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The Usage Nursing Classification of NIC in the Intensive Care

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ABSTRACT

Background: Implementation of the International Classification of NIC in conditions intensive care in the Czech Republic.

Aim: The aim of this enquiry was the choice of interventions NIC of the classification system, which are marked by nurses as usable minimaxy once a week in the clinical practice of intensive care.

This contribution maps the posibility of the usage of chosen interventions of classification system Nursing Interventions Classification NIC, which will be used for the future implementation in the intensive care sector. The aim of this enquiry was the choice of interventions NIC of the classification system, which are marked by nurses as usable minimaxy once a week in the clinical practice of intensive care.

Methods: Reaches the specific interventions NIC 75% threshold for counting records in the category of daily and weekly care has been identified as an intervention NIC, which is applicable at least once a week in clinical care intensive care environment. The quantitative analysis of 386 records with 184 interventions NIC in the clinical practice, by 12 health service proveders in the Czech Republic. Pearson‘ s chi quadrat ($p \leq 0,05$) was used for the statistic comparison of the data from the individual clinical workplaces.

Results: By the quantitative analysis was confirmed 46 interventions NIC of Classification system which possible usage in clinical intensive care minimally once a week in the CR. In comparison with the data distribution at individual clinical workplaces, there were not found any significant differences in minimal weekly usage indication at 14 NIC intervention of the classification system. There were found some differences in usage marking in 32 interventions NIC classification system by nurses at some workplaces. Higher frequency of presence was recorded by Anesthesiologic Resuscitation ward nurses.

Conclusions: Analysis from 184 intervention NIC confirms the possibility 46 of serviceability of classification system NIC in our country. There are interventions, which usage in clinical care workplaces Anesthesiologic Resuscitation ward, Intensive Care Unit surgery minimally once a week. These interventions NIC undergo expert validation.

KEY WORDS

standard terminology, classification system Nursing Interventions Classification NIC, Intensive Unit Care (ICU)

INTRODUCTION

On the international scale, there are standard terminologies in the field of nursing diagnostics NANDA-I, nursing interventions (NIC) and nursing results (NOC) often cited in nursing. Team of McCloskey and Bulechek created the key textbook of nursing interventions in the mid-80s, which can be considered the beginning of the research process on the project of University of Iowa with the aim of standardization of nursing interventions. Noticeable development of standard terminology of nursing interventions is described in various editions of Nursing Interventions Classification (NIC): McCloskey & Bulechek (2), including 336 NIC interventions; McCloskey & Bulechek (3), including 433 NIC interventions; McCloskey & Bulechek (4), including 486 NIC interventions; Dochterman & Bulechek (5), including 514 NIC interventions; Bulechek & Butcher (1), including 542 NIC interventions; Bulechek & Butcher (6), including 554 NIC interventions. Nursing intervention is defined as any intervention that the nurse performed based on her own judgment and knowledge, aimed at

improving the outcome of patient's health condition. It includes basic intervention usable in any healthcare sector, providing important information for care development and planning (1). Interconnection of standard language in the field of nursing interventions and nursing outcomes with selected clinical diagnoses is its main advantage. An example is the nursing outcomes, main and supporting (supplementary) nursing interventions in the clinical diagnosis of Diabetes Mellitus (7), which correspond to a content location of standard NOC and NIC classifications. Documentation of used interventions should allow monitoring and comparing the rate of use of specific interventions on specific workplace, as well as documentation of nursing diagnoses, and simultaneous monitoring of interventions that work best for a particular nursing diagnosis in clinical practice (6). English is an original language of the NIC classification system. NIC classification is translated into several languages (for instance French, German, Japanese, Chinese, Korean, Spanish, and Portuguese). Individual editions are available in the original language. The use of standardized language of NIC Classification in the Czech Republic will require negotiation of conditions for copyright licensing, comprehensive translation of interventions, its verification and validation of application possibilities in terms of clinical practice.

OBJECTIVE OF WORK

Identification of NIC interventions of the classification system (1), identified by the nurses as applicable in clinical practice of intensive care at least once a week.

