

Human Resource Management as an Area of Changes in a Healthcare Institution

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Purpose: The underlying objective of the paper was to investigate the areas that require changes in human resource management in healthcare institutions. The practical objective of the study was to formulate recommendations targeted at the management staff of a healthcare institution, which allow to increase the adaptability and development capacity of medical personnel with the use of appropriate instruments and methods of human resource management.

Patients and Methods: The quantitative research was conducted among 652 patients using the services of primary health care clinics located in the Silesian province in Poland, in 2019. The share of women in the research sample was 61%, and men - 39%. 11% of the respondents were students, 27% - people of retirement age, and 62% were economically active. An anonymous survey questionnaire was used. Calculations were performed using Statistica software. Mann-Whitney *U*-test and correlation analysis using Gamma (Γ) coefficients were used.

Results: The results of the empirical research showed that the respondents positively assessed most of the examined elements (over 70% of positive opinions). Negative opinions did not exceed the error threshold and amounted up to 5%. The presented results allowed to conclude that the expectations and preferences of patients should be constantly monitored, have an impact on the management of medical personnel and imply introducing changes in the weakest areas.

Conclusion: The conducted research made it possible to identify the needs and expectations of patients and to develop possible solutions to improve human resource management in healthcare entities. In order to improve the operating conditions of the clinic, managers should constantly monitor patient satisfaction and, if necessary, introduce changes to raise service standards. This will allow early detection of shortcomings and the introduction of necessary changes in the clinic.

Keywords: human resource management, changes in medical personnel management, healthcare institutions, patient service, patient satisfaction

Introduction

The concept of human resource management perceives people as the main source of success or failure of an organisation. In every organisation, it is the processes of human resource management that are responsible for building human capital and for its effective management. The literature on the subject emphasises that people are the most important element for achieving the goals of an organisation, the efficiency of which depends primarily on their qualifications and skills.

Currently human resources are treated as the most valuable capital of any organisation, as its success depends on their knowledge, competences, and experience.^{1,49,50} This growing importance of personnel management is becoming increasingly apparent in practice. It is appreciated by more and more business entities, regardless of the size and form of ownership, seeing it as the main source of competitive advantage.² Human resource management basically results in increasing the efficiency of employees to their highest possible level, correspondingly to their role in the company. Employees should be managed to ensure that their potential is fully used in accordance with the goals of an organization and in the most effective and efficient way possible.

Nowadays, patient satisfaction is becoming one of the most important indicators of the competitiveness of medical entities.^{34–36,51} Of course - having concern for his health and life as a priority. Getting patients is not easy, but maintaining long-term ties with them is even harder. The element that attracts patients to a given health center - in addition to the positive effects of treatment - is in particular the high quality of services provided. Therefore, it can be concluded that good treatment results and high quality of services have an impact on patient satisfaction and loyalty.^{40–42} In this context, the role of health care managers should be considered, who, by properly managing medical staff, will provide patients with high quality services, and thus - satisfaction with the service. Managers should constantly examine the quality of services provided, ask patients about their relationships with medical staff in order to be able to introduce necessary changes in problem areas. This article shows how to fill the research gap, which is the lack of knowledge of managers in the field of deficiencies and shortcomings of the health center and areas requiring changes in human resource management in order to strengthen patient satisfaction and competitiveness of the health center. The article is dedicated mainly to the management of the treatment entity, which is responsible for adapting the planned changes. It can become a guideline on how to study patients' expectations and, based on them, implement necessary improvements in the area of human resources management.

The main purpose of the article was to examine the areas requiring the implementation of changes in human resource management in health care facilities. The practical aim of the study was to formulate recommendations addressed to the management of a health care facility, allowing to increase the adaptive and developmental abilities of medical staff with the use of appropriate instruments and methods of human resource management. The empirical research was conducted in Poland on a representative sample of respondents for the city of Częstochowa using the survey method, which is discussed in more detail in the "material and methods" section.

Changes in Management of Medical Personnel

The presented study concerns changes in management of medical personnel, mainly in the field of relations between employees and patients with respect to service. These changes are necessary in Polish healthcare entities due to the negative opinions of patients appearing in various studies.^{47,48} The basis for the considerations and conclusions drawn is the assumption that changes in human resource management constitute an indispensable part of the functioning of any organisation, including medical entities, and are a natural consequence of economic development in the conditions of changing environment. The paper uses patient opinion surveys to verify the strengths and weaknesses of services rendered by the surveyed health centres, as a starting point for introducing necessary changes in management of medical personnel. The environment is one of the essential variables considered in management theory, which influences the organisation's functioning in a multilateral manner and requires it to undertake adaptive actions.³ We perceive it as a source of information that continuously generates signals relevant to the enterprise. Changes affect almost every area of life. Regardless of their nature, the researchers assume that they are an essential and indispensable part of management.⁴ It is necessary to understand the need to introduce them and identify problems related to their implementation.

