

Employees' Satisfaction with Education and Professional Development in a Selected Acute Care Hospital

Špačková, I.; Holá, J.

Faculty of Health Studies, University of Pardubice

Abstract

Introduction: The rapid development of medicine forces healthcare staff to keep up with new trends in health care. The nature of their work necessarily requires lifelong learning. It is a task of hospital management to promote lifelong learning and create enough opportunities for it. Only such a work environment that is favourable to further education and professional development could increase job satisfaction, staff stability and improve the quality of healthcare provided.

Aim: The aim of this paper is to show the importance of lifelong learning for employees of a selected acute care hospital, their satisfaction with the conditions of education and the opportunities for education provided to them by their employer.

Method: The data were collected within a satisfaction survey in a selected acute care hospital. The anonymous online questionnaires were used in this survey. Spearman's correlation coefficient, contingency tables and Chi-square test were used for detailed analysis.

Results: For 82% of hospital staff, lifelong learning is necessary to their work, and for 74% of them, it is very beneficial. However, only 55% of them agree that they have enough education opportunities and only 48% claim that their superior regularly talks to them about their professional development. Physicians show greater interest in lifelong learning and consider it more beneficial for their work than other professional groups of employees.

Conclusion: Lifelong learning is important and beneficial to hospital employees, but they are not satisfied with enough opportunities for education and with hospital management support. This fact negatively affects the assessment of education and professional development by hospital staff.

Keywords: education, healthcare, hospital staff, lifelong learning

Introduction

Employees and their knowledge are very important to organizations in all sectors, especially in healthcare. Effective use of knowledge of educated and qualified employees helps organizations to satisfy their current and future needs and achieve their goals. On the opposite side, organizations must ensure that employees are ready to learn and be able to take responsibility for their education (Armstrong, 2007). It is a task for management to create adequate opportunities for education and to encourage employees to use these opportunities (Koubek, 2015).

As already mentioned in the opening paragraph, employee knowledge is particularly important for healthcare organizations. Healthcare is characterized as a knowledge-based sector that puts high demands on the knowledge and skills of the people working in it. There is a relatively high number of university educated people with specialized knowledge (Zlámál, 2009). Medical facilities must use and coordinate this specialized knowledge and skills of their employees to be able to provide quality health care for patients. Education is a tool for increasing the competitiveness of healthcare

organizations that need to adapt to a rapidly changing environment (Plevová, 2012). The rapid development of medicine and the associated growing demands on healthcare professionals and their knowledge are causing an increased interest in lifelong learning and qualification increase. Healthcare employees must keep up with new trends in medicine and cannot afford to ignore further professional education (Bělohávek, 2006). They must be educated throughout their active careers. Only then, it is possible to maintain a high level of quality of health care and to ensure its development.

Lifelong learning is considered a tool that enables healthcare professionals to obtain new information, the latest knowledge and skills and that responds to dynamic changes in health care delivery (Bártlová, 2006). Investments in lifelong learning are therefore essential. These investments produce future returns for the organization and improve its performance (Covell & Sidani, 2013; Hamed & De Lusignan, 2013). According to Armstrong (2007), these investments also attract high-quality employees, offering them opportunities for education, development and their careers. They increase the flexibility of employees by extending their skills, help to manage changes, create a positive organizational culture, and provide a higher level of service to customers (patients). The result is then qualified personnel contributing to the provision of high quality and safe patient care (Covell, 2008).

Lifelong learning must be a priority for healthcare facilities. Otherwise, there could be mistakes and the safety and health of patients would be jeopardized. It is necessary for hospital management to promote further education of employees. Sufficient opportunities for education are important factors in contributing to higher employee satisfaction in healthcare, stability and loyalty to the organization, but also contribute to higher safety and patient satisfaction (Bártlová, 2006).