SUBJECTS

The target group consisted of nurses who were asked to fill in the recording sheets with a range of translated NIC interventions (1). The condition was that these nurses worked in an environment where a specialized intensive nursing care was provided. Minimum size of set to fulfil the criteria of the project was 200 completed record sheets. 12 hospitals were finally selected to complete them (7 faculty hospitals and 5 others). Selection of workplaces corresponded to the criteria of the project again (facility with more than 500 beds and inclusion of department of anaesthesiology and resuscitation inpatient clinical workplace and internal and surgical intensive care unit in particular healthcare provider). The analysed group consisted of 386 recording forms with NIC interventions. Complete record sheet contained 184 NIC interventions (1) with a numeric code, translated Czech title and definition (see translation and selection of NIC interventions of the classification system).

METHODOLOGY

This survey is part of a larger study. Participating subjects were asked for a written consent to implementation of the investigation procedure. Cover letter, which was distributed to the nursing management of selected facilities throughout the Czech Republic, contained a brief description of the project, a urpose of the survey of standard NIC terminology, criteria and model requirements for filling out the record sheets and the attached questionnaire. Written consent of nursing management, at the level of deputy chief nursing care or nurse, was a prerequisite for participating in the survey. Further communication proceeded by mail, via the managers of nursing care, who delegated the ward nurses to pass the record sheets and questionnaires at clinical workplace of department of anaesthesiology and resuscitation and ICU. General nurses of these workplaces were asked to record how often they would use the presented interventions of NIC classification system. Investigation did not undergo prior approval by the ethics committee. General nurses marked into the recording sheet the interventions, which they would use: daily, at least once a week, once a month or occasionally in clinical intensive nursing care. Entries in categories daily and at least once a week were subsequently summed up. If a particular NIC intervention reached 75% limit of records in these categories, it was identified as a labelled NIC intervention, applicable at least once a week in clinical care of intensive care environment in the investigated group. Record sheet, as well as the procedure for selection of intervention with limit of 75% of labelled records, was based on the previous Iowa Intervention Project (3). This is intended to help the general nurses for determining the frequency of nursing intervention in practice. Record sheet of interventions was firstly verified in terms of clarity of the requirements for its completion. The participants had a compulsory choice to mark the possibility of using specific intervention. The analysis of quantitative and descriptive data was held by the Statistika Data Miner Cz statistical program, version 12. Pearson's chi-square was used for statistical comparison of records in the labelling of interventions at individual clinical workplaces for the 5% significance level ($p \leq 0.05$).

Table 1 Selected NIC interventions in the record sheet, including the proposed Czech translation of the title. (1)