In the literature on the subject, one can find many definitions and classifications of changes, depending on the reference point. According to the American professor of management Ricky W. Griffin,⁵ organisational changes include all significant modifications concerning almost every aspect of the organization.⁶ They refer to technology, management system, corporate form and structure, and human resources.⁷ They also refer to political, economic, financial, technical or socio-cultural dimensions.⁵ The changes may affect the organisation as a whole or its elements. They can emerge due to the pressure of external forces forcing changes in the organisation or various internal points.⁸

The term changes mean the anticipated modifications to how an organisation operates in response to transformations in its immediate and more distant environment, aimed at increasing competitiveness and efficiency.⁹ It is each transition from the current state to the desired shape.¹⁰ A change is each deliberate effort to improve and refine your position on the market. Changes in the organisation are the result of a multi-dimensional process of adaptation to a changing environment. Some may be planned well in advance (planned changes),¹¹ ie changes prepared in advance and implemented in an orderly and timely manner.⁶ Others may emerge as reactions to unplanned events,¹² emerging circumstances, and these are usually gradual changes. Therefore, they can be too hastily and chaotically prepared and improperly implemented.⁵

Moreover, changes can be classified as superficial, more general, or deep, strongly changing the existing conditions, causing long-term consequences. They can be fast or slow, imposed or agreed. Some people use the division into the following changes: functional (concerning processes, introducing new technologies),¹³ structural (implying changes in the structure of a given organisation), evolutionary (not requiring a complete shift in the organisation's strategy),¹⁴ revolutionary (requiring significant interference in the structure, strategic goals, procedures, human resources),^{15,16} organic (as a result of the needs for improvement noticed by the organisation's staff) and forced (when the direction of changes was imposed by outside).¹⁷

Each change is a continuous, complex process consisting of many interrelated events.¹⁸ It is a kind of transformation that is not a single act. It requires managers to carefully discern the internal and external conditions of the organisation's environment, plan improvement and adaptation processes to new situations, motivate people to accept the need for changes and cooperate in their implementation.¹⁹ Each change in the management of an organisation must be viewed as a flexible category that reacts quickly to a rapidly changing environment. The same is happening in health care.²⁰

One of the priorities of any business, including healthcare providers, is to provide the highest quality of customer (patient) service at every stage of their contact with the organization.^{21,22} Patients' needs and expectations are constantly growing. It turns out that a qualified medical team, an excellent location, competitive prices and high-end diagnostic equipment are still not enough to make patients want to use the services of a particular medical facility. Healthcare providers need an efficient human resources department that, by managing the company's most valuable resource - its employees - is able to serve patients in the most satisfactory way possible, thereby ensuring the clinic's ability to meet business needs.²⁵⁻²⁷

Materials and Methods

Research Project

In order to identify areas requiring changes in human resource management in healthcare entities, an anonymous questionnaire was used, targeted at the patients who benefited from the services of a given health centre. This method served as a source of information on subjective perception of the quality of patient service and the involvement of medical personnel in the work performed. The research was carried out in several stages. First, a research tool was constructed in the form of a survey questionnaire, and then distributed to selected health centres. The questionnaires were handed over to patients to be completed after benefiting from health services in a given health centre. The last stage included an analysis and interpretation of the obtained data and the development of possible solutions aimed at improving the quality of services in a healthcare institution, increasing the level of patient satisfaction and identifying the best marketing tools increasing the interest of patients in a given health centre. Negative opinions about the work quality of medical personnel were treated as an element requiring changes in the area of human resource management.

Research Object

The empirical research was conducted on a sample of 652 respondents. They were only adult beneficiaries of services provided by medical entities located in the Silesian Voivodeship (Poland). The share of women in the research sample was 61%, and men – 39%. 11% of the respondents were students, 27% - the retired persons and 62% - professionally active people. The research area covered the most developing healthcare institutions in Częstochowa (Poland), mainly: medical and outpatient health centres as well as hospitals operating privately, commercially, and publicly. The data collection period covered period from January to December 2019 - before the Covid-19 pandemic, due to the fact that in the pandemic period data collection in health centres was impossible – owing to the restrictions introduced by the government (e-visits, closed health centres).

