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Assessment of nurses' communication with department and hospital management in implementation of integrated clinical pathways in Slovenia

Ocena komunikacji pielęgniarek z kierownictwem oddziału i szpitala we wdrażaniu zintegrowanych ścieżek klinicznych w Słowenii

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STRESZCZENIE

OCENA KOMUNIKACJI PIELĘGNIAREK Z KIEROWNICTWEM ODDZIAŁU I SZPITALA WE WDRAŻANIU ZINTEGROWANYCH ŚCIEŻEK KLINICZNYCH W SŁOWENII

Wprowadzenie. Ważnym czynnikiem we wdrażaniu innowacji, takich jak integracyjne ścieżki opieki klinicznej (ICP), jest wspierająca komunikacja ze strony kierownictwa oddziału i szpitala.

Cel pracy. Badanie miało na celu ocenę komunikacji pielęgniarek pracujących w trzech ICP oraz kierowników oddziałów i kierowników szpitali w typowym słoweńskim szpitalu oraz zidentyfikowanie głównych powodów tej komunikacji przy użyciu podejścia metod mieszanych.

Materiał i metody. W badaniu przekrojowym wykorzystano metodę ilościową z ankietą oraz metodę jakościową z wywiadami zogniskowanymi grupami pielęgniarek pracujących w ICP w zakresie: przewlekłe choroby nerek, udar i całkowita endoprotezoplastyka stawu biodrowego w słoweńskim szpitalu.

Wyniki i wnioski. Wyniki pokazały, że komunikacja odgrywa ważną rolę we wdrażaniu ICP i że pielęgniarki gorzej komunikują się z kierownikami szpitali niż z kierownikami oddziałów, niezależnie od wieku, płci, wykształcenia i ICP. Głównymi przyczynami słabej komunikacji w realizacji ICP są zależne od komunikacji (słaba wymiana informacji, brak odpowiednich kanałów komunikacji, jednostronna i autorytatywna komunikacja ze strony kierowników szpitali) oraz organizacyjne (brak personelu, dezorganizacja pielęgniarstwa personel).

Słowa kluczowe: **pielęgniarka, komunikacja, zintegrowana ścieżka kliniczna, zarządzanie szpitalem**

ABSTRACT

ASSESSMENT OF NURSES' COMMUNICATION WITH DEPARTMENT AND HOSPITAL MANAGEMENT IN IMPLEMENTATION OF INTEGRATED CLINICAL PATHWAYS IN SLOVENIA

Introduction. An important factor in the implementation of innovations such as integrative clinical care pathways (ICPs) is supportive communication from department and hospital management. ICPs have been introduced into the clinical environment as a tool to improve the quality, safety and efficiency of health services.

Aim. The study aimed to assess communication of nurses working in three ICPs and department heads and hospital managers in a typical Slovenian hospital and to identify the main reasons for this communication using a mixed methods approach.

Material and methods. The cross-sectional study used a mixed descriptive quantitative method with a survey and a qualitative method with a focus group interviews of nurses working in ICPs for chronic kidney disease, stroke and total hip arthroplasty in a typical Slovenian hospital.

Result and conclusion. The results showed that communication plays an important role in the implementation of ICPs and that nurses communicate worse with hospital managers than with department heads, regardless of age, gender, education and ICPs. The main reasons for poor communication in the implementation of ICPs are communication-related (weak exchange of information, lack of appropriate communication channels, one-sided and authoritative communication on the part of hospital managers) and organisational (lack of staff, disorganisation of nursing staff).

Key words: **nurse, communication, integrated clinical pathway, management hospital**

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INTRODUCTION

In the search for innovative methods to enhance the quality and efficiency of health services, integrated clinical pathways (ICPs) have been introduced [1-3]. Although there is no single definition of ICPs, it can be described as a complex intervention for shared decision-making and organisation of health care processes for a well--defined group of patients during a well-defined period of time, including an explicit statement of the goals and key elements of care based on evidence, best practise and patients' expectations and characteristics [4]. Some authors use the term "integrated" to emphasise the work of multidisciplinary teams that transcend the boundaries of individual healthcare facilities and include all key healthcare professionals and other care settings [1-3,5,6]. However, others emphasise that the term "ICP" is no longer necessary, as care pathways are integrated by definition, as fragmented care pathways cannot exist [7]. The term "clinical pathway" is reserved for the pathway within a clinic or a 24-hour department of a hospital [7].

Research show that quality communication and information provision is essential for the implementation and sustainability of ICPs [8-12]. The introduction of ICPs supports role clarification, communication and access to information and documentation evidence from all disciplines, and top-down support from hospital management, as major changes in existing institutional structures and culture are required, but could also lead to increased workload and emerging team conflicts due to the introduction of ICPs [12]. A study of nurses' views of management communication showed that they value the transformative communication style, which emphasises the manager's ability to find out what is good for both the manager and the employee, integrated communication with motivation of employees to accept change, and a less authoritarian and even less dictatorial communication style [13].