NIC class	NIC code	NIC intervention	NIC intervention translation	n%
1. PHYSIOLOGICAL: BASIC DOMAIN				
A Activity and Exercise Management		xxxx	xxxx	
B Elimination Management	1876	Tube Care: Urinary	Péče o katétr: močový	94.0
C Immobility Management		xxxx	xxxx	
D Nutrition Support	1056	Enteral Tube Feeding	Výživa enterální sondou	80.5
	1050	Feeding	Krmení	82.1
	1200	Total Parenteral Nutrition administration	Zavedení žaludeční sondy	76.4
	1100	Nutrition Management	Výživová opatření	79.7
	1803	Self Care Assistance: Feeding	Pomoc při sebepéči: krmení	77.7
	1874	Tube Care: Gastrointestinal	Péče o sondu: GIT	77.7
E Physical Comfort Promotion	1400	Pain Management	Zvládání bolesti	93.8
	1450	Nausea Management	Zvládání nevolnosti	75.3
F Self-Care Facilitation	1650	Eye Care	Péče o zrak	91.2
	1720	Oral Health Promotion	Podpora orálního zdraví	92.2
	1680	Nail Care	Péče o nehty	75.5
	1801	Self Care Assistance: Bathing/ Hygiene	Pomoc při sebepéči: koupel/ hygiena	85.7
	1800	Self-Care Assistance	Pomoc při sebepéči: koupel	78.4
	1870	Tube Care	Péče o katétr/drén	82.9
2. PHYSIOLOGICAL: COMPLEX DOMAIN				
G Electrolyte and Acid Base Management	2120	Hyperglycemia Management	Zvládání hyperglykémie	77.9
H Drug Management	2300	Medication Administration	Podávání léků	91.2
	2301	Medication Administration:enteral	Podávání léků: enterálně	84.4
	2310	Medication Administration:eye	Podávání léků do oka	78.7
	2311	Medication Administration:inhalation	Podávání léků inhalačně	86.2
	2317	Medication Administration: subcutaneus	Podávání léků podkožně	84.2
	2260	Sedation Management	Opatření týkající se sedace	75.3
	2314	Medication Administration: Intravenous	Podávání léků: intravenózně	92.5
	2304	Medication Administration:oral	Podávání léků per os	80.3
I Neurologic Management		xxxx	xxxx	
J Perioperative Care		xxxx	xxxx	
K Respiratory Management	3230	Chest Physiotherapy	Fyzioterapie hrudníku	80.8
	3320	Oxygen Therapy	Kyslíková terapie	92.2
	3350	Respiratory Monitoring	Sledování dýchání	91.9
L Skin/Wound Management	3500	Pressure Management	Zvládání tlaku na podložku	89.9
	3540	Pressure Ulcer Prevention	Prevence dekubitů	93.0
	3590	Skin Surveillance	Sledování kůže	87.5
	3660	Wound Care	Péče o ránu	86.0
N Tissue Perfusion Management	4110	Embolus Precaution	Bezpečnostní opatření embolie	79.2
	4120	Fluid Management	Opatření týkající se bilance tekutin	77.9
	4200	Inravenous Therapy	Intravenózní terapie	96.6
	4190	Intravenous Insertion	Vytvoření i.v. vstupu	78.9
M Thermoregulation	3740	Fever Treatment	Léčba horečky	81.3

NIC class	NIC code	NIC intervention	NIC intervention translation	n%
3. BEHAVIORAL DOMAIN				
O Behavior Therapy		xxxx	xxxx	
P Cognitive Therapy	4720	Cognitive Stimulation	Kognitivní stimulace	77.1
Q Communication Enhancement		xxxx	xxxx	
R Coping Assistance	5270	Emotional Support	Emocionální podpora	87.0
S Patient Education		xxxx	xxxx	
T Psychological Comfort Promotion		xxxx	xxxx	
4. SAFETY DOMAIN				
U Crisis Management		xxxx	xxxx	
V Risk Management	6680	Vital Sign Monitoring	Monitorování vitálních funkcí	94.0
	6490	Fall Prevention	Prevence pádu	92.7
	6540	Infection Control	Kontrola infekce	92.7
	6550	Infection Protection	Ochrana před infekcí	92.2
5. FAMILY DOMAIN				
W Childbearing Care		xxxx	xxxx	
Z Childrearing		xxxx	xxxx	
X Lifespan Care		xxxx	xxxx	
6. HEALTH SYSTEM DOMAIN				
Y a Health System Management	7880	Technology Management	Opatření týkající se technologií	84.4
	7620	Controlled Substance Checking	Revize kontrolovaných léčiv	78.2
	7710	Physician Support	Pomoc lékaři	85.2
Y b Information Management	7920	Documentation	Dokumentace	90.4
Y c Community Health Promotion		xxxx	xxxx	
Y d Community Risk Management		xxxx	xxxx	

Table 2 The NIC interventions with recording higher than 75% at clinical workplaces