Research Data

In order to collect data, the author employed a survey method with the use of a proprietary anonymous questionnaire. The respondents were to assess various factors influencing the perception of the level of patient service and selected characteristics of medical personnel. The questions were divided into three groups assessing selected elements of patient

service: at the reception desk, by a general practitioner and in a treatment room. The evaluation was carried out on a five-point Likert scale, where 1 meant definitely negative, 2 – rather negative, 3 – indifferent, 4 – rather positive, and 5 – definitely positive.

The research results were developed using methods from the field of multidimensional statistical analysis. The calculations were made using the Statistica package. Due to the scale used in the questionnaire, the study used methods that do not require confirmation of the normality of distribution, typical for quantitative data and presented on an ordinal scale. The data from the survey was analysed using descriptive measures. In order to compare several independent groups of respondents the author employed the Mann–Whitney *U*-test and correlation analysis with the use of Gamma (Γ) coefficients to develop the research results. The reliability and validity of the questionnaire is confirmed by the determined Alpha-Cronbach coefficient (0.956).

Results

The paper presents the results of the research assessing the quality of patient service provided by medical personnel. Patients expressed their opinions on the work of nurses and doctors, which allowed to determine the level of patient service in a health centre. On this basis, the strengths and weaknesses of service rendered by the surveyed health centres were identified and conclusions were drawn about which areas require changes and improvements in human resource management. For this purpose, the relationship between the degree of patient satisfaction with the service and individual elements determining selected characteristics of medical personnel was identified. Various evaluation elements were taken into account, such as: competence and professionalism, commitment, and readiness to help in dealing with matters in a health centre, doctors and nurses' manners, physical appearance, attitude to a patient as well as the pace and quality of service offered by the staff. The conducted analyses proved the existence of statistically significant relationships between the examined elements (Table 1).

Table 1 Assessment of Selected Elements of Patient Service by Medical Staff Employed in Registration According to Age Groups

Test Groups	Assessment of Selected Elements	Professionalism / Expertise	Engagement	Personal Culture	Apparition	Patient Approach	Speed and Service Quality
≤25/26–45	Z	0.381	– 0.796	0.268	0.887	– 1.181	– 0.212
	p	0.703	0.426	0.788	0.375	0.238	0.832
≤25/46–65	Z	– 0.391	– 0.580	– 0.957	0.505	– 1.089	– 0.825
	p	0.696	0.562	0.339	0.613	0.276	0.410
≤25/over 65	Z	– 0.183	– 0.455	– 1.576	0.082	– 0.519	– 0.743
	p	0.855	0.649	0.115	0.935	0.604	0.457
26–45/46–65	Z	– 1.040	0.298	– 1.596	– 0.534	0.105	– 0.837
	p	0.298	0.766	0.110	0.593	0.916	0.403
26–45/ over 65	Z	– 0.755	0.369	– 2.338*	– 1.143	0.778	– 0.840
	p	0.450	0.712	0.019	0.253	0.437	0.401
46–65/ over 65	Z	0.222	0.105	– 0.808	– 0.667	0.642	– 0.008
	p	0.824	0.917	0.419	0.505	0.521	0.993
≤45/over 45	Z	– 0.987	0.045	– 2.344*	– 0.567	– 0.064	– 1.153
	p	0.324	0.964	0.019	0.571	0.949	0.249

Notes: *Statistically significant values at the level of $\alpha = 0.05$. The values of the statistic (Z) and the probability of rejecting the hypothesis of significance of differences in the tested distributions under study (p). Source: Own elaboration.

The analysis shows that the age of the respondents did not significantly affect the assessment of people working at the reception desk. Only personal manners were rated significantly higher by people over 65 years old compared to people aged 26–45 ($Z = -2.338$; $p = 0.019$) and by people up to 45 years old compared to people older than 45 years ($Z = -2.344$; $p = 0.019$). Personal manners, the appearance of medical personnel, professionalism, attitude to a patient or the pace and quality of service are the issues of outmost importance for patients, because they affect confidence in a medical facility and shape its image. All these elements were highly rated by the patients. Despite this, the management staff of the medical entity should pay attention to those elements that were assigned the lowest scores by patients and introduce necessary changes in this area.

