebe si protirečiaci termín (na jednej strane ju má každá ľudská bytosť bez rozdielu a je neodňateľná; na druhej strane sa človek môže dostať do situácie, kedy ho zákerné ochorenie o ňu pripraví). Túto kritiku musíme brať vážne. Ak chceme rehabilitovať ľudskú dôstojnosť v zdravotnej starostlivosti, tak sa musíme seriózne zaoberať nejasnosťami, ktoré používanie tohto termínu prináša a pokúsiť sa ich vysvetliť.

Zastávam presvedčenie, že dôstojnosť je mnohvrstvový fenomén, ktorý sa nedá vysvetliť ako jednoduchá vlastnosť človeka. Nie je to vlastne ani logická kategória v bežnom slova zmysle, ale skôr *existenciál*, alebo presnejšie existenciálna hodnota. To znamená, že je bytostne (vnútorne/intrinsicky) spätá s podstatou ľudskej existencie a tá sa nedá opísať iba faktograficky v kategóriách, pretože každá ľudská bytosť je jedinečná, neopakovateľná a dočasná. Práve na tieto, navzájom zviazané, charakteristiky môžeme nazerať ako na konštitutívne prvky hodnoty človeka (dôstojnosti). Ak je niečo jedinečné, tak aj napriek faktickej podobnosti to nemôže byť bytostne medzi sebou porovnateľné. To paradoxne poukazuje na to, že v dôstojnosti sme si všetci rovní práve preto, že sme každý iný. Jedinečnosť človeka ešte podtrhuje neopakovateľnosť, pretože ani v minulosti, ani teraz a ani v budúcnosti nebude nikto taký istý ako je konkrétny človek. Každý človek je tak jedinečným príbehom. Dočasnosť hovorí o tom, že jedinečný a neopakovateľný človek tu nebude navždy, čo ešte zvyšuje jeho existenciálnu hodnotu. To je dôvod, prečo sme v existenciálnom zmysle nenahraditeľní alebo lepšie povedané nezastupiteľní, aj keď fakticky, „ako sa vraví“, je nahraditeľný každý človek. To znamená, že takúto intrinsickú dôstojnosť naozaj nemôžeme stratiť – je nám imanentná z dôvodu konštitúcie ľudského bytia. Toto zakotvenie však môže zostať skryté a človek nemusí nájsť tento dôvod hodnoty ľudského života ako jeho potvrdenie alebo ako zdroj pre svoju osobnú dôstojnosť v sociálno-psychologickom význame. Práve osobná dôstojnosť, ako forma extrinsickej (vonkajšej) dôstojnosti, je tá, ktorá je situačne podmienená.

Existujú teda dva druhy dôstojnosti intrinsická a extrinsická. Intrinsická dôstojnosť je inherentná a neodcudziteľná hodnota, ktorá patrí každej ľudskej bytosti. Tento druh dôstojnosti nemôže byť zničený alebo meraný, nie je podmienený, kontextuálny, či porovnateľný medzi ľuďmi navzájom, tak ako bolo opísané vyššie. Extrinsická dôstojnosť ustanovuje univerzálnu hodnotu v správaní, vnímaní a očakávaní človeka. Na rozdiel od intrinsickej je závislá, kontextuálna, podmienená, je možné ju porovnávať a merať. Je prežívaná, udeľovaná alebo získaná prostredníctvom interakcií v sociálnom prostredí. Je realizovaná vo vzťahoch, či už k sebe samému ako osobná dôstojnosť. Vtedy je založená na sebaúcte, seba-hodnote, integrite a identite konkrétneho človeka. Prípadne je realizovaná v interakcii s druhými ľuďmi a prejavuje sa v spôsoboch akými sú napríklad úcta, rešpekt a pocta.

Práve extrinsická dôstojnosť je silne závislá na osobnej skúsenosti a na interakcii s druhými ľuďmi v rámci zdravotnej starostlivosti. Tento druh dôstojnosti môže byť zachovaný alebo naopak narušený, zničený, ale aj obnovený. Z toho pre zdravotníkov vyplývajú tri základné úlohy: nespôsobiť pacientovi nedôstojnosti svojím vlastným správaním, minimalizovať situačné nedôstojnosti (napríklad spôsobené obťažujúcimi symptómami ochorenia) a pomôcť znovunadobudnúť dôstojnosť pacientovi v prípade, že ju stratil a svoju situáciu prežíva ako nedôstojnú.

V kontexte dôstojnosti je stretnutie s druhým človekom osobitá, autentická udalosť, kedy sú v interakcii dve unikátne existencie. Byť s druhým človekom znamená byť s jedinečným, neopakovateľným a anticipačne konečným súcnom – s existenciou, práve takou istou a zároveň odlišnou akou sme my sami. Z tohto stretnutia by mala vyrastať aj úcta a rešpekt k inakosti druhého človeka, ako prejav ľudskej dôstojnosti.

Mgr. Juraj Čáp, PhD.

Univerzita Komenského v Bratislave, Jesseniova lekárska fakulta v Martine, Ústav ošetrovateľstva

Editorial: On human dignity

Dear readers,

in the last three years me and my colleagues have had the opportunity of addressing the issue of human dignity under the project KEGA 006UK-4/2014. I have to say, it has been a rewarding experience. Allow me to share some reflections on this topic with you.

Respect for human dignity is a fundamental feature of patient care. This phrase or its various forms, which we can often find in many documents, legal norms, regulations and codes related to the health care, but the explanation of what human dignity means in these documents is very rare. However, how we can implement dignity into practice, when we really do not understand what it is? But, on the other hand, we feel intuitively that the human dignity is a needed term which for example covers the goals of palliative care. So, what does it mean? Honestly, it is really difficult to answer.

Some critics are sceptical of using the term human dignity in the health care. They say it is a cliché – an empty phrase that means nothing or it is internally self-contradictory term (on the one side every human being has dignity without distinction and it is inalienable; on the other side, a person can get into a situation where insidious disease deprives her of it). This criticism must be taken seriously. If we want to rehabilitate human dignity in health care, we have to correctly deal with the ambiguities that the usage of this term brings and try to explain it.

I am of the belief that the dignity is a multilayer phenomenon that cannot be explained as a simple attribute of being human. It is not really a logical category in the traditional sense, but it is *existential*, rather an existential value. This means that it is intrinsically linked to the essence of the human existence, which cannot be described only by the factual categories because every human being is unique, unrepeatable and temporal. These characteristics connected together can be seen as constitutive elements of the human value (dignity). If there is something unique, despite the factual similarities, it cannot be inherently comparable with another entity. Paradoxically, it points out that in the case of dignity, we are all equal, precisely because we are all different. This uniqueness of human beings highlights their unrepeatability because neither in the past, nor now, nor in the future will any two people be exactly the same. Each person is a unique story.

So, there are two kinds of dignity intrinsic and extrinsic. Intrinsic dignity is inherent and inalienable value that belongs to every human being. This kind of dignity cannot be destroyed or measured; it is not conditional, contextual, and comparable between humans, as was described above. Extrinsic dignity provides universal value into behaviour, perceptions and expectations of human beings. Compared to intrinsic dignity this type is contextual, contingent; it can be compared and measured. This type of dignity is realized in relationship to me (personal dignity). In this case it is based on self-esteem, self-worth, integrity and identity of a particular person. Extrinsic dignity is also realized in relationship to others. In this case it is manifested in esteem, respect and honour.

Extrinsic dignity is heavily dependent on personal experience and interaction with others, especially in health care. This kind of dignity can be maintained or vice versa disturbed, destroyed, but also restored. It gives rise to the care-givers three basic tasks: do not cause indignities to the patient by your own behaviour; minimize situations of indignity (for example due to annoying symptoms of the disease) and help regain the dignity of the patient if they lost their feeling of worth.

In the context of the dignity, the human encounter is a distinctive, authentic event of interaction between two unique existences. Being with another person means to be with a unique, unrepeatable and temporal being – the existence, just as much a different and at the same time similar to ourselves. Esteem and respect for the otherness of existences should grow from this meeting as an expression of human dignity.

Juraj Čáp, PhD.

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The role of nurses in medication management in the Czech Republic: A narrative literature review

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Abstract

HECZKOVÁ, J. – BULAVA, A. The role of nurses in medication management in the Czech Republic: narrative literature review. In *Ošetrovateľstvo: teória, výskum, vzdelávanie* [online], 2016, vol. 6, no. 2, pp. 38-43. Available on: <http://www.ošetrovateľstvo.eu/en/archive/2016-volume-6/number-2/the-role-of-nurses-in-medication-management-in-the-czech-republic-a-narrative-literature-review>.

Background: Medication management is considered to be highly important area of health care. It is ensured by different health care professionals, unfortunately their competences are not always clear.

Aim: The aim of this study is to describe role and formal competences of nurses in medication management in the Czech Republic.

Methods: Literature for this review was identified using electronic searches of databases Medline, ProQuest Central, EBSCOhost, ScienceDirect and Web of Science, hand searches of legal norms and hand searches of professional Czech and Slovak journals.

Results: Medication management is highly regulated area covered by many legal norms having different levels of authority. Although many of the activities related to medication management are described in details, certain activities remain poorly defined, everyday practice can differ, and certain health care professionals are exceeding their competencies related to medication management.

Conclusion: To ensure adequate quality of care, formal competencies related to medication management should be effectively matched with responsibilities and duties in real practice.

Keywords: medication administration, medication competence, nurses role

Introduction

Nurses, in general, spend a large part of their working hours on activities related to medication management. They themselves consider this area to be a highly important issue (Smeulers et al., 2014) although nurses (Morrison-Griffiths et al., 2002) as well as nursing students (Honey et al., 2008) do not consider their education to be always fully relevant to the current practice.

The topic of medicines management seems to be also closely connected to the quality of health care services as medication errors are described in the literature as the most common source of adverse events in health care (Ďurišová et al., 2005; Michaels et al., 2010; Berdot et al., 2013). Although it is emphasized the whole system approach is required to reduced them (Wright, 2013), several studies focus on teaching and learning methods and there is agreement that medication management should be strengthened during the nursing education (Manias et al., 2002; Štrbová et al., 2014) as well as through continuous professional development (Ndosi et al., 2009; Simonsen et al., 2014).

The extent of activities related to medication management can vary across different types of units (Sulosaari, 2010; Wright, 2013). In the Czech Republic medication administration is ensured by different healthcare professionals that need to cooperate. In an attempt to ensure as high level of provided care as possible, the performance of many specific activities is regulated on the national level as typical for any regulated profession (ICN, 2003, p. 9-16) but some studies indicate real practice can vary (Bártlová, 2007; Mikšová et al., 2014).

Aim

The aim of this study is to describe role and formal competences of nurses in medication management in the Czech Republic.

Methods

Literature for this review was identified using electronic searches (in November 2015) of databases Medline, ProQuest Central, EBSCOhost, ScienceDirect and Web of Science limited to articles published in Czech, Slovak and English language. Combinations of the following key word phrases were used: *nursing* OR *nurse* AND *pharmacology competence* OR *medication competence*. A total of 372 sources published between 1979 and 2015 were reviewed using abstracts. Only full text articles related to graduate nurse competencies in medication management in nonspecific nursing context were included (5 articles). Hand searches of legal norms, articles from reference collections, government and professional healthcare society's websites; and hand search of professional Czech and Slovak nursing journals was also performed between November 2015 and February 2016. As a result 10 full text articles and 10 legal norms were included in review.