Each healthcare organization provides monitoring of patient satisfaction and employee satisfaction by law. Satisfaction monitoring is one of the quality management standards. Monitoring of employee satisfaction includes monitoring their satisfaction with lifelong learning opportunities in the context of professional development and self-realization. The above mentioned is important for assessing the education system and its level in healthcare organizations. Employee satisfaction assessment with education should therefore be part of satisfaction questionnaires.

Aim

The aim of this paper is to demonstrate employee satisfaction with the education system (conditions, opportunities for education) in a selected acute care hospital and to demonstrate the importance and benefits of lifelong learning for hospital staff.

Method

Data for this paper were obtained within a satisfaction survey. The survey took place in December 2015 and January 2016, in a selected acute care hospital and was addressed to all hospital staff, i.e. to a total of 4 595 employees (including 756 physicians, 3 017 non-medical healthcare workers and 822 other employees). The sample of respondents was made up of those who properly filled in the entire questionnaire, which was 34% of all employees (i.e. 1 564 employees, including 174 physicians, 1 178 non-medical healthcare workers and 212 other employees).

In the survey, respondents filled out anonymous online questionnaires based on randomly generated unique password. The questionnaires were designed based on standardized questionnaires of Gallup agency (Gallup, 2008) and surveys conducted in the project Novotný and Pecáková (2014) “Engagement of employees in the Czech Republic”. The proposal of the questionnaire was also discussed with the hospital top management.

The questionnaire included six individual domains (areas) of satisfaction assessment. Now we focused on the second domain (D2) – *education, professional and career development*. The other five domains concerned these topics: the level of the formal setting of work, the quality of management, the level of engagement and conditions of the potential for innovation and cooperation, the level of self-realization, satisfaction with personal and professional development, and the level of belonging to the organization. The last part of the questionnaire contained the seventh section of the verification of importance of selected factors for satisfaction and improving organizational culture. It was also possible to comment or make suggestions at the end of the questionnaire.

Each of the domains mentioned above contained several statements. There were 47 statements in the questionnaire (of which 35 statements were part of the D1 to D6 domains and 12 statements were part of the seventh section). The respondents expressed the degree of consent to the statement on a scale from 1 (definitely agree) to 5 (definitely disagree), ratings 1 and 2 were considered the positive zone for the assessment. In addition, it was possible to state the answer “I cannot judge”.

The employees presented classifying characteristics in the opening part of the questionnaire. Based on these characteristics, their responses were divided into special groups: *professional occupation, membership to a department, job title and length of the employment*.

As already mentioned in the previous paragraph, we focused on the D2 domain – *education, professional and career development* and *professional occupation*. Based on the professional occupation, the hospital staff were divided into the following three groups: *physicians, non-medical healthcare personnel* (including nurses, midwives, radiologic assistants, paramedics, health and social workers, health labs, nutritional therapists, pharmaceutical assistants, physiotherapists, clinical speech therapists and clinical psychologists, medical assistant, medical orderlies, hospital attendants) and *other employees* (including administrative employees, technicians, workmen).

For detailed analysis of the D2 domain, correlation with other domains was determined and contingency tables were used. Spearman’s correlation coefficient was used to express the relationship of the D2 domain to the other domains. Contingency tables were compiled as a basis for testing dependence between two variables. The relative frequencies were calculated and the testing by Chi-square test was used to decide whether the variables (an individual statement and a professional group) in the contingency tables are dependent or not.

Results

This paper presents the survey results of the evaluation of individual domains (D1–D6), the correlation between individual domains and the detailed analysis of statements in domain D2.

Table 1 shows the evaluation of individual domains (D1–D6) in the professional group of physicians, non-medical healthcare personnel and other employees. Attention is focused on domain D2 – *education, professional and career development* and the evaluation scale from 1 to 5 is used. The D2 domain is evaluated (along with the domain D5 – *the level of self-realization, satisfaction*

with personal and professional development) by all employees as the second best (average rating 2.218). However, the domain rating is higher than 2, which is beyond the positive rating zone. A professional group of physicians assesses this domain the best (average rating 2.000). Other employees assess this domain the worst (average rating 2.442).