Another issue of the analysis was the assessment of a visit to a GP. The interpretation of the results of the research presented in Table 2 showed that people aged over 65 rated the professionalism and competence of doctors significantly higher compared to those aged 26–45 ($Z = -3.734$; $p < 0.001$) and people aged 46–65 years ($Z = -2.948$; $p = 0.003$). People up to 45 years old rated the professionalism of doctors notably lower compared to people older than 45 years ($Z = -2.320$; $p = 0.020$). Commitment, accuracy, and inquisitiveness in solving a health problem were rated significantly higher by people aged over 65 compared to those aged 26–45 ($Z = -2.371$; $p = 0.018$) and people aged 46–65 ($Z = -2.231$; $p = 0.026$). People over 65 years old rated personal manners of doctors significantly higher compared to people up to 25 years old ($Z = -2.466$; $p = 0.014$), and people aged 26–45 ($Z = -2.958$; $p = 0.003$) and people aged 46–65 ($Z = -2.943$; $p = 0.003$). Individual approach to patient was rated significantly higher by people over 65 years old in comparison with people aged 26–45 ($Z = -3.285$; $p = 0.001$) or people aged 46–65 ($Z = -2.678$; $p = 0.007$). Compliance with the principles of medical ethics also plays an important role for patients, and was assessed by people over 65 years old significantly higher compared to people up to 25 years of age ($Z = -2.453$; $p = 0.014$), people aged 26–45 years ($Z = -3.884$; $p < 0.001$) or people aged 46–65 years ($Z = -2.325$; $p = 0.020$). People under 45 years of age assessed compliance with medical ethics significantly lower compared to people older than 45 years old ($Z = -3.180$; $p = 0.001$). It is clearly visible that as the age of respondents increases, ethical issues receive higher scores. The analysis also shows that some elements of a visit to a doctor require changes, especially those with a high negative correlation (Table 2).

Table 2 Assessment of Selected Elements of a Visit to a GP in Breakdown into Age Groups

Test Groups	Assessment of Selected Elements	Professionalism / Expertise	Engagement	Personal Culture	Apparition	Patient Approach
≤25/26–45	Z	1.140	1.191	- 0.063	1.118	0.935
	p	0.254	0.234	0.950	0.264	0.350
≤25/46–65	Z	0.377	1.063	- 0.254	0.535	- 0.562
	p	0.706	0.288	0.799	0.593	0.574
≤25/over 65	Z	- 1.914	- 0.661	- 2.466*	- 1.689	- 2.453*
	p	0.056	0.509	0.014	0.091	0.014
26–45/46–65	Z	- 1.097	- 0.141	- 0.276	- 0.769	- 1.897
	p	0.273	0.888	0.783	0.442	0.058
26–45/ over 65	Z	- 3.734*	- 2.371*	- 2.958*	- 3.285*	- 3.884*
	p	0.000	0.018	0.003	0.001	0.000
46–65/ over 65	Z	- 2.948*	- 2.231*	- 2.943*	- 2.678*	- 2.325*
	p	0.003	0.026	0.003	0.007	0.020
≤45/over 45	Z	- 2.320*	- 0.832	- 1.866	- 1.878	- 3.180*
	p	0.020	0.405	0.062	0.060	0.001

Notes: *Statistically significant values at the level of $\alpha = 0.05$. The values of the statistic (Z) and the probability of rejecting the hypothesis of significance of differences in the tested distributions under study (p). Source: Own elaboration.

Table 3 Values of the Gamma Correlation Coefficients and the Results of Their Significance Tests for the Age of the Respondents and Other Variables Determining the Service Evaluation

Variable:	Test Results		
	Gamma	Z	p
Assessment of service in registration:			
Professionalism / expertise	0.035	0.920	0.357
Engagement	0.005	0.146	0.884
Personal culture	0.119	3.041	0.002
Apparition	0.029	0.707	0.479
Approach to the patient	0.005	0.142	0.887
Speed and quality of service	0.052	1.392	0.164
Precise information	0.051	1.346	0.178
Possibility of dealing with the matter by telephone or via the Internet	0.024	0.676	0.499
GP's assessment of service:			
Professionalism / expertise	0.146	3.742	0.000
Commitment, accuracy, curiosity	0.062	1.647	0.100
Personal culture	0.144	3.620	0.000
Approach to the patient	0.117	3.079	0.002
Compliance with medical ethics	0.185	4.564	0.000
Overall assessment of service:			
In the registration	0.119	3.139	0.002
In the GP's office	0.117	2.977	0.003
In the treatment room	0.211	5.132	0.000

Note: Source: Own elaboration.