NIC code	Workplace	n per week	n% per week	n total	n% total	Significance
3350	IJIP	60	17	354	91.9	p = .330437
	CHJIP	62	17.5			
	ARO	232	65.6			
4110	IJIP	50	16.4	305	79.2	p = .127526
	CHJIP	57	18.7			
	ARO	198	64.9			
5270	IJIP	60	17.9	335	87	p = .282104
	CHJIP	59	17.6			
	ARO	216	64.5			
1400	IJIP	59	16.5	357	93.8	p = .307397
	CHJIP	65	18.2			
	ARO	233	65.2			
4200	IJIP	64	17.2	372	96.6	p = .228069
	CHJIP	64	17.2			
	ARO	244	65.6			
2300	IJIP	58	16.2	351	91.2	p = .109634
	CHJIP	62	17.7			
	ARO	231	65.8			
1720	IJIP	58	16.3	355	92.2	p = .371387
	CHJIP	62	17.5			
	ARO	235	66.2			
3320	IJIP	59	16.6	355	92.2	p = .138939
	CHJIP	63	17.7			
	ARO	233	65.6			
6490	IJIP	62	17.4	357	92.7	p = .427070
	CHJIP	66	18.9			
	ARO	229	64.1			
2314	IJIP	60	16.9	356	92.5	p = .415430
	CHJIP	64	17.9			
	ARO	232	65.2			
3540	IJIP	61	17	358	93	p = .216310
	CHJIP	64	17.9			
	ARO	233	65.1			
1200	IJIP	50	17	294	76.4	p = .085471
	CHJIP	51	17.3			
	ARO	193	65.6			
1876	IJIP	61	16.9	362	94	p = .278923
	CHJIP	64	17.7			
	ARO	237	63.8			
6680	IJIP	62	17.1	362	94	p = .145619
	CHJIP	64	17.6			
	ARO	236	65.2			

Legend: n = absolute frequency; n% = relative frequency

Tabulka 3 The NIC interventions with recording higher than 75% at clinical workplaces

NIC code	Workplace	n per week	n% per week	n total	n% total	Significance
3230	IJIP	13	4.1	311	80.8	p = .001909
	CHJIP	88	17			
	ARO	210	67.6			
4720	IJIP	27	9	297	77.1	p = .000000
	CHJIP	56	18.9			
	ARO	214	72.1			
7620	IJIP	21	6.9	301	78.2	p = .014219
	CHJIP	45	15			
	ARO	235	78.1			
7920	IJIP	16	4.6	348	90.4	p = .002506
	CHJIP	101	29			
	ARO	231	66.4			
1056	IJIP	11	3.5	310	80.5	p = .000000
	CHJIP	71	23			
	ARO	228	73.5			
1650	IJIP	36	10.2	352	91.2	p = .000000
	CHJIP	82	23.3			
	ARO	234	66.5			
7110	IJIP	26	7.9	328	85.2	p = .010313
	CHJIP	78	24			
	ARO	224	68.3			
1050	IJIP	41	12.9	316	82.1	p = .008212
	CHJIP	76	24			
	ARO	199	63			
3740	IJIP	34	10.9	313	81.3	p = .003725
	CHJIP	11	3.5			
	ARO	268	85.6			
4120	IJIP	29	9.7	300	77.9	p = .000703
	CHJIP	79	26.3			
	ARO	192	64			
2120	IJIP	11	3.6	300	77.9	p = .094474
	CHJIP	55	18.3			
	ARO	234	78			
6540	IJIP	86	24	357	92.7	p = .036705
	CHJIP	29	8.1			
	ARO	242	68			
6550	IJIP	10	2.9	349	92.2	p = .001192
	CHJIP	91	26			
	ARO	248	71			
4190	IJIP	11	3.6	304	78.9	p = .000000
	CHJIP	94	31			
	ARO	199	65.5			
1450	IJIP	31	10.7	290	75.3	p = .001623
	CHJIP	84	29			
	ARO	175	60.3			
2304	IJIP	29	9.3	309	80.3	p = .000000
	CHJIP	81	26.2			
	ARO	199	64.4			
1800	IJIP	11	3.6	302	78.4	p = .000003
	CHJIP	106	35.1			
	ARO	185	61.3			
3660	IJIP	27	8.1	331	86	p = .004050
	CHJIP	91	27.5			
	ARO	213	64.5			
7880	IJIP	25	7.7	325	84.4	p = .001114
	CHJIP	84	25.8			
	ARO	216	66.5			
1870	IJIP	19	5.9	319	82.9	p = .000000
	CHJIP	47	14.8			
	ARO	253	79.3			
1874	IJIP	65	21.8	299	77.7	p = .020873
	CHJIP	12	4			
	ARO	222	74.2			
1801	IJIP	38	11.5	330	85.7	p = .000419
	CHJIP	82	24.9			
	ARO	210	63.6			
2260	IJIP	21	7.2	290	75.3	p = .000000
	CHJIP	55	18.7			
	ARO	214	73.8			
3590	IJIP	80	23.8	337	87.5	p = .000011
	CHJIP	22	6.5			
	ARO	235	69.7			
1803	IJIP	22	7.4	299	77.7	p = .000003
	CHJIP	78	26			
	ARO	199	66.5			
3500	IJIP	74	21.4	346	89.9	p = .000000
	CHJIP	15	4.3			
	ARO	257	74.3			
1100	IJIP	71	23.1	307	79.7	p = .000583
	CHJIP	14	4.6			
	ARO	222	72.3			
1680	IJIP	9	3.1	290	75.5	p = .000157
	CHJIP	30	10.3			
	ARO	251	86.6			
2317	IJIP	85	26.2	324	84.2	p = .009061
	CHJIP	16	4.9			
	ARO	223	68.8			
2311	IJIP	8	2.4	334	86.8	p = .000011
	CHJIP	63	18.9			
	ARO	263	78.8			
2310	IJIP	14	4.6	303	78.7	p = .000000
	CHJIP	6	2			
	ARO	283	93.4			
2301	IJIP	11	3.4	325	84.4	p = .000000
	CHJIP	42	12.9			
	ARO	272	83.7			
6550	IJIP	80	22.9	349	90.65	p = .001192
	CHJIP	21	6			
	ARO	248	71			