Tab. 1 The average value of each rated domain in the professional categories

Professional group	D1	D2	D3	D4	D5	D6
Physicians	1.953	2.000	2.393	2.517	2.292	2.819
Non-medical healthcare personnel	1.745	2.210	2.380	2.472	2.219	2.683
Other employees	1.805	2.442	2.402	2.519	2.150	2.465
Total	1.776	2.218	2.385	2.484	2.218	2.668

Table 2 shows correlations between all domains expressed by Spearman's correlation coefficient. Spearman's correlation coefficient was used because the obtained values cannot be considered as normal probability distributions. Only the questionnaires with all answers evaluated on the 1 to 5 scales were used to search for correlation between the domains, the answers "I cannot judge" were eliminated. All results obtained are statistically significant at a level of 0.05; all of them have the character of positive correlation.

Tab. 2 The correlations between domains expressed by Spearman's correlation coefficient

Domains	D1	D2	D3	D4	D5	D6
D1	1.00	0.44	0.46	0.42	0.53	0.51
D2	0.44	1.00	0.68	0.55	0.72	0.57
D3	0.46	0.68	1.00	0.61	0.79	0.57
D4	0.42	0.55	0.61	1.00	0.66	0.61
D5	0.53	0.72	0.79	0.66	1.00	0.70
D6	0.51	0.57	0.57	0.61	0.70	1.00

We can see from the results in the table that the strongest correlation is between the domains D2 – education, professional and career development and D5 – the level of self-realization, satisfaction with personal and professional development (correlation coefficient 0.72). Educational events and their sufficient offer enable professional growth and the realization and development of employees' personal abilities. They improve not only the individual performance but also the performance of the whole organization, for example in the form of better productivity and quality of provided health services.

Domain D2 also has a strong correlation to domain D3 – the quality of management (correlation coefficient 0.68). Good management creates suitable conditions for work, supports and plans employee education and gives hospital staff enough education opportunities.

Domain D2 included 4 statements related to employee education. Contingency tables were used for detailed analysis. The following contingency tables contain the absolute and relative column frequencies (in %) of responses by individual professional groups. Relative column frequencies are calculated to determine whether these frequencies are equally represented in all groups. Equal representation means that there is no dependence between two variables (the response and the professional group).

Tab. 3 Contingency table for the assessment of Statement 1 in the professional categories

	CONTINGENCY TABLE				
	1. Lifelong learning is necessary for my work.	Physicians	Non-medical healthcare personnel	Other employees	Row total
Frequency	1	158	652	80	890
Column frequency		90.80%	55.35%	37.74%	
Frequency	2	12	326	59	397
Column frequency		6.90%	27.67%	27.83%	
Frequency	3	1	100	22	123
Column frequency		0.57%	8.49%	10.38%	
Frequency	4	2	44	16	62
Column frequency		1.15%	3.74%	7.55%	
Frequency	5	1	37	12	50
Column frequency		0.57%	3.14%	5.66%	
Frequency	I cannot judge	0	19	23	42
Column frequency		0.00%	1.61%	10.85%	
Frequency	All groups	174	1178	212	1564

The sum of the relative frequencies in the positive zone (1 and 2) indicates that 97.7% of physicians and 83.02% of non-medical healthcare personnel assess lifelong learning for their work as necessary. Lifelong learning is important only for 65.57% of other employees. Lifelong learning is especially important for healthcare professionals as it extends their knowledge and skills and enables them to be more flexible and better respond to rapid advances in medicine. Physicians consider lifelong learning to be crucial to their work and, of all three professional groups, they rate domain D2 the best (see Table 1).