In order to deepen the research results, a correlation analysis was also carried out using the Gamma (Γ) coefficients, which is presented in Table 3. The values of the Gamma correlation coefficients and the test results of their significance for the age of the respondents were divided into three groups:

- evaluation of selected characteristics of personnel service during registration,
- evaluation of selected characteristics of a GP,
- general evaluation of service provided at the reception desk, in a treatment room and by a doctor.

The results show that there were many statistically significant correlations between age and the evaluations of customer service quality in health centres. The older the patients are, the higher they evaluate personal manners of a person employed at the reception desk ($\Gamma = 0.119$, $p = 0.002$) and the attitude to a patient by a GP ($\Gamma = 0.117$, $p = 0.002$). The respondents appreciated the commitment ($\Gamma = 0.005$, $p = 0.884$) and the attitude towards patient ($\Gamma = 0.005$, $p = 0.887$) at the reception desk. Also, the overall service assessment at the reception ($\Gamma = 0.119$, $p = 0.002$), in the doctor's surgery ($\Gamma = 0.117$, $p = 0.003$) and in the treatment room ($\Gamma = 0.211$, $p < 0.001$) have been evaluated positively (although these are not fully satisfactory results). There is only a positive correlation between the age of the respondents and individual variables assessing patient service.

Discussion

A characteristic feature of modern economy are changes and the need to constantly adapt to the changing environment. If an organisation wants to function effectively on the market, it must follow new trends and be flexible in its structure and operating strategy. The increasing volatility of economic environment becomes a premise for the verification and implementation of new solutions, also in the personnel sphere.²⁸ The personnel sphere concerns people and the work they perform for an employer. Therefore, when considering the issues of changes in the personnel sphere, one cannot ignore those whose effects of the management's decisions directly concern.²⁹

The fundamental issue of the empirical research undertaken was to identify the areas requiring changes in human resource management in healthcare entities. These issues are particularly important and still topical, and are raised by a number of scientists and practitioners around the world.^{30–32} They are considered mainly from the point of view of improving health care management, improving the quality of medical services, as well as holistic patient service.^{23,33}

Conducting a survey among patients allowed to verify their needs and expectations, as well as to develop possible solutions in the field of human resource management in healthcare entities, mainly aimed at streamlining this process. The research results have shown that the level of customer service by a doctor, a nurse, or a person at the reception desk in the surveyed health centres was highly evaluated. More than 70% of the responses regarding all examined items were positive. Negative opinions did not exceed the error threshold and amounted up to 5%. Such high scores indicate, above all, a satisfactory level of competence from medical personnel and their full commitment to patient service. The results of empirical research contained in the present paper can be compared with the results of international research – Global Health Survey – where over 70% of respondents in 22 out of 28 surveyed countries also positively assessed the work of general practitioners. It should be noted, however, that at the same time, the overall assessment of the functioning of health care system in most of these countries was negative.⁴⁸ The presented research is characterized by similar relations – despite the general dissatisfaction with the functioning of health care – the assessments of patients regarding the work of general practitioners, specialist doctors or other medical personnel (nurses) were high and satisfactory. It should be emphasised that proper and efficient organisation of work in a health centre has a huge impact on scores of patients and determines the level of satisfaction with a medical service.

The issue of examining the level of patient satisfaction with medical services has been undertaken many times on the international scene.^{34–36,51} Just as in this study, Faiza Manzoor³⁴ proved that physician's behaviour has a decisive influence on patient satisfaction and moderates their perception of the quality of health services.²² Scientists from different geographical locations have explored this topic, comparing their research results with others, and looking for the best solutions in these areas.^{37–39}

An attempt to identify factors influencing the quality of medical services in relation to organisation and management has also been undertaken by Vaughn et al,⁴⁰ and others, who have stated that there are many areas in health care that require changes and improvements. They emphasized that understanding and identifying these elements could be the first step to improving the points of health centres with the lowest scores, helping them to solve organisational problems related to its improvement. The research presented by Kader Mohiuddin⁴⁰ has shown a strong relationship between the quality of health services and patient satisfaction. As in the present study, the author proved that the reason for patients leaving for other facilities, even those located outside the country – in this case Bangladesh – is the poor quality of rendered health services, lack of empathy of medical personnel, low level of competence, disregard of patients or lack of professionalism. A. Kader Mohiuddin⁴⁰ noted that these are the elements that clearly require improvement as they influence the prestige of a health centre and prevent patients from continuing treatment there.