Legend: n = absolute frequency; n% = relative frequency

Translation and selection of interventions of the NIC classification system

The project team decided because of panel discussion for the selection of interventions of NIC classification system (1) according to the list of specialized areas (Anaesthesia Nursing, Critical Care Nursing, Emergency Nursing, Flight Nursing, and Perioperative Nursing). We selected 201 NIC interventions from areas that correspond the Czech context of anaesthesiology, intensive, resuscitation and perioperative nursing care. This list of interventions with definitions passed the first semantic translation into Czech and was consulted at clinical workplace with 20 general nurses specialized in anaesthesiology, resuscitation and intensive care of University Hospital in Brno for a pilot survey of clarity. 17 NIC interventions were excluded after a pilot survey by general nurses, because of mismatch in meaning translation and different perspective of competencies in clinical practice. A new list of 184 NIC interventions was made after subsequent modification (1). The created list was further controllably translated from English into Czech and from Czech into English, was subjected to significant analysis of conformity of two independent translations of the Czech version from experts and incorporated into the record sheet for general nurses in clinical practice in intensive care, department of anaesthesiology and resuscitation and ICU of internal and surgical type.

RESULTS

There were 184 NIC interventions incorporated into the recording sheet in total. These were, according to the taxonomic structure of NIC (1), the following: 38 interventions from basic physiological domain; 107 interventions from the complex physiological domain; 8 interventions from behavioural domain; 17 interventions from domain of safety; 2 interventions from domain of family and 12 interventions from domain of health system. From a total of 184 interventions of NIC classification system (1) in record sheet, 46 NIC interventions were identified as NIC interventions applicable at least once a week in clinical care in the intensive care environment among the investigated group. 15 NIC interventions from basic physiological domain, 21 NIC interventions from the complex physiological domain, 2 NIC interventions from behavioural domain, 4 NIC interventions from domain of safety and 4 NIC interventions from domain of health system were awarded this label according to the taxonomic structure of NIC classification system. Table 1 shows an overview, including a draft translation of the title of NIC interventions into Czech. When comparing workplaces providing intensive care department of anaesthesiology and resuscitation, internal and surgical intensive care units, no significant differences were found among the 14 of NIC interventions records (Table 2). Table 3 shows significant differences in distribution of records on application of NIC interventions in the clinical environment at individual workplaces. 32 interventions confirms the difference of records. General nurses from department of anaesthesiology and resuscitation labelled these NIC interventions in the recording sheet more often as usable at least once a week in their care. 138 of NIC interventions did not achieve the 75% frequency; therefore, they were not identified as applicable in clinical care in the monitored group at least once a week and were excluded from the following phase of investigation.