Due to the ageing population and the associated prevalence of commonly treated conditions in older patients such as chronic kidney disease, stroke and total hip arthrosis [14-17], as well as the poor implementation of ICPs in the treatment of these patients in hospital [18], there is a gap in research regarding communication between nurses working in multidisciplinary teams for these three ICPs (chronic kidney disease, stroke and total hip arthrosis) and department and hospital management.

AIM

The aim of the study was to assess the communication of nurses working in ICPs for chronic kidney disease, stroke and total hip arthroplasty and department heads and hospital managers in a typical Slovenian hospital and to identify the main reasons for this communication.

MATERIALS AND METHODS

The cross-sectional study used a mixed descriptive quantitative method with a survey and qualitative method with focus group. Data collection was part of the project "Impact of integrated clinical pathways on patient outcomes, communication and cost-effectiveness" funded by the Slovenian Research Agency (No. L7-2631-3824-2020). The research was approved by the Commission for Medical Ethics of the RS (No. 0120-189 / 2021/3). At the request of the participants, the questionnaire was distributed in printed form. The questionnaires were collected from 7 June to 15 July 2021 in the Nephrology, Neurology and Orthopaedics Department of the Novo mesto General Hospital (SBNM). This hospital was selected because it represents a typical general hospital in Slovenia, one of ten.

Quantitative approach

The research population consisted of nurses treating patient of the three ICPs: chronic kidney disease, stroke and total hip arthroplasty. Data was collected in an online survey. There were 150 completed questionnaires. The sample was dominated by women (n=148, 87%). Most participants were in the age group of 21 to 30 years (29%) and 31 to 40 years (26%), and the fewest were up to 20 years old (2%). The majority of the participants had tertiary education (63%), 37% had secondary education. The majority of participants were members of the multidisciplinary team in the ICP for the treatment of patients with chronic kidney disease (42%) and the fewest in the ICP for the treatment of patients after stroke (22%). For data collection, we used a structured questionnaire based on the similar questionnaires [13,18,19], which was adapted and supplemented for the needs of the study. The first question measured the assessment of communication with the department head (chief physician) and hospital management (director, hospital medical director, nursing deputy, other deputy). It included eight statements that participants rated on a five-point scale from 1 – "I don't agree at all" to 5 – "I totally agree" and "I don't know" (see Table 1). The next set of questions, which included socio-demographic variables, contained five questions on gender, age, educational level, occupation and ICPs. Descriptive analysis and Pearson's and Spearman's coefficients were calculated. Data were coded and analysed using SPSS 24.0.

Qualitative study

All nurses treating patients with chronic kidney disease, stroke and total hip arthroplasty at SBNM were invited to participate in focus groups and 27 responded. Three focus groups (one for each ICP) were conducted with 8-10 participants in each group. The purpose of using the focus group was to verify the data obtained from a quantitative survey and to identify the reasons for the communication assessed. Focus groups were conducted in September and October 2021 at SBNM. Three main thematic questions were addressed: (1) the evaluation of communication with department heads through the introduction of ICPs, (2) the evaluation of communication with hospital managers and (3) the reasons of this communication. The focus group discussions, which lasted on average about 2 hours, were recorded with prior consent of the participants and the (anonymised) statements of the participants were transcribed. The data were analysed using thematic analysis independently by two researchers. After familia-

Tab. 1. Nurses' assessment of communication with department and hospital managers

Statement	I don't agree at all	I don't agree	I am undecided	I agree	I totally agree	I don't know	$\bar{X}$	SD
As a team member, I am satisfied with the communication with the department head.	6 (4%)	9 (6%)	26 (17%)	63 (42%)	38 (25%)	8 (5%)	3.9	1.1
As a team member, I am satisfied with communication with the hospital managers.	11 (7%)	42 (28%)	57 (38%)	24 (16%)	4 (3%)	12 (8%)	3.0	1.3
Department head has an open ear for the suggestion of our team.	6 (4%)	11 (7%)	22 (15%)	60 (40%)	41 (27%)	10 (7%)	4.0	1.2
Hospital managers have an open ear for the suggestion of our team.	12 (8%)	45 (30%)	57 (38%)	21 (14%)	2 (1%)	13 (9%)	3.0	1.3
Department head properly speaks or communicates with our team in writing.	4 (3%)	10 (7%)	28 (19%)	61 (41%)	37 (25%)	10 (7%)	4.0	1.1
Hospital managers properly speak or communicate with our team in writing.	12 (8%)	43 (29%)	53 (35%)	23 (15%)	5 (3%)	14 (9%)	3.1	1.3
With the department head, we solve problems in appropriate communication.	4 (3%)	13 (9%)	24 (16%)	66 (44%)	36 (24%)	7 (5%)	3.9	1.1
With the hospital managers, we solve problems in appropriate communication.	13 (9%)	37 (25%)	58 (39%)	23 (15%)	6 (4%)	13 (9%)	3.1	1.3

risation, the thematic framework was identified with the formation of descriptive statements and the data were analysed according to the questioning route. Due to the limited textual possibilities to present qualitative results, we only present those findings of the qualitative analysis that explain or further illuminate the results of the quantitative analysis.