Quality improvement in the Italian health care has also been promoted by Sabina De Rosi et al,⁴¹ where the reported experiences of patients were treated as a measure of the quality of health services and were used to analyse the strengths and weaknesses of the surveyed departments. Alagoz et al,⁴² have also focused on improving the quality of medical services, offering support by external agents specialising in this field.

Issues related to holistic assessment affecting the well-being of healthcare personnel, mainly nurses, have been raised by Xiao et al^{43,52} They have adopted different perspectives to identify a process in which human resource management (HRM) oriented towards well-being will affect the comfort of nurses. In particular, to help nurses cope with professional

burnout and heavy workloads, which increased dramatically during the Covid-19 pandemic.^{53,54} They have encouraged healthcare organisations to implement a well-being-oriented HRM by investing in nursing staff, providing engaging work, improving the voice of nurses, creating nursing-friendly work environments, and offering many forms of support related to their work – such as introducing a bonus system or rewarding.^{43,44} The study of the relationship between the quality of professional life and the organizational involvement of paramedical personnel in emergency medical systems in Iran during the COVID-19 pandemic was also addressed in the study by Mohsen Aminizadeha et al.⁵³ It was mainly frontline healthcare workers who were at increased risk of developing health problems during the COVID-19 pandemic, which resulted in psychological problems, including post-traumatic stress disorder, in addition to physical illnesses. These issues have been presented in detail by Ali Sahebi and others.⁵⁵

The analysis and involvement of managers in the implementation of HRM in Polish health care was described by Buchelt et al.⁴⁵ They proved that the lack of managerial competences can become a serious barrier in coping with the challenges posed by the Healthcare 4.0 technology, which was also confirmed by Wehde⁴⁶ in his article. This concept should aim at improving health care as it establishes a new and innovative vision for the healthcare sector. The goal is to provide patients with better, more valuable, and more cost-effective healthcare services, while improving the industry's efficiency and productivity.

The issue of employee participation in the process of management and introducing changes is the main conclusion resulting from this study.^{24,53} The idea is to create a work system based on high commitment of medical personnel, so that employees of a given health centre could participate in decision-making processes. This aims at strengthening the loyalty and attachment of employees to a medical entity. The effectiveness of community participation in achieving positive outcomes at organisational, community and individual levels in health care has been confirmed by Haldane et al,³³ and others.^{22,47} Similar conclusions were drawn by Mohsen Aminizadeh and others. They confirmed that in order to increase the quality of working life and organizational commitment of medical staff, more emphasis should be placed on employee participation in decision-making, opportunities for skills development, lifelong learning and occupational safety.⁵³

Human resource management in healthcare entities should be based on employee participation. Medical personnel should be involved in achieving the health centre's goals, participate in the management process, and influence the implementation of changes and decision-making.

Employees are the pillar of any organisation, in particular health care organisation, and managing their relationships is one of the key functions of human resource management. By taking care of positive relations between medical personnel, patients as well as management staff, good work results can be obtained, at the same time attracting patients to a given health centre and building its reputation.

The conducted research makes it possible to conclude that high qualifications and competences of medical personnel play a vitally important role in the process of improving patient service, however, poor communication significantly reduces their effectiveness. Medical personnel should be properly trained in patient service so that the communication process runs properly. Failure to improve the skills of medical personnel causes them to work schematically, and thus they lack motivation. It is recommended that managers of a health centre organise regular training for medical personnel in the scope of improving communication skills with patient. Moreover, each employee involvement in patient service should be appreciated and rewarded by the management (in healthcare entities a system of motivation, bonus and reward should be applied).

In order for human resource management in a healthcare entity to be effective, it should be supported by carrying out systematic measurements of the level of patient satisfaction, and above all, by analysing and comparing the current results with the previous ones. Patient satisfaction should be constantly monitored by management staff. It should become an indispensable element of effective health centre management. Thanks to regular surveys of patient satisfaction with service, the management staff has the opportunity to identify weaknesses in functioning of a health centre, shortcomings in the service, and then create an action strategy aimed at introducing the necessary changes in human resource management, in the direction of improving patient service. Applying these principles in the long run may bring benefits to a health centre, ensure its competitive advantage, and create comfortable conditions for treating patients.