DISCUSSION

This survey identified 46 NIC interventions (1), identified by the general nurses as useful in clinical practice of intensive care of reference group at least once a week. The results highlighted the diversity of labelling of NIC interventions application among clinical departments of anaesthesiology and resuscitation and ICU. Sector for providing intensive nursing care at anaesthesiology and resuscitation and ICU workplaces is considerably extensive in the Czech Republic. Especially ICU workplaces may differ in the level and narrow specialization of providing care. However, the use of interventions of the classification system does not have to correspond to the competencies of care in our area. It is important to note the lack of studies carried out in an intensive care settings in our country, but also internationally and we suggest the need for further investigation in order to deepen understanding of the issue. The very translation from one language to another can create problems in the context of understanding the significance. Language developed in one culture cannot be automatically used in a different environment. Thoroddsen highlights the semantic equivalence of content and conceptual equivalence of a standardized language (8). Record sheet of our investigation included only independent Czech translations titles and definitions of included NIC interventions, not the individual activities/operations of particular interventions (because of the length of the text). We demonstrate an example of controlled independent translation into Czech, which may affect the assessment of an opinion on the frequency of use of the intervention, on the intervention 3350 Respiratory Monitoring. This was translated as *Sledování dýchání*.

In terms of content equivalence, monitoring →action of monitoring →verb to monitor → to record, to capture, to watch and record, to control (9). Term *monitoring* as an action is commonly used in the Czech specialized texts (10). NIC interventions in classes are listed alphabetically in each edition, which our presented translation Czech version does not allow, and therefore the clinical nurses may have problems with the content orientation. Authors Marečková and Tománková (11) promote the introduction of numerical codes of original versions the essential components of NANDA-I diagnostics of standard terminology. NIC classification system belongs to the standard terminology and it is necessary to accept the idea of numerical codes. Therefore, also our investigation strictly respected the identification of the NIC interventions with the original numerical code. Cross-sectional study from Lucena (12) collects the data about nursing care at ICU from a computer database (a set of 991 hospitalized patients). Even this team of authors highlights the lack of studies in the intensive care settings. Cross mapping of the referred Brazilian study identifies 57 NIC interventions applicable in intensive care environment in the philosophy of a set standard taxonomy structure. Interventions were compared to documented clinical interventions at intensive care unit in relation to the category of nursing diagnostics (for instance risk of infection, inefficient breathing, and self-care deficit). The study has verified that most interventions were recorded as applicable in respect to taxonomic structure of NIC, at the level of basic physiological domain, and complex physiological domain. Defining of these domains is focused on the fundamental issues of impaired homeostatic regulation. Profile of critically hospitalized patients in intensive care is confirmed by findings of 10 NIC interventions in complex physiological domain, K class – Respiratory Management (1), that are associated with impaired respiratory function. The second highest number of similar conformity, as in our survey, was recorded at 9 NIC interventions in basic domain, in F class – Self Care Facilitation (1), relating to the essential basic nursing care, allowing saturation of daily needs and support of comfort. Interventions, which correspond to the type of specialized intensive nursing care, predominate in these domains. However, this published study lacks the numeric codes of described interventions and nursing diagnoses of standard terminology to verify a specific comparison of our survey. Authors in the investigation that involves acute air transports in connection with acute intensive care (13) confirm the usefulness of nomenclature of NIC taxonomy. There were 1435 nursing interventions identified based on documented records during air transports. The authors state that 90% of them could be classified according to NIC taxonomic classification structure. Records during air transport also contained in particular interventions from basic physiological domain (9%), further interventions from the complex physiological domain (71%) and the domain of safety (16%). We noticed most NIC interventions in the physiological complex domain and basic physiological domain in our investigation as well. No record has not been identified in the domain relating to family (the same as in our investigation). The authors suggest that interventions in this domain are less typical in care for patient during air transport. Intravenous therapy has been confirmed as the most frequently recorded intervention in air transportation. In our survey, intervention 4200 Intravenous Therapy was recorded by general nurses in 96%, as an applicable intervention within the minimal care once a week. Our investigation result of NIC intervention 2314, translated as Medication Administration: Intravenous, can be included in similar result. The authors of the article, unlike our investigation, followed the second edition of NIC (3), used the original English language and point out that this edition still does not reflect the advanced level of clinical practice with respect to the level of the internal structure of the NIC taxonomy. An example is, according to them, the NIC intervention Airway Suctioning 3160 (Physiological complex domain, K class), which is defined as an intervention. However, removal of secretion with support of coughing and suctioning of the airways is classified as an activity/action, given as part of the NIC intervention Airway Management 3140 (Physiological complex domain, K class). Detailed analyses of the so-called life-threatening interventions (for instance the already mentioned NIC intervention 3140 Airway Management), appear in the proposals for interventions, relating only to intensive care (14). The author is engaged in activities, which are rather perceived as interventions in a life-threatening situation, and suggests specification of the so-called critical interventions in standard terminologies. Partial steps for implementation of the standard terminology, specifically of the NIC classification into clinical practice, are described also in the default literary source, the original edition of NIC (1). Relevant survey to compare the results on the applicability of standard terminology of intensive care in our country is still at a lower level. Dolák (15) verified the classification of NIC and the expected results of the NOC classification in patients of