Results

Medication management is considered by many authors (Sulosaari, 2010; Wright, 2013) to be a very complex issue within the provision of health care. It is defined as multistep process (Vogenberg, 2011) that include phases of prescribing, transcribing, dispensing, administering and monitoring (Sulosaari, 2010). The whole process is ensured by many different types of health care professionals (Vogenberg, 2011) with sometime different and sometime overlapping role (Mikšová et al. 2014).

In the Czech Republic the main legal norm regulating medicine management is *Act no. 378/2007 Coll. on pharmaceuticals, as amended by later legal regulations*. A medicine is defined there as "a substance or combination of substances presented as having therapeutic or preventative properties" or which can be used "for the purpose of restoration, adjustment or influencing physiologic functions through its pharmacological, immunological or metabolic effect, or for the purpose of making a medical diagnosis". The origin of this substance can be human, animal, plant-based, or chemical.

The Act further specifies the basic conditions for the use of medicinal products within health care, including the conditions for qualification recognition of workers handling these products. The conditions for handling medical products, which are concurrently controlled drugs, are further specified in Act no. 167/1998 Coll. on addictive substances. Preconditions for handling medicinal products and controlled drugs include: age older than 18 years, legal capacity, moral integrity, good health status and professional competence according to Act no. 95/2004 Coll. and Act no. 96/2004 Coll. Addition to conditions named above the medical products that are not controlled drugs can be also handled by persons younger 18 years during their education or orientation period when working under supervision.

Medication process starts with identifying a patient's need for medication and prescription (Sulosaari, 2010). According to the Czech law medicines are prescribed only by physicians. The prescribing procedure and the information necessary on a medical prescription are specified by *Decree no. 54/2008 Coll. on prescriptions of medical products*, as well as information necessary in a medical prescription and the rules for using a medical prescription. The procedure for prescribing medical products during a hospital stay is partly detailed in Decree no. 84/2008 Coll., which covers correct practice in pharmacies, specific conditions for handling medication in pharmacies, health care facilities and other providers, and facilities offering medicinal products. Moreover, each health care facility usually has its own internal guidelines on this matter.

Competencies to perform specific activities related to the administration of already prescribed medication are related mainly to non-medical healthcare workers. Their formal competencies are detailed mainly in *Act no. 96/2004 Coll. on non-medical health care professions* and *Decree no. 55/2011 Coll. on activities of health care workers*. These legal norms define competencies of nurses (tab. 1.) and other non-medical health care workers (tab. 2.).

Tab. 1. Formal competencies of a nurse in medicines administration

Competencies in medicines administration	General nurse *	Intensive care nurse **	Perioperative care nurse **	Pediatric nurse **	ICU pediatric nurse **	Community nurse **	Internal medicine nurse **	Surgical nurse **	Psychiatric nurse **	Clinical perfusiology nurse **
IV infusion or IV injection administration in adults and children above 3 year of age	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
IV infusion or IV injection administration in children under 3 year of age				✓	✓					
IM and SC injection administration	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Enteral administration	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Administration by inhalation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Tab. 1. – continued

Competencies in medicines administration	General nurse *	Intensive care nurse **	Perioperative care nurse **	Pediatric nurse **	ICU pediatric nurse **	Community nurse **	Internal medicine nurse **	Surgical nurse **	Psychiatric nurse **	Clinical perfusiology nurse **
Epidural administration	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Topical and transdermal administration	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Receiving, checking, storing and supplying controlled drugs	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Receiving, checking, storing and supplying medication	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Legend: * – professional qualification; ** – specialized qualification

Compiled according to Act no. 96/2004 Coll. on non-medical health care professions and Decree no. 55/2011 Coll. on activities of health care workers and Government regulation no. 31/2010 Coll. on the fields of specialist education.

Except nurses there are also other non-medical health care professions involved in medication management although the issue of medication administration by non-medical health care professionals is relevant mainly to general care nurses, midwives, and health care paramedics. These professions gain their professional qualification through a study program lasting at least three years (Decree no. 39/2005 Coll.). Further, they can gain a specialist qualification during subsequent specialist education.

Tab. 2. Formal competencies of other “non-medical” health care professionals and workers in medicines administration

Competencies in medicines administration	Midwife*	Intensive care midwife**	Perioperative care midwife**	Community care midwife**	Health care rescuer*	Health care rescuer – dispatcher**	Health care rescuer in urgent medicine**	Health care assistant*	Care giver*	Auxiliary staff*
IV infusion or IV injection administration in adults and children above 3 year of age	✓	✓	✓	✓	✓	✓	✓			
IV infusion or IV injection administration in children under 3 year of age					✓	✓	✓			
IM injection administration in adults and children above 3 year of age	✓	✓	✓	✓	✓	✓	✓	✓***		
IM injection administration in adults and children above 3 year of age	✓	✓	✓	✓	✓	✓	✓			
SC injection administration	✓	✓	✓	✓	✓	✓	✓	✓***		
Enteral administration	✓	✓	✓	✓	✓	✓	✓	✓***		
Administration by inhalation	✓	✓	✓	✓	✓	✓	✓	✓***		
Epidural administration	✓	✓	✓	✓	✓	✓	✓			
Topical and transdermal administration	✓	✓	✓	✓	✓	✓	✓	✓***		
Receiving, checking, storing and supplying controlled drugs	✓	✓	✓	✓	✓	✓	✓	✓***		
Receiving, checking, storing and supplying medication	✓	✓	✓	✓	✓	✓	✓	✓***	✓	✓

Legend: * – professional qualification; ** – specialized qualification; *** – under professional supervision of nurse, midwife or medical doctor

Compiled according to Act no. 96/2004 Coll. on non-medical health care professions and Decree no. 55/2011 Coll. on activities of health care workers and Government regulation no. 31/2010 Coll. on the fields of specialist education.

Even though many of the competencies required of Czech health care professionals and workers are defined by legislation in details, everyday practice in health care facilities can differ dramatically from the letter of these laws. Several studies have reported that Czech nurses and other “non-medical” health care professionals, in certain situations, significantly exceed their competencies. On the other hand, nurses also participate in less demanding activities, which could be delegated to less qualified staff, thus reducing the need for less qualified staff to perform activities best handled by nurses, including the administration of medication (Bártlová, 2007; Mikšová et al., 2014). The situation seems to be rather confusing and is complicated by the fact that nurses are not sure which competencies belong to nursing, which should be performed by other professions, and which competencies can be shared (Bártlová, 2007).

The process of medicine management is viewed as a multifaceted task (Tang et al., 2007; Sung et al., 2008) and highly complex (Wright, 2013) that forms important part of nursing work. Some authors indicate that nurses spend up to 40% of their working hours on activities related to administration of medications (Armitage et al., 2003). However there is undergoing debate in the Czech Republic as to what areas are actually included in the medicine management process. The literature lists at least 11 areas closely related to medication administration, where nurse knowledge is considered to be essential for error-free administration of medication. According to Sulosaari (2010, p. 464-476) nurse medication competence has theoretical, practical and decision-making part and includes following areas: knowledge of anatomy and physiology, knowledge of pharmacology, communication skills, the ability to cooperate interdisciplinary, the ability to use different information sources, mathematical skills, knowledge of the particular procedure for medication administration, the ability to educate patients effectively, the ability to assess and evaluate a patient’s condition correctly, efficient documentation, the ability to promote medication safety.

Unfortunately there is another controversy. Some of the above mentioned areas are traditionally understood in the Czech Republic in a wider context (not only in relation to administering medication); and formal competency for their performance is defined separately in existing law (tab. 3.).

Tab. 3. Other competencies of health care workers related to „medication competence”

Competencies	General nurse	Midwife	Health care rescuer	Health care assistant	Care giver
The ability to educate patients effectively					
Education of patients and others	✓	✓			
Provision of information to patients	✓	✓	✓		
The ability to assess and evaluate a patient’s condition correctly					
Monitoring and basic evaluation of vital functions	✓	✓	✓	✓ **	To measure body temperature *
Testing of biological material obtained non-invasively and capillary blood	✓	✓	✓	✓ *	
Collection of biological material for testing	✓	✓	✓	✓	
Basic evaluation of tests results	✓	✓	✓		
Efficient documentation					
Keeping healthcare records	✓	✓	✓		
The ability to promote medication safety					
Evaluation of risk factors	✓	✓			

Legend: * – under professional supervision; ** – under professional supervision as indicated by a general care nurse or midwife

Compiled according to Act no. 96/2004 Coll. on non-medical health care professions and Decree no. 55/2011 Coll. on activities of health care workers.

This has been creating a rather confusing situation as some formal competencies to perform certain activities contradict each other. It means some health care workers have the competence to administer certain medications but they do not have competence to perform all activities related to this process. An example can be that of a health care assistant, who has the competence to administer medication orally, by IM or SC injection, but they only have the competence to measure vital functions (which is necessary prior or after administering certain medications) based on the decision of a general nurse or midwife and while under their professional supervision. Similarly, a health care assistant does not have the competence to educate a patient about the administered medication, but patient education and active participation in process of medication management is considered to be one of the ways to prevent medication errors (Brabcová et al., 2014; McLeod et al., 2015). Patient education is also aligned with European Parliament Directives 2005/36/ES, as amended by 2013/55/EU. In addition, a health care assistant has the competence to work with health care records but not to be in charge of record keeping related to nursing care, etc.

It seems that although medication administration is currently ensured by different non-medical healthcare professionals, formal competencies to perform activities related to medication management in full extent have nurses and midwives.

Conclusion

The reality of medication management in the Czech Republic has not been fully described yet, however it seems that in some situations, certain health care professionals, and workers are exceeding their competencies; although, its impact on the quality of provided care is not clear.

The topic is very complex and a rather specific area of health care provision. Different types of health care professionals need to cooperate despite different and sometimes overlapping roles. Although this area is highly regulated and covered by many legal norms having different levels of authority, some activities remain poorly defined. It appears they would benefit from a more detailed attention of legislators and as well as professional nursing organizations.

Nurses, in general, spend a large part of their working hours on activities related to medication management although the extent of these activities can vary across different types of units. Additionally, medication management is also affected by work organization within the unit as in some instances nurses are performing activities that should be handled by less qualified staff, which has led to a shift of duties, best performed by nurses, to less qualified staff. To ensure adequate standard of care, formal competencies related to medication management should be effectively matched with responsibilities and duties.

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Perceived effectiveness and attitudes of health professionals towards the Czech Incident Reporting System

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Abstract

POKORNÁ, A. – MUŽÍK, J. – ŠVANCARA, J. – GREGOR, J. Perceived effectiveness and attitudes of health professionals towards the Czech Incident Reporting System. In Ošetrovateľstvo: teória, výskum, vzdelávanie [online], 2016, vol. 6, no. 2, pp. 44-51. Available on: <http://www.oseetrovatelstvo.eu/en/archive/2016-volume-6/number-2/perceived-effectiveness-and-attitudes-of-health-professionals-towards-the-czech-incident-reporting-system>.

Aim: The major objective of this survey was to examine the perceived effectiveness of the incident reporting system in acute hospital settings in the Czech Republic. The second objective was to determine needs for change in the electronic system from the users (on managerial positions) perspective after five years of the initial system implementation.

Method: Cross-sectional descriptive survey was used and the questionnaire survey was undertaken. Statistical analysis was conducted using the IBM SPSS Statistics 22 (statistical significance $\alpha = 0.05$) by nonparametrical tests (Mann-Whitney U test for two groups and Kruskal-Wallis H test for more than two groups). Reliability of Likert scales was tested by Cronbach's alpha coefficient.