In the face of growing competition on the health service market, health centres managers should constantly monitor patient satisfaction and, if necessary, introduce changes in the area of human resource management, and thus increase the standards of service.

The management staff should pay attention primarily to negative evaluations and also introduce changes in this area. Excellent service is now a must have of every health centre as it affects patient satisfaction and creates the image of a given health facility.

The results of the presented research can become an inspiration for the management of a health center, and in the future they can be used to verify shortcomings and faults in medical facilities and to introduce changes in the area of human resource management, which will fill the gap in this area.

Limitations of the Study and Future Research

One of the limitations of the research was the Covid-19 pandemic, which made it impossible to continue – due to the government restrictions and lockdown. A significant limitation was also the reluctance of patients to fill in the questionnaire and the lack of involvement of medical personnel in the research process. Thanks to the great dedication and help of the medical staff, we managed to overcome it.

In the future, the research area is planned to be extended to neighbouring countries, as part of international cooperation, so as to perform a comparative analysis.

Practical Implications

The presented results of the empirical research may constitute a starting point for healthcare managers to expand the research sample and continue considerations on changes in human resource management in healthcare institutions. Based on this example, the management staff can create their own monitoring system and their own action strategy with the aim of improving selected areas of management, in particular personnel management.

Conclusion

Negative scores requiring corrective action on the part of the management were identified primarily in terms of personal manners of persons at the reception desk, professionalism, pace and quality of service, and physical appearance. However, in the case of a visit to a doctor, almost all examined elements should be improved, ie individual approach to a patient, professionalism and competence, commitment, accuracy, inquisitiveness, personal manners. or compliance with the principles of medical ethics. These are the elements that require changes with the participation and cooperation of medical personnel.

Data Sharing Statement

The authors confirm that the data supporting the findings of this study are available within the article.

Ethical Approval and Consent to Participate

Ethical approval for the research was received from University of Economics in Bratislava, Slovakia. All ethical aspects of the research were fully respected. Voluntary consent to participate in the study was fulfilled as a fundamental ethical principle. An essential part of the process of obtaining consent to participate in the study was to keep the participant fully informed about the objectives, proceedings, and risks of the study. The study was conducted in accordance with the Declaration of Helsinki.

Author Contributions

Authors contributed to data analysis, drafting, or revising the article, have agreed on the journal to which the article will be submitted, gave final approval of the version to be published, and agree to be accountable for all aspects of the work.