intensive care, with nursing diagnosis 00032 Ineffective Breathing Pattern. He focused on activities/actions of interventions 3350, 3390 and 3230 from the NIC classification system. A set for verification consisted of 20 general nurses, who met the modified criteria of an expert (16). The study used Fehring's DCV model. The results of the study showed that the nurses identified only 62 activities as important for use from a total of 158 activities/actions mentioned by NIC interventions. The author encourages further testing in clinical practice in the Czech Republic. Verifying of application of NIC interventions in home care (17) highlights the differences between real interventions and activities recorded in the nursing plan. Naming of nursing interventions by nurses of home care agency failed to reflect the terminology of NIC classification. This observation points to continuously low level of awareness of Czech clinical care nurses about the standard terminology (18).

CONCLUSION

There were 46 of NIC interventions identified from the 184 interventions of NIC classification system (1), selected for the purpose of this investigation, identified by the general nurses as applicable in clinical practice in intensive care at least once a week. These identified NIC interventions are designed for a validation expert evaluation, including incorporated independently compiled activities/actions. The results revealed differences of perception of designation of NIC interventions application among clinical anaesthesiology and resuscitation and ICU workplaces in the reference group. Sector for providing intensive nursing care at anaesthesiology and resuscitation and ICU workplaces is considerably extensive in the Czech Republic. Especially ICU workplaces differ by level of providing care and their narrow specialization. This allows affecting the designation of use of possible interventions, which may not correspond to the competencies of care in our country. Further detailed analysis of survey results of the project of Implementing of NIC interventions for surgical and anaesthesiology and resuscitation workplaces at inpatient facilities in Czech Republic are published gradually.

ETHICAL ASPECTS AND CONFLICT OF INTEREST

The survey was conducted as part of the research project and approved by Faculty of Medicine MU Brno. The authors declare that the research has no conflict of interest. This research survey yielded partial results of the project IGA MZČR NF 12078-4/2011, which supports the implementation of NIC classification system in surgical and anaesthesiology and resuscitation nursing care in clinical practice conditions of the Czech Republic.

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