Results: In total, 64 respondents (healthcare workers - mainly quality managers) with experience of reporting and analysing incidents – working in involved hospitals as contact persons during implementation of the reporting system on the national level were interviewed. We have not identified a statistical relationship between the overall assessment of system and age of the respondents ($p = 0.55$), nor by the work position ($p = 0.795$). As well as according to the nature of the hospital involvement to the system (voluntary or mandatory, $p = 0.268$) nor length of involvement in the reporting system ($p = 0.345$). The main barrier for using the system is lack of staff and high workload of workers.

Conclusion: The system is perceived as an important tool for developing and maintaining awareness of risks in clinical practice; however, there are issues to be solved and improved, particularly in methodology and technical support.

Keywords: quality of care, electronic incident reporting, adverse events, healthcare risk, evaluation

Introduction

Health care is provided in a quite high risk environment, because human behaviour is regarded as inherently error-prone and health care providers should decide, act and plan interventions in every moment of their professional life and not all of those activities could be used in the same way for every situation (even with using guidelines or pathways). The need to use one's own view brings risk of errors. In practice, the error management requires from organisations to learn from their safety threats, identify all underlying causes, and seek out opportunities for change (Anderson et al., 2013; Waring, 2005). The one of the best implementation of error management is the incident reporting system (Vincent, 2010). It is not the only one, but quite effective tool for improvement of patient safety and care quality. It is well accepted in safety critical industries, such as aviation, as a safety improving method, and is already/being well established in healthcare in many countries (Anderson et al. 2013; Vincent, 2010). The analysis of incidents (defined as adverse events and near misses) can provide information, on which to base policy and practical decisions likely reduce future occurrences (Vincent, 2004). Aggregated together, data on multiple incidents have the potential to help identify patterns, trends and categories of incidents for follow-up, creating opportunities for system improvements (Wood et al., 2005). The benefits of adverse event reporting systems are summarised also by the recent work, where special attention is paid to the five key challenges emerged to explain why incident reporting has not reached its potential: poor processing of incident reports (triaging, analysis, recommendations), inadequate engagement of doctors, insufficient subsequent visible action, inadequate funding and institutional support of incident reporting systems and inadequate usage of evolving health information technology (Mitchell et al., 2016). So, from the author's point of view the human resources and their behaviour and attitudes are important components for functioning and effectiveness of the incident reporting system. Another systematic review proved that still little is known about the effectiveness of the incident-reporting systems. There were found some evidence of single-loop learning and there was insubstantial evidence of enabling double-loop learning, that is, a cultural change or a change in mind-set (Stavropoulou et al., 2015). Thus authors of this survey believe that is important to know about the view of users on incident reporting systems.

At the local level, there are different systems of evaluation of adverse events in the Czech health care facilities. Risk management of patient safety and early warning monitoring is for majority of hospitals managed entirely by the government (Ministry of Health) of Czech Republic (as mentioned above and also below). The staged implementation of an electronic

occurrence/incidence reporting system (used interchangeably with “clinical/incident safety reporting system”) started in 2008 in the Czech Republic. The electronic clinical/incident safety reporting system (CSRS) was designed to replace a paper-based system and especially to facilitate and promote the comparison of adverse events occurrence at national level (in primary stage for hospitals directly managed by Ministry of Health). The CSRS involves reporting on occurrences such as falls, safety/security issues, medication errors, treatment and procedural mishaps, medical equipment malfunctions, and close calls. The electronic system was modelled from the UK and also other foreign systems. Definitions and taxonomies of what constitutes a reportable incident have been used (Chang et al., 2005). The main objective of the system was to improve the reporting process with the goal of improving clinical safety on national level. Incident reporting systems remain an important and relatively new and inexpensive means of capturing data on errors and adverse events in medicine (especially in electronic systems). We should note that here is a long tradition of examining past practice with the objective to learn from the past and to understand how things might have been done differently (Bosk, 2003). So, the system cannot be used only for retrospective analysis but also for prospective risk analyses for preventive strategies to enhance incident reporting behaviour (Kessels-Habraken et al., 2010). Over five years of existence, the system did not undergo significant changes in the content, but successively, there was involved a total of 85 hospitals throughout the Czech Republic, so the system currently covers approximately 40 % of beds fund (40 % of all beds in total in the Czech hospitals). Although the system is described as national – the participation is compulsory only for hospitals which are controlled directly by the Ministry of Health (e.g. Teaching hospitals and Psychiatric hospitals) since the beginning of the system and it is still voluntary for other hospitals. The Institute for Health Informatics and Statistics (IHIS) was commissioned for system administration in 2013. Restructuring of all health care registries (including incident reporting system) into a unified technology platform was launched in 2014, in pursuit of changes in terms of contents and its quality. The main objective of those system changes is to improve the reporting processes (by promoting objective and consistent provision of information) with the goal of improving clinical safety based on international recommendations (Cheng et al., 2011; Sun et al., 2011). Concerning the reporting system, it is important to measure attitudes towards the incident reporting (Braithwaite et al., 2008; Mitchell et al., 2016; Stavropoulou et al., 2015). Therefore, we were curious how health workers, involved in the reporting processes concerning adverse events, perceive the effectiveness of the system. We also wanted to know whether they feel the need to do some changes to improve quality of the reporting on the national level.

Aim

The aim of the study was to examine the perceived effectiveness of the incident reporting system in acute hospital settings by asking managerial staff about their perceptions, experiences and opinions. The second objective was to determine the need for changes in the electronic system from the users (mainly quality managers) perspective after five years of implementation and before the start of the new unified technological system. We hypothesized that health professional attitudes towards the system would vary according to profession, years of hospital’s involvement, type of the hospital they represent.

Sample

In total sixty-four healthcare workers in managerial positions (mainly quality managers) were involved. All of them with experience in reporting and analysing incidents – working as contact persons in implementing reporting system on national level (in hospitals involved in the electronic clinical/incident reporting system). A total of 64 questionnaires were returned (75.2 % response rate from all addressed hospitals). For the final analysis, 64 completed questionnaires were used (no questionnaire was excluded because of missing data).

Methods

Design

Quantitative research design (an anonymous questionnaire survey) – Cross-sectional descriptive survey.

Setting

Initially 85 hospitals providing acute health care were approached (which are currently involved in the reporting system).

Data collection

A paper-based survey was used for data collection. The data were collected during the informational seminar organized by IHIS in order to inform participants about future changes in the electronic reporting system. The questionnaire took approximately 15 minutes to complete (24 items). The questionnaire was developed based on work in previous related research (Braithwaite et al., 2008; Kingston et al., 2004; Michael et al., 2006; Westbrook et al., 2007) and advice of professionals involved in the system’s implementation. We wanted to investigate:

1. health professionals' demographic characteristics (professional background – level of education, type of work spent on managerial duties, type of facility where most of the work conducted, type of involvement in the reporting system – voluntary, compulsory),
2. attitudes towards the system. In total seven demographic items for description of the sample and in addition 17 questions were generated to measure the perception of the electronic incident reporting system. The last was open ended question for expression of views and comments of respondents. Each evaluating item (e. i. the importance of reporting system, the key factors for reporting incidents, areas where changes are required, barriers for reporting) was rated on a five-point Likert-type item from 1 (less important) to 5 (most important).

Data analysis

Standard descriptive statistics were used to describe the sample characteristics. Categorical variables were described using absolute and relative frequencies of categories (percentage). Continuous variables were described using mean and standard deviation. Statistical significance of differences among groups of respondents was tested by nonparametrical tests (Mann-Whitney U test for two groups and Kruskal-Wallis H test for more than two groups). Reliability of Likert scales was tested by Cronbach's alpha coefficient. Statistical analysis was conducted using the IBM Statistical Package for the Social Sciences – SPSS Statistics 22. Alpha 0.05 was taken as the level of statistical significance in all analyses.

Results

Characteristics of respondents

The majority of respondents have had professional background in nursing and worked as quality managers with academic education. Average age of respondents was 45 years (min. 25 and max. 67). The interesting results were identified concerning the length of hospitals involvement in the reporting system. The average length of involvement was reported 3.5 years, but 4 respondents (6.3 %) declared more than 6 years – which is not possible, because the national system works for six years until now. In total 8 respondents (12.5 %) did not know the number of years of involvement. The concrete demographic characteristics of respondents are shown in Tab. 1.

Tab. 1. Demographic characteristics of sample of health professionals in survey (N = 64)

Characteristic	N	%
Age		
45 and less	34	53.1
More than 45	30	46.9
Education		
Secondary school for nurses	13	20.3
Academic – university (college)	51	79.7
Type of representing hospital *		
Small hospital (to 349 beds)	21	32.8
Medium size hospital (350 to 749 beds)	10	15.6
Large hospital (more than 750 beds)	16	25
Long term care hospital (without bed limitations)	4	6.3
Psychiatric hospital (without bed limitations)	10	15.6
Other (i.e. special inpatients centres)	3	4.7
Work position/type of job		
Top management (director, assistant director for quality, head nurse)	23	35.9
Quality manager (nursing professional background)	34	53.1
Line manager (ward sister)	2	3.1
Physician	1	1.6
Other (risk manager)	4	6.3
Length of involvement in the reporting system		
0-2 years	13	20.3
3-5 years	39	60.9
6-8 years	3	4.7

Tab. 1. – continued

Characteristic	N	%
More than 9 years	1	1.6
Do not know	8	12.5
Type of involvement in the reporting system		
Voluntary	37	57.8
Compulsory	27	42.2

Legend: * – the stratification of hospitals corresponds with the actual classification in the system for reporting adverse events (AE)

The views on adverse event reporting system - clinical safety reporting system

Respondents had to express opinions on adverse event (AE) reporting system (Clinical Safety Reporting System – CSRS) at the national level using a five-point Likert item (scale) and indicate what kind of circumstances and factors in connection with the reporting and recording of adverse events are regarded as crucial (see Tab. 2).

Tab. 2. Evaluation of clinical safety reporting system (CSRS)

Characteristic	Mean	SD
Evaluation/assessment of adverse event reporting system*		
Important	4.3	0.9
Effective/useful	4.0	1.1
Beneficial	4.0	1.2
Unnecessarily burdening	2.2	1.2
Meaningless/ insignificant	1.6	1.1
Hazardous/risky	2.0	1.2
Summation index – assessment	24.4	4.5
Crucial circumstances in the reporting system / Key factors*		
The correct terminology – defining the type of AE	4.6	0.8
The correct terminology – defining the severity of AE	4.5	0.8
The necessity of valid data – an objective assessment of the AE situation /condition of the patient, place of origin, etc./	4.3	0.9
Collection of information – current information about number of AE	4.1	1.0
Collection of information – summary of AE in time (the trend)	4.0	1.1
Possibility to add comments	3.6	1.2
Summation index key factors	25.1	4.0

Legend: SD – standard deviation; * – evaluation was rated on a five-point Likert-type scale from 1 (least important) to 5 (most important)

Incident reporting system was perceived by the most staff as important (N = 54; 84.4 %), beneficial (N = 45; 70.4 %) and effective (N = 68.6 %). The most common reasons for using the system by our respondents were: to evaluate the quality of care in the hospital (N= 30; 46.9%), to improve the quality of care through the preparation of new recommendations for practice (N = 14; 21.9 %), to increase the safety of patients (N =19; 29.7 %) and for the recurrence of adverse event risk assessment only (N = 5; 23.4 %). The questions and possible answers for the evaluation of the system, key factors, main barriers and areas with need for changes were represented with using Likert scale (consisting of 6-8 five point Likert items). For these Likert scales were created comprehensive summation indexes. The internal consistency (reliability) of the summary index was tested using Cronbach's alpha coefficient. The responses were consistent – Cronbach's alfa was $p = 0.759$ for overall assessment of the system. For the key factors was Cronbach's alfa 0.765. The CSRS was rated as important (average 4.3 points), beneficial and effective (both average points 4). Only a few respondents rated the system as risky (average points 2.0). What should be emphasized that the average points score for the possibility that the system is meaningless or insignificant reached 1.6 points. We have not identified a statistical relationship between the overall assessment of CSRS (importance, benefits, and usefulness etc.) and age of the respondents ($p = 0.55$), nor by the work position ($p = 0.795$). We also did not find statistical relationship according to the nature of the hospital involvement to the CSRS – voluntary or mandatory ($p = 0.268$) and length of involvement in the reporting system ($p = 0.345$). A more detailed analysis of individual responses indicated that managers from hospitals involved for shorter time (less than 3 years) in the electronic system evaluated him as more effective and useful than from hospitals involved for longer time ($p = 0.005$). The same situation was found in relation to the key factors evaluation, which corresponds to a consistent overall evaluation. Correct terminology both in types of AE evaluation (average points 4.6) and their severity assessment (average points 4.5) have been identified as the most important/crucial circumstances of the system.