From the different representation of the relative frequencies in all columns of the contingency table, it can be concluded that there is a dependence between the two observed variables. To test independence/dependence, the Chi-square test with the chosen $\alpha = 0.05$ significance level was used. The calculated p-value is less than $\alpha = 0.05$ ($p < \alpha$), the null hypothesis on the independence of both variables is rejected.

Tab. 4 Contingency table for the assessment of Statement 2 in the professional categories

	CONTINGENCY TABLE				
	2. Lifelong professional learning is very beneficial to me.	Physicians	Non-medical healthcare personnel	Other employees	Row total
Frequency	1	120	467	83	670
Column frequency		68.97%	39.64%	39.15%	
Frequency	2	38	395	54	487
Column frequency		21.84%	33.53%	25.47%	
Frequency	3	9	191	30	230
Column frequency		5.17%	16.21%	14.15%	
Frequency	4	3	57	5	65
Column frequency		1.72%	4.84%	2.36%	
Frequency	5	1	34	7	42
Column frequency		0.57%	2.89%	3.30%	
Frequency	I cannot judge	3	34	33	70
Column frequency		1.72%	2.89%	15.57%	
Frequency	All groups	174	1178	212	1564

The results of statement 2 analysis are similar to the previous question. Most physicians assess lifelong learning as beneficial to them (90.81%). 73.17% of non-medical healthcare personnel and 64.62% of other employees consider lifelong professional education to be beneficial and assess it in a positive rating scale (these results were again obtained by the sum of the relative column frequencies in the positive zone of the assessment 1 and 2). The professional group of physicians most believe that lifelong learning is beneficial to them and also evaluates as the best D2 domain (see Table 1).

From the different relative column frequencies in the contingency table and the calculated p-value (based on the Chi-square test) that is less than the chosen level of significance ($p < \alpha = 0.05$), it is evident that there is a dependence between the professional category and the answer (the null hypothesis on the independence of the variables is rejected).

Lifelong learning should be beneficial regardless of professional status. It improves existing skills, leads to the development of competencies and knowledge that prepares employees for more challenging tasks in the future (Armstrong, 2007). Lifelong learning is beneficial for healthcare professionals because it improves their individual performance and the quality of health services provided by them.

Tab. 5 Contingency table for the assessment of Statement 3 in the professional categories

	CONTINGENCY TABLE				
	3. The hospital gives me enough opportunities for education.	Physicians	Non-medical healthcare personnel	Other employees	Row total
Frequency	1	41	275	43	359
Column frequency		23.56%	23.34%	20.28%	
Frequency	2	50	389	58	497
Column frequency		28.74%	33.02%	27.36%	
Frequency	3	29	254	30	313
Column frequency		16.67%	21.56%	14.15%	
Frequency	4	28	138	22	188
Column frequency		16.09%	11.71%	10.38%	
Frequency	5	21	78	27	126
Column frequency		12.07%	6.62%	12.74%	
Frequency	I cannot judge	5	44	32	81
Column frequency		2.87%	3.74%	15.09%	
Frequency	All groups	174	1178	212	1564

The results of this table show interesting findings. As we can see, only 52.30% of physicians, 56.36% of non-medical healthcare personnel and 47.64% of other employees report that their hospital gives them enough education opportunities. In evaluating this statement, other employees are the most critical. The D2's assessment by other employees is also the worst of all professional groups (see Table 2). It is necessary for hospital managers to recognize the need to support and promote employee education. Managers should provide enough opportunities for education for all professional groups and ensure that their employees use these opportunities.

The p-value calculated based on the Chi-square test is less than the chosen $\alpha = 0.05$ significance level ($p < \alpha$) and relative column frequencies are not equally in the contingency table. This indicates the dependence between the professional group and the evaluation of the statement. The null hypothesis on the independence of the variables is rejected.