RESULTS

Table 1. shows that participants rated communication with department head significantly higher than with hospital managers. They were the least satisfied with communication with hospital managers (M=3.0, SD=1.3) and communication with team suggestions (M=3.0, SD=1.3).

The analysis of the focus groups confirmed these findings. Most participants stated that communication with hospital management was one of the main reasons for poor implementation of ICPs. The majority of participants stated that communication with hospital management in general and in implementing ICPs is notably worse than with the heads of departments, as they felt uninformed by the hospital management, which has abolished some established communication channels such as the internal newsletter. A typical statement comes from Participant 2, a 42-year-old nurse who works in the ICP for chronic kidney disease: "The communication with the hospital management has become worse, there is none at all anymore. This is of course noticeable in the implementation of clinical pathways and in general work. Communication has stopped, the internal newsletter has been switched off and we do not even know what is going on.". Most participants also mentioned an inappropriate way of communicating that is one-sided and not inclusive, individualised instead of systemic and authoritative without motivation. A typical statement was from Participant 4, who works in stroke ICP: "Hospital managers only communicate on an individual level and not systematically to all. (...) Also, they only send us new requests, they do not care what we think, no praise of our hard work.".

Most participants also cited organisational reasons for poor communication in general and specifically with the hospital managers, such as lack of nurses' staff and thus lack of time and overwork of nurses and nurses' inability to organise themselves to articulate their problems and bring them to the attention of the hospital managers, as well as general dissatisfaction in the hospital due to lack

Tab. 2. Correlation between assessment of communication with department head and gender, age, education and working in different integral clinical pathways

Statement	Age	Gender	Education	ICPs
	Person's r	Spearmen's r	Spearmen's r	Spearman's r
As a team member, I am satisfied with the communication with the department head.	0,142	0,074	-0,100	0,090
As a team member, I am satisfied with communication with the hospital managers.	0,136	0,038	0,087	-0,159*
Department head has an open ear for the suggestion of our team.	0,155*	0,124	-0,012	0,113
Hospital managers have an open ear for the suggestion of our team.	0,155*	0,094	0,100	-0,032
Department head properly speaks or communicates with our team in writing.	0,169*	0,148	-0,059	0,112
Hospital managers properly speak or communicates with our team in writing.	0,157*	0,095	0,084	-0,049
With the department head, we solve problems in appropriate communication.	0,164*	0,138	-0,048	0,178*
With the hospital managers, we solve problems in appropriate communication.	0,124	0,014	0,078	-0,012

Correlation significant at 0.001(***), 0.01(**), 0.05(*)

of staff. "We have a staff shortage … and we are too tired. ... I must admit, we do not know how to organise ourselves and present the main problems. And the entire staff is dissatisfied with the hospital situation … there is a real problem with staff shortage in general as in other hospitals in Slovenia," said Participant 9, the 44-year-old, who works in the stroke ICP.

Table 2. shows that analysis of the correlation between assessment of communication with department head and gender, age and education suggested no relationship between these variables. There is a negligible statistically significant relationship between some aspects of communication and age and ICPs. The analysis of the focus groups also revealed no significant differences between the participants.

DISCUSSION

An important factor in the adoption of innovations such as ICPs is support from department heads and hospital management. The use of a mixed approach was useful as it showed not only that nurses communicate worse with hospital management than with department heads, but also the main reasons for poor ICTs implementation. These are both the communicative and the organisational levels. This research has confirmed the results of previous studies, according to which, the main problem in introducing innovations is poor communication between hospital management and employees, which is a problem not only in Slovenia but also in other countries worldwide [20].The findings are consistent with the earlier studies that nurses are dissatisfied with hospital management communication [8-12], especially with weak exchange of information, lack of appropriate communication channels, one-sided and authoritative communication on the part of hospital managers.

The findings implication is that hospital managers need to communicate with and motivate staff despite the poor financial situation. Relationships between managers and nurses can be improved if regular communication channels are established and nurses feel that they are informed and involved in the decision-making process. The communication style of hospital management needs to be changed to a transformative style based on regular, open, engaged communication to ensure that members of multidisciplinary teams understand what they are doing, why they are doing it and how their involvement contributes to the success of the hospital. Such communication is based on motivating and strengthening nurses' willingness to embrace change.

The main limitation is that only one Slovenian hospital was included in the study. The results can only give us an insight into the challenges of implementing ICPs in Slovenia and in comparable Eastern European countries. Another important limitation relates to the unusual situation related to the Covid-19 epidemic, where work, communication and collaboration took place in a different way than before the epidemic.

CONCLUSIONS

As there is a gap in research of communication between nurses working in multidisciplinary teams of ICPs and hospital management, the first study to assess nurses' communication with department and hospital managers in the implementation of ICPs showed that communication plays an important role in the implementation of ICPs and that nurses communicate worse with hospital managers than with department heads, regardless of age, gender, education and ICPs. The main reasons for poor communication in the implementation of ICPs are communication-related (weak exchange of information, lack of appropriate communication channels, one-sided and authoritative communication on the part of hospital managers) and organisational ones (lack of staff, disorganisation of nursing staff).

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