The barriers to the use of CSRS and areas with possible need of changes in the CSRS

As we wanted to know not only the opinions on the current electronic system from the end users viewpoint we also wanted to recognise the possible barriers and suggestions in which areas would be appropriate to make changes in the system. Summary of replies are shown in Tab. 3.

Tab. 3. Barriers to the use of CSRS and areas of possible changes

Characteristic	Mean	SD
Barriers*		
Economical / financial limits	2.3	1.4
Existing legislation	2.5	1.5
Local policy in the workplace	2.7	1.5
Problems with the technical achievement in the workplace	2.6	1.3
Lack of staff	3.0	1.4
High workload of workers	3.6	1.1
Fear of reprisal of individuals	2.1	1.3
Fear of reprisal of the team	2.0	1.3
Summation index – barriers	20.6	6.5
Areas with need of changes*		
Technical management and support	3.3	1.4
Methodological safeguarding/assistance and support	3.4	1.5
Changes in the contents – the type of AE	3.0	1.3
Changes in the contents – objective assessment of the patient, situation	2.8	1.3
Changes in the contents – causes/etiology of AE	2.8	1.2
Changes in the contents – the consequences of AE	2.8	1.2
Changes in the contents – involved person	2.3	1.2
Summation index – need of changes	20.1	6.3

Legend: SD – standard deviation; * – evaluation was rated on a five-point Likert-type scale from 1 (less important) to 5 (most important)

When assessing barriers to the use of CSRS from the perspective of users there was reported as the most important high workload of workers (average 3.6 points) and a lack of staff (average 3.0 points). Overall evaluation (summation index) of barriers was rated as 20.6 (± 6.5) and Cronbach's alpha 0.741. What could be considered as positive finding, that fears of reprisal individual neither team were not reported/cited as the most important (2.1 respectively 2.1 points). We did not confirm relationship between age ($p = 0.080$), work position/cited as the most important ($p = 0.317$), length ($p = 0.082$) and type of involvement ($p = 0.225$) of hospitals and overall evaluation of barriers in the system. Technical barriers were statistically significantly more frequently reported in compulsory involved hospitals ($p = 0.05$). What is interesting that younger respondents (45 years old and less) significantly more frequently mentioned the lack of staff as the barrier ($p = 0.013$) for reporting the adverse events in the electronic system. The most often mentioned area which has to be improved is methodological (average points 3.4) and technical support (average points 3.3) for health care providers in the clinical practice. This finding is consistent with the fact that the majority of respondents (62.6 %) would appreciate the opportunity to use the services of terrain methodologist – a person who would help them with the records and settlement of the adverse events. Cronbach's alpha for the summation index for the suggested changes is 0.817. We also did not confirm relationship between age ($p = 0.385$), work position of respondents ($p = 0.100$), length ($p = 0.998$) and type of involvement ($p = 0.417$) of the hospitals and overall evaluation of needed and suggested changes in the system. We statistically verified differences in the need for methodological support according to the type of hospital involvement (compulsory, voluntary) to the CSRS. Hospitals participating compulsorily reported methodological support as important more frequently ($p < 0.001$). In contrast, the time of hospitals involvement in the system did not affect views of respondents on needed methodological improvements and changes in the CSRS system ($p = 0.663$).

Discussion

The overall aim of this study was to examine how is the incident reporting system in an acute care hospital evaluated in practice by examining staff perceptions and experiences. The survey was not focused on evaluation of the influence of the electronic reporting system on safety and learning from those incidents. We have identified some important issues which should be used not only for the improvement of the reporting system itself, but these changes should lead to improved care and safety for patients.

Firstly, it should be mentioned that there were several limitations to this study: it is possible that views of interviewed participants (mainly quality managers) are not representative sample of the common hospital staff, because we did not in-

volve a random sample of health practitioners. They volunteered to participate and so may have had a more positive attitude to the incident reporting than other members of staff, although our questionnaire still elicited information about problems associated with the incident reporting as we needed response from the final users – managers involved in the system. A final limitation of this study is the relatively small number of respondents. We have to emphasize that there were 75 % of all representatives of hospitals, which are involved in the monitoring system. After the data analysis, there are some important contributions to results of this study. Firstly, majority of respondents were quality managers with nursing professional background. This finding fully corresponds to the current situation in clinical practice in the Czech Republic and also with some studies where nurses are the most frequent reporters (McKaig et al., 2014).

Secondly, the study found evidence that incident reporting system was perceived by the most staff as important which corresponds with quite recent study made in the UK (Anderson et al., 2013). We could not assume that the existing system allowed or lead to conceptual changes including changes in risk and perceptions awareness of the importance of good practice because even we recognised positive finding that only the minority of respondents rated the system as risky or meaningless on the five point scale (Tab. 2.). We could expect that more positive safety culture will correlate with increased reporting rates as it was confirmed in other studies (Hutchinson et al., 2009; Kingston et al., 2014; McKaig et al., 2014) and we verified it also in another study which was made by IHIS concerning the trends in adverse events occurrence in five years (not published in printed version yet, under the review). We also could not predict that the system had a positive effect by changing staff attitudes and knowledge. Nevertheless the way in which the system was introduced and training supporting its introduction could contribute to cultural change. We identified that respondents did not feel fear of reprisal of individuals or fear of reprisal of the team when reporting incidents even they are the most often reported reason or barrier to discourage reporting on the basis that reporting could damage professional reputations or lead to unjustified reprisals (Waring, 2005).

Findings from our survey do not completely correspond to the recent study where fear, overload of workers and apologizing colleagues when they make a mistake were mostly reported as the biggest obstacles (Haw et al., 2014). According to our respondents fear is not so big problem, but we have to confirm that the main identified barriers of the reporting system were lack of staff and high workload of staff. This may also be associated with the fact that the majority of respondents indicated the importance of verbal description of the incident because they need it for the root analyses. After an error has happened, an employee can disclose it by filling out a reporting form. Subsequent causal analysis can bring about learning to enhance the safety and quality of care proactively by eliminating failure factors before a real accident occurs, enhancing their ability to intercept errors in time, improving their safety culture (Evans et al., 2007; Kessels-Habraken et al., 2010). Younger respondents significantly more frequently mentioned lack of staff as the barrier for reporting the adverse events in the electronic system. It may be affected by poor digital literacy of older respondents or habits of older respondents in practice. In the past it was even less nurses on duty and therefore older respondents do not perceive their lack so much. Another explanation may be the availability of computer equipment which is also mentioned in one study (Braithwaite et al., 2008), because the second most important area with the need of changes was technological management support. The most important need of changes was reported according to the methodological support especially concerning the type of adverse events and their severity description. This fully corresponds to scientific sources which emphasize taxonomies for patient safety events (Chang et al., 2005; Mitchellet al., 2016; Stavropoulou et al., 2016; Fukuda et al., 2010; Holden et al., 2007; Thomson et al., 2009) and the design of incident reporting systems (Anderson et al., 2013; Stavropoulou et al., 2015). Lack of orientation in terminology and lack of knowledge about severity of adverse events is common among health professionals which confirm Braithwaite's et al. study (Braithwaite et al., 2008). In this study only 42 % respondents always knew what severity rating to assign to an incident they report. The resolution between adverse events and near miss could be also significant problem in the clinical practice and should be evaluated (Collins et al., 2014; Kessels-Habraken et al., 2010; McKaig et al., 2007). Methodical support should be provided at both local and national levels. It is likely that a local incident-reporting procedure increases willingness to report and facilitates faster implementation of improvements. In contrast, the central procedure, by collating reports from many settings, seems better at addressing generic and recurring safety issues. The advantages of both approaches should be combined (Zwart et al., 2011). Concerning this, we have to highlight logical finding that representatives from hospitals participating compulsorily in the system (managed directly by Ministry of Health) reported methodological support as an important more frequently. The representatives from hospitals involved voluntarily did not recognise it as important. But it could have some other consequences in relation to the accreditation process for them (despite the benchmarking among hospitals is made anonymously). One third of respondents stated the use of reporting system for adverse events as important for accreditation and reaccreditation processes and they were mostly compulsorily involved. Finally, it should be noted in this context that in the Czech Republic there are not yet available national best practices (guidelines or pathways) of care. Monitoring of adverse events at the national level is one of the bases for their preparation and implementation and subsequent verification of their effectiveness in clinical practice. In the subsequent preparatory phase is the assumption that it will be used "Ten guiding principles for safety measurement and monitoring" (Vincent et al., 2014).

Conclusion

The findings provided evidence that frontline staff and managers (mainly quality managers with nursing professional background) from involved 64 hospitals support the CSRS on the national level. The identified both benefits and areas for improvement (especially need for technical and methodological support). The implementation process encountered challenges related to customizing the software and the development of the classification system for coding occurrences/adverse

events and there is still lot of to do. Identified issues and suggestions for improvements to the system itself would be shared in the expert group which is preparing the new version of some parts of reporting system in relation to the uniform electronic registries in the health sector in Czech Republic. Those changes will be made to the system before the roll out. Findings from this study will be used before the rollout to internal electronic system in other clinical settings, and before the implementation of the system in other health care facilities (inpatient settings) in the Czech Republic. While measuring the long term impact on clinical safety was beyond the scope of this survey, we have identified by the participants' expressions that if the employees continue to be engaged with the new system, then it will lead to improved clinical safety, as long as all identified issue are followed through with action plans. There is a plan/schedule to repeat this study after 6 months of system running in the uniform technological platform.

Ethical aspects and conflict of interest

The protocol (questionnaire) was designed and administered according to ethical principles of the Helsinki Declaration (World Medical Association, 2016). Completing the questionnaire was taken as indicating consent to participation in the study. The participants could withdraw from the survey at any time during the data collection. They did not have to answer each question.

The authors declare that there is no conflict of interest. The authors declare that they meet the authorship criteria defined by ICJME and are in agreement with the content of the manuscript.

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Výskyt ošetrovateľských diagnóz u pacientov s nutričnou jejunostómiou

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Abstract

HLINKOVÁ, E. – NEMCOVÁ, J. – SLEZÁKOVÁ, M. The occurrence of nursing diagnosis in patients with feeding jejunostomy. In *Ošetrovateľstvo: teória, výskum, vzdelávanie* [online], 2016, vol. 6, no. 2, pp. 52-58. Available on: <http://www.osetrovateľstvo.eu/archiv/2016-rocnik-6/cislo-2/vyskyt-osetrovateľskych-diagnoz-u-pacientov-s-nutricnou-jejunostomiou>.