Tab. 6 Contingency table for the assessment of Statement 4 in the professional categories

	CONTINGENCY TABLE				
	4. My superior regularly talks to me about my professional development.	Physicians	Non-medical healthcare personnel	Other employees	Row total
Frequency	1	30	237	37	304
Column frequency		17.24%	20.12%	17.45%	
Frequency	2	49	342	50	441
Column frequency		28.16%	29.03%	23.58%	
Frequency	3	43	241	37	321
Column frequency		24.71%	20.46%	17.45%	
Frequency	4	20	188	27	235
Column frequency		11.49%	15.96%	12.74%	
Frequency	5	26	134	36	196
Column frequency		14.94%	11.38%	16.98%	
Frequency	I cannot judge	6	36	25	67
Column frequency		3.45%	3.06%	11.79%	
Frequency	All groups	174	1178	212	1564

It is evident from Table 6 that only 45.40% of physicians think that their superior regularly talks about their further professional development. Only 49.15% of non-medical healthcare personnel and only 41.03% of other employees assess this statement positively. Evaluating this statement, as well as evaluating the D2 domain by other employees, is the worst of all professional categories. Superiors should help and support employees in the preparation and implementation of their professional development plans and provide advice on how to achieve professional qualifications. It is also important for the superior to be able to motivate employees to further education.

As in the previous contingency tables, the Chi-square test and relative column frequencies were used to consider the dependence of the variables observed. The calculated p-value is less than the chosen level of significance 0.05 ($p < \alpha$) and there are different relative columns frequencies, indicating the existence of dependence between the observed variables.

Discussion

The results of the previous analysis show that for 82% of employees, lifelong learning is necessary. Lifelong learning is very beneficial to 74% of employees, but only 55% of them agree that they have enough education opportunities and only 48% claim that their superior regularly talks to them about their professional development.

Physicians show greater interest in lifelong learning and consider it more beneficial than other professional groups. Non-medical healthcare personnel and other employees follow them. Other employees are most dissatisfied with the opportunities for education and report the worst possibility to talk with their superior about their further professional development. On the contrary, non-medical healthcare personnel evaluate these areas from all three professional groups the best.

It would certainly be necessary to assess in more detail recent educational activities and to verify which topics would be appropriate and continue to support them. From the point of view of the survey results, it is necessary to focus on the internal education system and the conditions for further increasing of qualifications by creating educational opportunities. This recommendation is supported by several studies. According to Kamer and Schmalenberg (2004), the support of educational opportunities is one of the most important reasons for a decision to remain in the hospital. The authors state in their article that a direct correlation has been proved between staff retention and ensuring quality education opportunities. Providing opportunities for continuing education is a key motivator, as it increases employee satisfaction (Snyder, 2007). As Bártlová (2006) presents, professional development and education are important factors that increase the stability of medical staff and affect loyalty to the organization. The availability of educational opportunities and their support by management also contribute to job satisfaction and create a positive social climate in the workplace (Kamer & Schmalenberg, 2004). Ensuring quality education by management also has a significant impact on patient satisfaction, the length of employment, reduced incidence of complications, decreasing mortality etc. It also may be related to better education of patients and better medical documentation (Covell, 2008). According to Tomey (2009), most successful hospitals place a significant emphasis on lifelong learning and career development.

Conclusion

Our survey showed that lifelong learning is important and beneficial to hospital employees, but they are not satisfied with enough opportunities for education and with superiors' support. This fact negatively affects the evaluation of the education and professional development area. Physicians expressed greater interest in lifelong learning and consider it more beneficial than other professional groups. Other employees reported the worst opportunities for education and for accessing superiors to the issue of career development.

Based on the survey results, we recommend preparing and implementing a uniform education concept including the specific aspects of individual professional groups with an emphasis on the system of internal education. We also recommend career and professional development as part of employee assessment.

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Ing. Iva Špačková

Faculty of Health Studies, University of Pardubice
Iva.Spackova@upce.cz

doc. Ing. Jana Holá, Ph.D.

Faculty of Health Studies, University of Pardubice
Jana.Hola@upce.cz