Aim: The aim of the study was to identify nursing diagnosis of patients who underwent placement of feeding jejunostomy. Then compare the differences in the incidence of nursing diagnosis in terms of indication jejunostomy introduction, surgical diagnosis and age.

Methods: A retrospective study was performed of patients underwent of feeding jejunostomy for carcinoma oesophagus, stomach and biliary tract. Participants were divided in two groups: I. group of patients after radical surgery treatment of temporary postoperative enteral nutrition through jejunostomy and II. group of respondents with inoperable malignant process with the introduction of nutritional jejunostomy. The main tool of research, we used content analysis patient's medical records, including nursing documentation (operating and 7th postoperative day). We have developed a research protocol of its own design. Jejunostomy feeding problems were divided into four categories: infectious, gastrointestinal, metabolic and mechanical complications.

Results: We recorded the occurrence of nursing diagnosis, but without statistical significance in terms of the type of indication jejunostomy. Of the total 53 respondents had deficient fluid volume 91 %, over half of the respondents had pain around the catheter (58 %), hyperthermia (64 %) and 13 % had impaired the integrity of the skin around the catheter. We have seen a high incidence of gastrointestinal complications: diarrhea (49 %), nausea (80 %), abdominal pain (96 %). We have also identified a number of important defining characteristics as redness around the catheter in 4 % of patients, heperglycemia 28 % and 32 % hypocalcemia. In terms of age of the respondents we obtained a statistically significant results in the occurrence of pressure sores around the catheter – impaired integrity due to the presence of the catheter ($p = 0.04$).

Conclusion: Jejunostomy is safe maintenance performance combined with a low incidence of postoperative infectious and metabolic complications compared to total parenteral nutrition, although also not without risk. Of the most common nursing problems they have been diagnosed with diarrhea, nausea, hyperthermia, acute pain and deficient fluid volume.

Keywords: nursing diagnosis, enteral nutrition, feeding jejunostomy, complications jejunostomy

Úvod

Enterálna výživa (ďalej len EV) a nutričná farmakológia sa stali rutinným liečebným postupom a integrálnou súčasťou ošetrovateľskej starostlivosti. Podvýživa prispieva k zhoršenému hojeniu rán, imunodeficiencii s následnými infekčnými komplikáciami, hypoproteinémií s edémami, zníženej motilité čriev, svalovej slabosti, riziku trombóz, embólií, hypostatických pneumónii, infekcií močových ciest a dekubitov, sekundárne vedie k zvýšeniu morbidity, predlžuje dobu hospitalizácie, rekonvalescenciu a zvyšuje mortalitu (Olejník, 2002, s. 260). Prevalencia podvýživy u hospitalizovaných pacientov je 30-40 %, väčšina z nich trpí podvýživou v dobe prijatia (Pablo, Igaza, Alday, 2003, s. 824). Počas hospitalizácie v závislosti od zmeneného typu metabolizmu pri základnom ochorení má organizmus vyššie energetické nároky (Pokorná, Mrázová, 2012, s. 39). Výživa pacienta je predpokladom úspešnej terapie, a jej nerealizovanie v indikovaných prípadoch jednoznačne negatívne ovplyvní celkový priebeh ochorenia. Enterálna výživa sa indikuje u pacientov s manifestnou malnutríciou ako aj s rizikom vzniku malnutrie. Najčastejšími indikáciami enterálnej výživy sú porucha pasáže hornej časti gastrointestinálneho traktu (ďalej len GIT), spôsobená organickou prekážkou, plánované vyraďenie hornej časti GIT, bulbárne symptómy, neuromuskulárna dysfunkcia, cerebrálne symptómy, poruchy digescie a absorpcie a udržanie bariérových funkcií GIT v kritických stavoch (Voleková, 2007, s. 659; Mierťová, Ovšonková, 2014; Bóriková, 2015, s. 273; Tomagová, Bóriková, Jelšovková, 2015, s. 66).

Jednou z možností EV je podávanie roztokov s presne definovaným zložením živín (cukry, tuky, bielkoviny, minerály, stopové prvky, vitamíny) cez jejunostómiu (Kohout, Skladaný, 2002). Existujú rôzne techniky pri zavádzaní jejunostómie: laparotómiou (longitudinálne Witzel, priečne Witzel, otvorená gastrojejunostómia, punkčná katéťrová jejunostómia), laparoskopicky (tenkoihlová jejunostómia) (Han-Geurtz, Verhoef, Titanus, 2004; Young et al., 2016, s. 126) alebo endoskopicky (PEJ – perkutánna endoskopická jejunostómia) (Niv, Fireman, Vaisman, 2009, s. 1282).

Vyživovacia jejunostómia je bezpečný výkon spojený s nízkym výskytom pooperačných infekčných a metabolických komplikácií v porovnaní s totálnou parenterálnou výživou, hoci tiež nie je bez komplikácií. Viacero autorov uvádza 15 až 55

% výskyt komplikácií, závažné komplikácie v 8 až 29 % prípadoch, s 2 až 10 % mortalitou predovšetkým u neurologických pacientov pri nemožnosti verbálnej komunikácie a tým včasnej diagnostiky (Stylianides et al., 2008). Komplikácie, ktoré vznikajú v súvislosti so zavedením jejunostómie rozdeľujeme podľa vyvolávajúcej príčiny na infekčné, gastrointestinálne, mechanické a metabolické (Langhorne, Fulton, Otto, 2007, s. 472). K daným komplikáciami môžeme stanoviť ošetrovateľské diagnózy podľa NANDA International Taxonómia II – Hnačka, Zápcha, Akútna bolesť, Nauzea, Nevyvážená výživa – menší príjem ako telesná potreba, Deficit telesných tekutín, Riziko deficitu telesných tekutín, Riziko nevyváženého objemu telesných tekutín, Hypertermia, Riziko infekcie, Riziko aspirácie, Neefektívna tkanivová perfúzia (gastrointestinálna), Porušená kožná integrita, Porušená tkanivová integrita (DiMaria-Ghalli, Guenter, 2011, s. 920-943).

Cieľ

Cieľom štúdie bolo identifikovať ošetrovateľské diagnózy súvisiace s prítomnosťou nutričnej jejunostómie, porovnať rozdiely vo výskyte ošetrovateľských diagnóz z hľadiska indikácie zavedenia jejunostómie, hlavnej chirurgickej diagnózy a z hľadiska veku.

Súbor

Výskumný súbor tvorila zdravotná dokumentácia chirurgických pacientov s nutričnou jejunostómiou. Pacienti boli hospitalizovaní na Chirurgickej klinike a transplantáčnom centre UNM (Univerzitnej nemocnice v Martine). Výber súboru bol zámerný. Zaradujúcim kritériom bola vykonaná chirurgická jejunostómia na základe jednej z nasledovných indikácií: z dôvodu udržiavania štrukturálnej a funkčnej integrity črevnej sliznice po operačnom zákroku na hornom úseku GIT, poruchy digestie, absorpcie a udržanie bariérových funkcií GIT v akútnych stavoch (dočasná nutričná jejunostómia). Druhú skupinu tvorili pacienti, ktorým bola vykonaná jejunostómia z dôvodu realimentačnej liečby malnutrie pri inoperabilnom malígnom procese. Vyradujúcim kritériom bol poúrazový stav (poleptanie tráviaceho traktu).

Z celkového počtu respondentov ($n = 53$) bol priemerný vek 70,98 rokov ($\pm 7,86$). Vekové rozpätie výskumného súboru od 53 do 84 rokov. Z toho vo vekovej kategórii 43-65 rokov (≤ 65 rokov) celkovo 11 (21 %) respondentov a 42 (79 %) v kategórii 65-84 rokov (> 65 rokov). V súbore žien ($n = 13$) bola iba jedna pacientka do 65 rokov. Rovnako i v súbore mužov ($n = 40$) prevládali respondenti nad 65 rokov ($n = 30$).

Z hľadiska indikácie zavedenia chirurgickej jejunostómie sme respondentov rozdelili na dve skupiny: I. súbor pacienti s dočasnou enterálnou výživou cez jejunostómiu ($n = 7$) a II. súbor respondenti s inoperabilným malígnym procesom so zavedením nutričnej jejunostómie ($n = 46$). Z hľadiska hlavnej chirurgickej diagnózy z celkového počtu ($n = 53$) 47 respondentov malo diagnostikovaný karcinóm žalúdka (C-16), 4 respondenti karcinóm pažeráka (C-18) a 2 respondenti karcinóm žlčových ciest (C-24). Bližšiu charakteristiku respondentov z chirurgického hľadiska a operačného rizika uvádzame v tab. 1.

Tab. 1. Charakteristika respondentov

Demografické údaje			n = 53	%
Pohlavie				
Muž			40	76
Žena			13	24
Vek (v rokoch)				
≤ 65 rokov			11	21
> 65 rokov			42	79
Chirurgická diagnóza – indikácia jejunostómie	Dočasná (n = 7)	Trvalá (n = 46)		
Ca žalúdka	6	41	47	88,7
Ca pažeráka	1	3	4	7,5
Ca žlčových ciest	0	2	2	3,8
Operačné riziko – chronické ochorenia				
Arteriálna hypertenzia			38	71,7
ICHS			36	67,9
Stav po IM			5	9,4
Chronická bronchitída			15	28,3
CHOCHP			1	1,9
DM typ 2			24	45,3
CHRI			7	13,2
ASA				
ASA 3			41	77,4
ASA 4			12	22,6

Tab. 1. – pokračovanie

Demografické údaje	n = 53	%
Abúzus návykových látok		
Alkohol	9	17
Fajčenie	16	30,2

Legenda: n – absolútna početnosť; % – relatívna početnosť; Ca – karcinóm; CHOCHP – chronická obštrukčná choroba pľúc, CHRI – chronická renálna insuficiencia, ASA – anestéziologické riziko (rozptyl 1-5), DM2 – diabetes mellitus 2 typu, IM – infarkt myokardu

Metodika

Pre zber empirických dát sme použili obsahovú analýzu dokumentov (zdravotnú dokumentáciu vrátane ošetrovateľskej dokumentácie, operačný až 7. pooperačný deň). Vypracovali sme výskumný protokol, ktorý obsahoval problémy nutričnej jejunostómie rozdelené podľa odporúčaní viacerých autorov (Langhorne, Fulton, Otto, 2007, s. 472; DiMaria-Ghalili, Guenter, 2011, s. 920-943) do štyroch kategórií: infekčné (začervenanie, bolesť v okolí katétra, hypertermia, horúčka, pretekanie stravy do okolia, aspiračná pneumónia), gastrointestinálne (hnačka, zápcha, nevoľnosť, zvracanie, akútna bolesť v epigastriu, krčovitá bolesť v podbruší), metabolické (dehydratácia hyperglykémia, hypoglykémia, hyponatriémia, hypofosfatémia) a mechanické (dislokácia katétra, obštrukcia katétra, pohyblivosť a posun katétra, podkožný intraabdominálny absces, enterokutánna fistula, uzáver jejunostómie, interstinálna ischémia, prítomnosť dekubitu pod jejunostomickým katétrom). K uvedeným problémom a komplikáciám sme vyhľadávali v ošetrovateľskej dokumentácii ošetrovateľské diagnózy. Na štatistické spracovanie, vyhodnotenie dát a hypotéz bol použitý softwarový program PASW Statistics. Z metód pravdepodobnosti boli použité Pearsonov Chi-kvadrát a Fisherovo F – rozdelenie.

Výsledky

Na základe analýzy zdravotnej dokumentácie sme identifikovali ošetrovateľské diagnózy súvisiace s prítomnosťou nutričnej jejunostómie (tab. 2.). Pearsonov výberový korelačný koeficient nepotvrdil vzťah medzi indikáciou jejunostómie (dočasná enterálna výživa cez jejunostómiu verzus realimentačná liečba malnutricie jejunostómiou) a výskytom komplikácii enterálnej výživy: infekčné komplikácie slabá závislosť ($r = 0,0737$), gastrointestinálne komplikácie slabá závislosť ($r = 0,0743$), metabolické komplikácie slabá závislosť ($r = 0,0772$) (tab. 3.).

Tab. 2. Výskyt ošetrovateľských diagnóz u pacientov s jejunostómiou

Ošetrovateľské diagnózy	Dočasná (n = 7)		Trvalá (n = 46)		Spolu (n = 53)	
	n	%	n	%	n	%
Zmenená výživa – menší príjem ako telesná potreba	7	100	46	100	53	100
Infekčné komplikácie						
Hypertermia	6	85,7	28	60,9	34	64,1
Akútna bolesť v okolí katétra	4	57,1	27	58,7	31	58,5
Začervenanie v okolí katétra*	0	0	2	4	2	3,8
Pretekanie stravy do okolia katétra*	0	0	0	0	0	0
Aspirácia potravy*	0	0	0	0	0	0
Gastrointestinálne komplikácie						
Hnačka	3	42,9	23	50	26	49
Zápcha	0	0	0	0	0	0
Nauzea	7	100	35	81,4	42	79,3
Zvracanie*	2	28,6	9	19,6	11	20,7
Akútna bolesť v epigastriu	2	28,6	7	15,2	9	17
Akútna bolesť v podbruší (krčovitý charakter)	7	100	44	95,6	51	96,2
Metabolické komplikácie						
Deficit telesných tekutín	5	71,4	43	93,5	48	90,6
Riziko deficitu telesných tekutín	2	28,6	3	6,5	5	9,4
Hyperglykémia*	1	14,3	14	30,4	15	28,3
Hypokaliémia*	1	14,3	16	34,8	17	32,1
Mechanické komplikácie						
Porušená kožná integrita v okolí katétra (dekubitus)	1	14,3	6	13	7	13,2
Dislokácia katétra**	0	0	0	0	0	0
Obštrukcia katétra**	0	0	0	0	0	0

Tab. 2. – pokračovanie

Ošetrovateľské diagnózy	Dočasná (n = 7)		Trvalá (n = 46)		Spolu (n = 53)	
	n	%	n	%	n	%
Posun katétra**	0	0	0	0	0	0
Uzáver katétra**	0	0	0	0	0	0
Intestinálna ischémia**	0	0	0	0	0	0

Legenda: * – definujúce charakteristiky; ** – súvisiace faktory; n – absolútna početnosť; % – relatívna početnosť

Tab. 3. Výskyt komplikácií enterálnej výživy v súvislosti s indikáciou jejunostómie (dočasná enterálna výživa cez jejunostómiu verzus realimentačná liečba malnutricie jejunostómiou)

Komplikácie	I. vzorka (n = 7)		II. vzorka (n = 46)		r
	n	%	n	%	
Infekčné	5	41,4	28	60,9	0,0737
GIT	7	100	46	100	0,0743
Metabolické	7	100	46	100	0,0772

Legenda: n – absolútna početnosť; % – relatívna početnosť, r – korelácia

Kategoriálna analýza pomocou Fisherovho testu nepreukázala vzťah medzi hlavnou chirurgickou diagnózou (karcinóm žalúdka, karcinóm pažeráka, karcinóm žlčových ciest) a výskytom nutričných komplikácií rozdelených do 4 kategórií: infekčné komplikácie ($p = 0,2604$), gastrointestinálne ($p = 1,000$), metabolické ($p = 1,000$) a narušená integrita kože ($p = 0,1209$). Výsledky sú štatisticky nevýznamné.

Výskyt ošetrovateľských problémov sme sledovali aj z hľadiska veku. Štatisticky významné výsledky sa potvrdili len pri výskyte dekubitu v okolí katétra – Narušená celistvosť kože v súvislosti s prítomnosťou katétra ($p = 0,04$).

Tab. 4. Vybrané ošetrovateľské diagnózy u pacientov s jejunostómiou v závislosti od veku

Ošetrovateľská diagnóza	Vek				Fisherov test (p)
	≤ 65 (n = 11)		> 65 (n = 42)		
	n	%	n	%	
Hypertermia	7	13	26	49	0,236
Začervenanie v okolí katétra*	0	0	2	4	0,167
Porušená kožná integrita v okolí katétra (dekubitus*)	4	8	3	6	0,040
Hnačka	7	13	19	36	0,196
Akútna bolesť v podbruší	11	21	40	75	0,642
Akútna bolesť v okolí katétra	7	13	25	47	0,132

Legenda: * – definujúce charakteristiky; n – absolútna početnosť; % – relatívna početnosť

Diskusia

Na základe analýzy zdravotnej dokumentácie sme zaznamenali výskyt ošetrovateľských diagnóz, avšak bez štatistickej významnosti z hľadiska indikácie jejunostómie (dočasná pooperačná enterálna výživa cez jejunostómiu verzus realimentačná liečba malnutricie jejunostómiou). U všetkých respondentov bola diagnostikovaná zmenená výživa – menší príjem ako telesná potreba. Z celkového počtu 53 respondentov sme akútnu bolesť v podbruší krčovitého charakteru zaznamenali u 96 % pacientov, deficit objemu telesných tekutín u 91 %, viac ako polovica mala hypertermiu (64 %) a bolesť v okolí katétra (58 %). Hnačka bola diagnostikovaná u 49 % respondentov, nevoľnosť takmer u 80 % respondentov, 13 % malo porušenú kožnú integritu v okolí jejunostomického katétra. Identifikovali sme aj viaceré významné definujúce charakteristiky: zvracanie 21 %, začervenanie o okolí jejunostomického katétra 4 %, hyperglykémia 28 % a hypokaliémia 32 %. Shenoy a Adapala (2015) v prospektívnej štúdii (n = 50) u pacientov s jejunostómiou v pooperačnom období 1 až 7. pooperačný deň zaznamenali výskyt gastrointestinálnych komplikácií 16 %, mechanické 12 %, infekčné 8 % a metabolické 8 %. Zároveň monitorovali laboratórne parametre malnutricie a kalorický príjem vrátane príjmu bielkovín, ktoré boli štatisticky významne pozitívne zmenené (Shenoy, Adapala, 2012, s. S277). Viaceré zahraničné štúdie uvádzajú, že incidencia gastrointestinálnych komplikácií (hnačka, distenzia) sa pohybuje v rozmedzí 5-35 % (Wani et al., 2010, s. 388; Kight, 2008, s. 521; Han-Geurts et al., 2007, s. 31; Ryan et al., 2006, s. 386; Sica et al., 2005, s. 276; Pramesh et al., 2002, s. 666; Gupta, 2009, s. 1435). Men et al. (2008) vo vzorke 57 pacientov identifikovali 30 % pacientov s hnačkou (Mene et al., 2008, s. 94).

Nezaznamenali sme výskyt mechanických komplikácií a problémov ako sú dislokácia, posun, obštrukcia, uzáver katétra. Uvedené komplikácie súvisia s dlhodobším podávaním stravy, t.j. viac ako 7 dní, niekoľko týždňov, mesiacov. Kalita et al. (2014) realizovali retrospektívnu štúdiu pacientov s nutričnou výživou v domácom prostredí. Zo súboru 147 respondentov až 29 % všetkých komplikácií enterálnej výživy pripadalo na mechanické komplikácie (Kalita et al., 2014, s. 466). Wani et al. (2010) uvádzajú u pacientov s dočasnou pooperačnou nutričnou jejunostómiou (n = 463 pacientov s karcinómom pažeráka) ako najčastejšiu komplikáciu obštrukciu katétra (Wani et al., 2010, s. 389).

Z gastrointestinálnych problémov sa najčastejšie vyskytovala hnačka (49 %). V porovnaní s vyššie uvedenými výsledkami zahraničných štúdií výsledky môžu byť ovplyvnené časovým faktorom (operačný až 7. pooperačný deň). Prítomnosť gastrointestinálnych komplikácií a to hnačky je typickým problémom spojeným s podávaním nutričnej stravy do jejunostómie. Môže súvisieť s nesprávnym podávaním stravy. Na ich zabránenie je potrebné dodržanie prietoku podávanej nutričnej výživy 20 ml / hodinu počas 20 hodín a to perfuzorom. Vyšší prietok je spojený s rizikom vzniku gastrointestinálnych ťažkostí. Hnačky môžu byť spôsobené aj intoleranciou výživy, kedy je potrebné, aby pacient verbalizoval svoje ťažkosti (pocit plnosti, nauzea). Vo väčšine štúdií autori uvádzajú, že úpravou rýchlosti podávania enterálnej výživy pumpou ťažkosti samostatne vymiznú, niekedy je potrebná farmakoterapia, alebo dočasne prerušiť výživu na 12-24 hodín (Wani et al., 2010, s. 388; Ryan et al., 2006, s. 386; Kight, 2008, s. 521; Han-Geurts et al., 2007, s. 31; Sica et al., 2005; Pramesh et al., 2002, s. 666). Do jejuna za duodenojejunálnu flexúru (ligamentum Treizi) môžeme aplikovať výhradne iba farmakologicky upravené nutričné preparáty (Mikula, Hluchová, 2005).

Výskyt ošetrovateľských diagnóz môže súvisieť s hlavnou chirurgickou diagnózou. V našom súbore boli respondenti prevažne so stenózou v hornej časti gastrointestinálneho traktu pri inoperabilnom malígnom procese. Dané skutočnosti ovplyvnili výsledky štúdie. Nutričná jejunostómia môže byť indikovaná aj u pacientov s pankreatitídou (Oláh, Romics, 2014, s. 16112-16131), pričom posledné štúdie naznačujú, že enterálna výživa významne znižuje úmrtnosť ťažkej akútnej pankreatitídy v porovnaní s totálnou parenterálnou výživou (Petrov et al., 2008, s. 1111-1117; Marik, Zaloga, 2004, s. 1407; McClave et al., 2006, s. 143-156). Podobne aj u pacientov s chronickou pankreatitídou znižuje stupeň malnutrie, zvyšuje hmotnosť pacienta, minimalizuje bolesť a zmiernuje gastrointestinálne ťažkosti pacienta v porovnaní s perorálne podávanou pankreatickou diétou. Pozitívny vplyv je zaznamenaný aj u skupiny pacientov, ktorí sa pripravujú na elektívnu operáciu pankreasu. Predoperačná enterálna výživa minimalizuje aj výskyt pooperačných komplikácií (Stanga et al., 2015, s. 18).

Vek predstavuje významný faktor ovplyvňujúci výskyt pooperačných komplikácií, nielen celkových ale i lokálnych. Vo veku nad 65 rokov nastáva redukcia všetkých fyziologických dejov a bunkovej reprodukcie pri hojení rán, predovšetkým zápalovej fázy (oneskorenie infiltrácie lymfocytmi, zmenená produkcia cytokínov, znížená fagocytárna schopnosť makrofágov, znížená sekrecia rastových faktorov, oneskorená angiogenéza, oneskorené ukladanie kolagénu) (Swift et al., 2001, s. 1027; Gosain, DiPietro, 2004, s. 321). Hodnotením miesta vyvedenia jejunostomického katétra sme v 7 prípadoch zdokumentovali začínajúci či prítomný dekubitus pod katétrom pri výstupe jejunostomického setu na povrch kože z dôvodu podráždenia kože prípadnými sekrétmi. Takýto stav môže byť výsledkom porúch tkanivového prekrvenia, prípadne nedostatočnej ošetrovateľskej starostlivosti. Vyšší výskyt bol zaznamenaný vo vzorke respondentov do 65 rokov, teda nie v seniorskom veku. Viacerí autori uvádzajú, že starnutím sa síce oneskoruje hojenie rany z časového hľadiska, ale nemení sa kvalita procesu hojenia rany (Maggi et al., 2009, s. 177; Stryja, 2011, s. 41-42). Výsledky našej štúdie pri výskyte lokálnych kožných komplikácií sú ovplyvnené ďalšími faktormi ako sú malignita a imunodeficiencia, ktoré majú vyššiu váhu ako samotný vek.

Záver

Sestry v chirurgických odboroch poskytujú ošetrovateľskú starostlivosť pacientom s nutričnou jejunostómiou. Analýzou zdravotnej dokumentácie sme identifikovali najčastejšie ošetrovateľské diagnózy hnačku, deficit telesných tekutín, akútnu bolesť v podbruší kŕčovitého charakteru, akútnu bolesť v epigastriu, akútnu bolesť v okolí katétra a hypertermiu a hypertermiu. Cieľom ošetrovateľskej starostlivosti u pacientov s nutričnou jejunostómiou by mala byť minimalizácia výskytu identifikovaných ošetrovateľských problémov, čím môžeme zlepšiť nielen kvalitu starostlivosti, ale i kvalitu života pacientov s onkologickým ochorením.

Limity štúdie

Limitom našej práce je malý a úzko selektovaný súbor respondentov. Výsledky nie je možné zovšeobecniť na populáciu pacientov s jejunostómiou.

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Beznádej u pedopsychiatrických pacientov

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Abstract

FARSKÝ, I. – ZAJACOVÁ, A. Hopelessness in child psychiatric patients. In *Ošetrovateľstvo: teória, výskum, vzdelávanie* [online], 2016, vol. 6, no. 2, pp. 59-63. Available on: <http://www.oseetrovatelstvo.eu/archiv/2016-rocnik-6/cislo-2/beznadej-u-pedopsychiatrickych-pacientov>.

Aim: The goals of this paper were to identify level of hopelessness in pedopsychiatric patients, to compare differences in the level of hopelessness in a connection with sex, family background, drug abuse and the presence of comorbid disorder. We also determined the relation between hopelessness and age, disease duration and number of hospitalizations.

Methods: The sample consisted of 96 children who suffered from mental disorder and who were hospitalized in the Clinic of Psychiatry JFMED CU and UHM in Martin. There were 44 girls and 52 boys in the sample and average age was 13.5 ± 3.0 years. Children hopelessness scale was used to measure the level of hopelessness. The used scale was not validated Slovak version of original scale. The score can range from 0 to 17 and the higher score means the higher level of hopelessness.

Results: 34 % of hospitalized children showed medium level and 15 % children showed high level of hopelessness. There were non-significant results in hopelessness in a connection with sex, family background, drug abuse and also in a connection with presence of only one or more diagnosed disorders. The results indicated that there is also no relation between hopelessness and age, duration of disorder and number of hospitalizations.

Conclusions: Hopelessness represents a serious nursing problem in pedopsychiatry because it is connected with potential risk behavior such as suicidal tendencies or self-mutilation behavior. In our research there were no correlations between hopelessness and other variables and hopelessness wasn't influenced by duration of affection, age or number of hospitalizations. Independent nursing interventions focused on reduction of hopelessness can be potentially more effective than other interventions focused on deal with nursing diagnoses which are more connected with an affection of patient.

Keywords: hopelessness, children, adolescents, psychiatric nursing

Úvod

Skúmanie beznádeje v detskom veku je dôležité z viacerých dôvodov. Beznádej oslabuje jednotlivca. Beznádej je myšlienkový proces, ktorý zahŕňa pesimistický spôsob hodnotenia budúcnosti a neschopnosť zmeniť to, čo budúcnosť priniesie. V detskom veku je beznádej považovaná za významný rizikový faktor suicidálneho uvažovania a konania (Chylová, 2012; Johnson et al., 2010), pričom beznádej má pri suicidálnom konaní výraznejší vplyv ako samotná miera depresie (Beck et al., 1985). Ako uvádzajú Kocourková a Koutek (2008) beznádej súvisí aj so sebaoškozovaním sa u detí (rezanie, škrabanie sa, pálenie cigaretami a pod.). Prežívanie beznádeje môže u detí spôsobiť psychické škody a môže meniť prežívané psychické napätie do depresívnej nálady (Weir, Jose, 2008), čo následne negatívne vplyva na osobné, rodinné, školské a sociálne fungovanie (Chapman, Specht, Cellucci, 2005). Beznádej je často pozorovaná u adolescentov s nízkym mierou „self-efficacy“ čiže seba uplatnenia, vedomia vlastnej účinnosti (Luszczynska, Gutiérrez-Doña, Schwarzer, 2005). Ak dospievajúci zažíva opakované sklamanie, má tendenciu nahradiť svoje dlhodobé ciele, ako napr. prospievanie v škole, alebo dobré telesné zdravie krátkodobými ziskami. Počas tejto doby má dospievajúci tendenciu k rizikovému správaniu a konaniu, ako je nechránený pohlavný styk alebo sex s viacerými sexuálnymi partnermi, z čoho získava okamžité potešenie (Kagan et al., 2012).

V ošetrovateľstve predstavuje beznádej ošetrovateľský problém/diagnózu, ktorý je definovaný v NANDA-I ako: „subjektívny stav, v ktorom jednotlivec chápe svoju situáciu ako bezvýhodiskovú (nevidí žiadne možnosti riešenia svojich problémov a/alebo žiadnu možnosť dosiahnuť toho, po čom túži, čo očakáva) a je neschopný mobilizovať svoje sily (NANDA-I, 2014, s. 266). Neschopnosť mobilizovať sily je operacionalizovaná prostredníctvom nasledujúcich charakteristík – pasívne prijímanie starostlivosti, celková pasivita. Vnímanie bezvýhodiskovosti situácie prostredníctvom vyjadrení o tom, že sa veci nezmenia (Gurková, Čáp, Žiaková, 2010).

Cieľ

Cieľom práce bolo zistiť mieru beznádeje u pedopsychiatrických pacientov, identifikovať možné rozdiely v závislosti od pohlavia, úplnosti/neúplnosti rodiny a abúzu drog. Ďalším cieľom bolo zistiť potenciálne súvisiace premenné beznádeje u pedopsychiatrických pacientov.

Súbor a metodika

Pri riešení výskumných cieľov bol realizovaný prierezový ex post facto výskum s použitím kvantitatívnej metodiky. Súbor tvorilo 96 detí hospitalizovaných na Psychiatrickej klinike JLF UK a UNM v Martine, priemerný vek bol $13,5 \pm 3,0$ rokov. V súbore bolo 44 dievčat s priemerným vekom $14,3 \pm 2,5$ rokov a 52 chlapcov s priemerným vekom $12,8 \pm 3,2$ roka. Takmer 68 % detí malo hlavnú diagnózu z okruhu F 90 – F 98 Poruchy správania a emočné poruchy so zvyčajným začiatkom v detstve, ďalej boli zastúpené diagnostické okruhy F 30 – F 39 Afektívne poruchy 13,5 % pacientov, F 10 – F 19 Poruchy psychiky a správania zapríčinené užitím (užívaním) psychoaktívnych látok 9,4 % pacientov, F 20 – F 29 Schizofrénia, schizotypové poruchy a poruchy s bludmi 6,3 % pacientov, 2 pacienti mali neurotickú poruchu a 1 pacientka mala mentálnu anorexiu. Priemerná dĺžka trvania psychických problémov bola $2,17 \pm 1,73$ roka. Z celkového súboru sa 83 % detí hlásilo k nejakému vierovyznaniu, s prevahou katolíckeho. Zaraďujúce kritéria: hospitalizácia na detskom oddelení psychiatrickej kliniky JLF UK a UNM, vek 6-17 rokov, súhlas pacienta, súhlas zákonného zástupcu, schopnosť pochopiť inštrukcie. Vylučujúce kritéria: stredná a ťažká kognitívna porucha, psychotická porucha a depresívna porucha v akútnom štádiu pre zníženú kritickosť a záťaž u pacienta. Výber respondentov bol zámerný, do výskumu boli zaradení všetci respondenti, ktorí spĺňali kritéria a boli hospitalizovaní na Psychiatrickej klinike JLF UK a UNM v Martine počas realizácie výskumu.

Na meranie beznádeje bola použitá *Children Hopelessness Scale* (Kazdin et al., 1983). Jednalo sa o slovenskú nevalidovanú verziu tejto škály. Škála má 17 položiek, tvrdení, s ktorými respondent vyjadruje súhlas alebo nesúhlas. 9 položiek je formulovaných kladne, 8 záporne. Skóre sa môže pohybovať od 0-17, pričom vyššie skóre vyjadruje vyššiu mieru beznádeje, resp. vyššiu mieru negatívnych očakávaní do budúcnosti. Autori škály uvádzajú, že deti, ktoré skórujú vyššie ako 7 prežívajú vysokú mieru beznádeje a deti so skóre menším ako 4 prežívajú nízku mieru beznádeje, resp. beznádej neprežívajú. Autori pôvodnej škály uvádzajú Cronbach alfa 0,97, v našom súbore bola 0,718, takže škála spĺňa kritéria pre jej použitie. Škála bola doplnená o demografické údaje: vek, pohlavie, vierovyznanie dieťaťa a úplnosť resp. neúplnosť rodiny. Zo zdravotnej dokumentácie boli zisťované nasledovné údaje: hlavná psychiatrická diagnóza, celkový počet psychiatrických hospitalizácií, dĺžka trvania psychických problémov, prítomnosť abúzu drog v anamnéze.

Údaje boli spracované v programe SPSS 14. Boli použité metódy popisnej štatistiky, na meranie rozdielov medzi skupinami bol použitý Studentov T test a na meranie vzťahov medzi premennými boli použité Pearsonove korelácie.

Výskum bol schválený Etickou komisiou UNM.

Výsledky

V našom súbore prevažovali pacienti, ktorí boli na psychiatrickom oddelení hospitalizovaní prvýkrát (56 %), v priemere ich psychické problémy trvali približne dva roky, pochádzajú prevažne z neúplných rodín (55 %). Abúzus alkoholu a drog bol u detí prítomný v menšej miere (32 %) a výrazná väčšina detí nemala okrem primárnej psychiatrickej diagnózy (84 %) iné psychické ťažkosti (tab. 1.).

Tab. 1. Charakteristika súboru

Charakteristika	N = 96	%
Rodina		
Úplná	43	44,79
Neúplná	53	55,21
Abúzus drog		
Áno	31	32,29
Nie	63	67,71
Pridružené diagnózy		
Áno	15	15,63
Nie	81	84,38
Poradie hospitalizácie		
1.	54	56,25
2.	26	27,08
3.	12	12,50
4.	2	2,08
5.	2	2,08

Priemerné skóre beznádeje bolo 4,17, čo je podľa autorov škály (Kazdin et al., 1983) považované za strednú mieru prežívania beznádeje. Na druhej strane len 51 % detí uvádzalo skóre 3 a menšie, čo ich radí do skupiny pacientov s nízkym rizikom prežívania beznádeje. U 34 % pacientov možno konštatovať strednú mieru prežívania beznádeje a takmer 15 % pacientov prežívalo vysokú mieru beznádeje (tab. 2.).

Tab. 2. Miera beznádeje

Charakteristika	CS N = 96	CH N = 52	D N = 44
Priemer	4,17	4,13	4,20
SD	2,98	2,87	3,14
Minimum	0	0	0
Maximum	15	13	15
0-3	49	17	23
4-7	33	20	13
7-17	14	6	8

Legenda: CS – celý súbor; CH – chlapci; D – dievčatá; SD – smerodajná odchýlka; 0-3 – nízke riziko beznádeje; 4-7 – stredná miera beznádeje; 8 a viac – vysoká miera beznádeje

V našej skupine respondentov sme nezistili žiadne významné rozdiely v závislosti od pohlavia, úplnosti/neúplnosti rodiny, abúzu drog, či prítomnosti pridružených psychiatrických diagnóz. Aj keď sa nám nepotvrdil významný rozdiel, zaujímavým zistením bolo, že deti, ktoré neuvádzali žiadne užívanie drog, mali mierne vyššie priemerné skóre beznádeje 4,25 v porovnaní s deťmi, ktoré mali abúzus drog v anamnéze, ktorých priemerné skóre bolo 4,00 (tab. 3.).

Tab. 3. Rozdiely v miere beznádeje

Charakteristika	Priemer ± SD	p
Pohlavie		
Chlapci	4,13 ± 2,87	0,910
Dievčatá	4,20 ± 3,14	
Rodina		
Úplná	3,83 ± 2,67	0,221
Neúplná	4,58 ± 2,96	
Abúzus		
Áno	4,00 ± 2,59	0,675
Nie	4,25 ± 2,98	
Pridružené diagnózy		
Áno	4,20 ± 2,50	0,955
Nie	4,16 ± 2,96	

Legenda: SD – smerodajná odchýlka; p – významnosť rozdielov na hladine $p < 0,05$

Skúmali sme aj vzájomný vzťah miery beznádeje a veku respondentov, počtu celkových psychiatrických hospitalizácií, ako aj celkovej doby trvania psychických problémov. Možno konštatovať, že v našom súbore nebol medzi beznádejou a skúmanými premennými takmer žiadny vzťah (tab. 4.).

Tab. 4. Vzťah beznádeje a vybraných premenných

	Vek	Poradie hosp.	Trvanie problémov	Beznádej
Vek	1			
Poradie hosp.	0,101	1		
Trvanie problémov	0,146	0,594**	1	
Beznádej	-0,083	0,074	0,097	1

Legenda: ** – $p < 0,01$; $r < 0,3$ – nízka tesnosť; $r = 0,3-0,5$ – mierna tesnosť; $r = 0,5-0,7$ – výrazná tesnosť; $r = 0,7-0,9$ – vysoká tesnosť; $r = 0,9 \leq$ – veľmi vysoká tesnosť

Diskusia

Ako sme už uviedli v úvode, prežívanie beznádeje má v detskom veku množstvo potenciálnych negatívnych dôsledkov. Napriek tomu existuje v našich podmienkach len veľmi málo štúdií, ktoré by sa priamo venovali meraniu beznádeje, resp. nádeje v detskom veku. Taktiež sme nenašli žiadnu štúdiu v slovenskom resp. českom jazyku, kde by bola beznádej meraná rovnakou metódou. V našom súbore až 47 detí (49 %) uvádzalo strednú až vysokú mieru prežívanej beznádeje. Jedným z možných vysvetlení je vzťah medzi beznádejou a depresiou, ktorý je dobre popísaný (Goetz, 2005; Váryová, Andreánska, 2007). Avšak afektívnu poruchu malo len 13,5 % respondentov a komorbídnu psychickú poruchu malo približne len 16 % hospitalizovaných detí. Je teda veľmi málo pravdepodobné, žeby depresívna symptomatika nebola počas psychiatrických vyšetrení diagnostikovaná.

Naše výsledky poukazujú na to, že beznádej nie je raritným javom, ktorý sa vyskytuje len u malej skupiny pedopsychiatrických pacientov. Napriek tomu možno predpokladať, že ošetrovateľská diagnóza Beznádej ostáva vo väčšine prípadov nediagnostikovaná a teda neriešená. V našej práci sme sa nezamerali na zisťovanie vzťahu beznádeje a iných psychických premenných. Uvádžame preto ešte výsledky niektorých zahraničných štúdií s použitím rovnakej škály na meranie beznádeje, ktoré poukazujú na to, že deti s vyššou mierou beznádeje majú tendenciu vnímať, že im ich rodiny a rovesníci poskytujú len malú podporu, vyjadrujú svoj hnev otvorenejšie a agresívnejšie a majú aj viac iných negatívnych emócií ako deti s nízkym skóre beznádeje (Kashani et al., 1997). U detí s vysokou beznádejou zistili nižšie kognitívne schopnosti, väčšiu úzkosť, nižšie sebavedomie a vyšší stupeň celkovej psychopatológie (Kashani et al., 1991). V našom výskume sme nezistili rozdiely v miere beznádeje v závislosti od pohlavia, úplnosti/neúplnosti rodiny, abúzu drog, či prítomnosti pridružených psychiatrických diagnóz. Taktiež beznádej nekorelovala s vekom, trvaním psychických problémov či počtom psychiatrických hospitalizácií. Nezávislosť beznádeje od pohlavia pri použití podobnej metodiky, ale na vzorke zdravej populácie zistila aj Madarasová Gecková et al. (2009). Kashani et al. (1989) nezistili rozdiely v miere beznádeje z hľadiska veku detí a adolescentov. Nepotvrdenie skúmaných vzťahov a rozdielov v miere beznádeje môže znamenať, že beznádej nie je symptómom psychickej poruchy, ale predstavuje vo väčšej miere nezávislý ošetrovateľský problém/diagnózu. To nás vedie k úvahe, že nezávislé ošetrovateľské intervencie zamerané na redukciu beznádeje môžu byť viac účinné ako nezávislé intervencie zamerané na riešenie ošetrovateľských diagnóz, ktoré sú vo väčšej miere samotným symptómom ochorenia (napr. ošetrovateľská diagnóza Akútna bolesť). Žiaková et al. (2006, s. 277) uvádza, že medzi najvýznamnejšie intervencie pre ovplyvnenie beznádeje možno zaradiť nasledovné intervencie: povzbudzovať vzťahy s blízkymi ľuďmi, ktoré môžu prispieť k terapii; pomáhať pacientovi nachádzať životné princípy a hodnoty; pomôcť pacientovi nájsť a zrevidovať ciele súvisiace s nádejou; pomáhať pacientovi/rodine nachádzať nádej v živote; rozšíriť pacientove schopnosti zvládať záťaž; vyvarovať sa maskovaniu pravdy/neklamať; aktívne zapojiť pacienta do starostlivosti; plánovať starostlivosť tak aby postupovala od jednoduchších ku komplexnejším cieľom; umožniť pacientovi praktizovať denné rituály; učiť ho rozpoznať reálne možnosti v danej situácii a stanoviť primerané ciele; informovať pacienta aj keď je aktuálny stav prechodný; zabezpečiť súkromie pacienta/rodiny. Tieto intervencie musia byť prirodzene v súlade s terapeutickým plánom, ktorý zahŕňa psychofarmakoterapiu, event. kombináciu s psychoterapiou. V našich podmienkach absentujú intervenčné štúdie hodnotiace efektívnosť zásahov na podporu nádeje a preto je potrebné dôkladne koordinovať ošetrovateľské, psychofarmakoterapeutické a psychoterapeutické intervencie.

Záver

Najzávažnejším zistením našej práce je, že beznádej sa vyskytovala takmer u polovice pedopsychiatrických pacientov. Beznádej predstavuje v pedopsychiatrii závažný ošetrovateľský problém, pretože je spojená s rizikovým správaním ako napr. suicidálne tendencie, sebapoškodzovanie sa detských pacientov. V súvislosti s tým apelujeme na dôslednejšie diagnostikovanie tohto problému, hľadanie vhodných posudzovacích nástrojov, ako aj hľadanie efektívnych stratégií a ošetrovateľských intervencií. Beznádej v našom výskume nekorelovala so skúmanými premennými (trvanie ochorenia, počet hospitalizácií, trvanie ochorenia) a taktiež sme nezistili rozdiely v miere beznádeje medzi jednotlivými podskupinami. Z tohto hľadiska môžu byť nezávislé ošetrovateľské intervencie zamerané na redukciu beznádeje potenciálne viac účinné ako v prípade iných ošetrovateľských diagnóz, ktoré sú viac spojené so samotným ochorením pacienta.

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HLINKOVÁ, E. – NEMCOVÁ, J. – MIERTOVÁ, M. et al. Nehojace sa rany – recenzia

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HLINKOVÁ, E. – NEMCOVÁ, J. – MIERTOVÁ, M. et al. *Nehojace sa rany*. Martin: Vydavateľstvo Osveta, 2015. 284 s. ISBN 978-80-8063-433-9.

Vysokoškolská učebnica s názvom *Nehojace sa rany* bola spracovaná kolektívom autoriek Hlinková, E., Nemcová, J., Miertová, M., Balková, M., Tabaková, M. a Matúšková, D. Svojim obsahom a systematickým spracovaním významne dopĺňa chýbajúcu literatúru k problematike manažmentu nehojajúcich sa rán. Je vhodná nielen pre pregraduálne štúdium v nelekárskych a lekárske študijných programoch, ale aj v postgraduálnom štúdiu, či v klinickej praxi nemocníc, zariadeniach pre seniorov, v domácej ošetrovateľskej starostlivosti a v hospicioch. Ponúka komplexné spracovanie témy v logickej štruktúre.

Prvá kapitola je venovaná východiskám k problematike ošetrovania rán. Druhá kapitola vysvetľuje faktory ovplyvňujúce hojenie a fázy hojenia rany. V tretej kapitole je venovaná pozornosť posudzovaniu rán s využívaním meracích nástrojov, čo má význam hlavne pre efektívny manažment hojenia rán v samotnej praxi. Štvrtá kapitola uvádza príčinné súvislosti, diagnostiku a liečbu, podľa najmodernejších postupov na podporu hojenia rán. Bolesť, ktorá býva sprievodným a závažným symptómom pri nehojajúcich sa ranách, je venovaná piata kapitola. V tejto časti učebnice sú okrem všeobecne známych poznatkov o bolesti, spracované aj špecifické stratégie zvládania bolesti s akcentom na uplatnenie preventívneho prístupu. Súčasťou odborného textu sú kapitoly šesť až deväť, zamerané na najčastejšie sa vyskytujúce typy nehojajúcich sa rán ako sú dekubity, vredy predkolenia, diabetické vredy a malígne rany, s uvedením osobitostí posudzovania a manažmentu liečby a ošetrovania. Desiata kapitola Ošetrovanie pacienta s infikovanou nehojacou sa ranou metódou riadeného podtlaku prezentovaná prostredníctvom klinickej kazuistiky, predstavuje jednak samotnú metódu riadeného podtlaku, ale tiež celý proces individuálneho liečebného plánu a ošetrovateľskej starostlivosti. V súhrne, uvedenom v závere každej kapitoly, sú prehľadne a stručne zrekapitulované základné myšlienky. Porozumenie textu jednotlivých kapitol si môžu čitatelia overiť pomocou testovacích otázok a problémových úloh.

Za pozitívum a prínos predkladanej učebnice považujem aj skutočnosť, že v jednotlivých kapitolách je venovaná pozornosť nielen metodickým postupom jednotlivých ošetrovateľských intervencií zameraných na ošetrovanie rán, ale i na edukáciu a sociálne a psychické potreby pacientov a ich rodín.

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