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Disclosure

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References

- Fanelli S, Lanza G, Enna C, Zangrandi A. Managerial competences in public organisations: the healthcare professionals' perspective. *BMC Health Serv Res.* 2020;20(1):303. doi:10.1186/s12913-020-05179-5
- Karna WJ. *Zmiany w zarządzaniu zasobami ludzkimi w administracji samorządowej [Changes in human resources management in local government administration]*. Instytut Spraw Publicznych UJ; 2011. Polish.
- Bojesson C, Fundin A. Exploring microfoundations of dynamic capabilities – challenges, barriers and enablers of organizational change. *JOCM.* 2020;34(1):206–222. doi:10.1108/JOCM-02-2020-0060
- Ford LW, Ford JD. Management is missing in change management. In: Noumair DA, (Rami) Shani AB, editors. *Research in Organizational Change and Development*. Emerald Publishing Limited; 2020:159–182. doi:10.1108/S0897-30162020000028006
- Griffin RW. *Management*. 6th ed. Houghton Mifflin Co; 1999.
- Griffin RW. *Fundamentals of Management*. 10th ed. Cengage; 2022.
- Ballaro JM, Mazzi MA, Holland K. Organization development through effective communication, implementation, and change process. *Organ Dev J.* 2020;38(1):45–63.
- Arghode V, Jandu N, McLean GN. Exploring the connection between organizations and organisms in dealing with change. *EJTD.* 2021;45(4/5):366–380. doi:10.1108/EJTD-06-2020-0095
- Lupina-Wegener AA, Liang S, van Dick R, Ullrich J. Multiple organizational identities and change in ambivalence: the case of a Chinese acquisition in Europe. *JOCM.* 2020;33(7):1253–1275. doi:10.1108/JOCM-08-2019-0260
- Szymański Z, Zaloga W, Ciekawowski Z, Pauliuchuk Y. Implementing changes in the organization as a guarantee of its success. Available from: <https://rep.bstu.by/bitstream/handle/data/9538/160-168.pdf?sequence=1>. Accessed December 29, 2022.
- Onyeneke GB, Abe T. The effect of change leadership on employee attitudinal support for planned organizational change. *JOCM.* 2021;34(2):403–415. doi:10.1108/JOCM-08-2020-0244
- Borges R, Quintas CA. Understanding the individual's reactions to the organizational change: a multidimensional approach. *JOCM.* 2020;33(5):667–681. doi:10.1108/JOCM-09-2019-0279
- Naslund D, Williamson S. A critical analysis of organizational transformation – PSR. *IJQSS.* 2020;12(2):187–200. doi:10.1108/IJQSS-11-2018-0092
- Rosenbaum D, More E, Steane P. Planned organisational change management: forward to the past? An exploratory literature review. *JOCM.* 2018;31(2):286–303. doi:10.1108/JOCM-06-2015-0089
- El-Amin A, George B. Towards a model and strategy for transformational change. *Econ Manage Sustain.* 2020;5(2):28–38. doi:10.14254/jems.2020.5-2-2
- Pechenaya LT, Magomedov MD, Stroeve VV, Karabanova OV, Domarev IE. Comparative assessment of quality and life standards in Russia and Abroad. In: Proceedings of the Russian Conference on Digital Economy and Knowledge Management (RuDEcK 2020); 2020; Atlantis Press. doi:10.2991/aebmr.k.200730.079
- Koźmiński AK, Piotrowski W. *Management. Theory and Practice*. PWN, Warsaw 2022 :493.
- Martinsuo M, Hoverfält P. Change program management: toward a capability for managing value-oriented, integrated multi-project change in its context. *Int J Proj Manag.* 2018;36(1):134–146. doi:10.1016/j.ijproman.2017.04.018
- Sartori R, Costantini A, Ceschi A, Tommasi F. How do you manage change in organizations? Training, development, innovation, and their relationships. *Front Psychol.* 2018;9:313. doi:10.3389/fpsyg.2018.00313
- McShane M, Kirkham K. Making it personal – population health management and the NHS. *JICA.* 2020;28(3):243–252. doi:10.1108/JICA-01-2020-0002
- Mitosis KD, Lamnisos D, Talias MA. Talent management in healthcare: a systematic qualitative review. *Sustainability.* 2021;13(8):4469. doi:10.3390/su13084469
- Vaughn VM, Saint S, Krein SL, et al. Characteristics of healthcare organisations struggling to improve quality: results from a systematic review of qualitative studies. *BMJ Qual Saf.* 2019;28(1):74–84. doi:10.1136/bmjqs-2017-007573
- Fetai V, Fetai N. The factors that influence in human resources management at the clinical hospital in Tetovo. *Eur J Med Nat Sci.* 2020;3(2):6. doi:10.26417/257zfi98g
- Khalid K, Nawab S. Employee participation and employee retention in view of compensation. *SAGE Open.* 2018;8(4):215824401881006. doi:10.1177/2158244018810067
- Blišťáková J, Palenčárová J, Hrušovská D, Kmety Barteková M, Trúchliková M, Raková M. Human resource management in healthcare. *SHS Web Conf.* 2021;115:03003. doi:10.1051/shsconf/202111503003
- Puchalski J. *Zmiany w zarządzaniu zasobami ludzkimi [Changes in human resources management]*. Wyższa Szkoła Handlowa; 2010. Polish.
- Okodogbe E. *Relationship Between Human Resources Management Practices and Employee Intention to Leave Healthcare Organizations*. Northcentral University; 2018.
- Al-Mutawa HA, Manuel P. Human resource information system in healthcare organizations. In: Nagar AK, Jat DS, Marín-Raventós G, Mishra DK, editors. *Intelligent Sustainable Systems*. Vol. 334. Lecture Notes in Networks and Systems. Springer Nature Singapore; 2022:29–43. doi:10.1007/978-981-16-6369-7_4
- Stone RJ, Cox AN, Gavin M. *Human Resource Management*. 10th ed. John Wiley and Sons Australia, Ltd; 2021.

30. Springs D. An exploratory content analysis of human resources management in healthcare organizations. In: Management Association IR, editor. *Research Anthology on Human Resource Practices for the Modern Workforce*. IGI Global; 2022:2092–2102. doi:10.4018/978-1-6684-3873-2.ch104
31. Elsafty A, Ragheb M. The role of human resources management towards healthcare providers retention during Covid-19 pandemic in Egypt. *IBR*. 2021;14(8):67. doi:10.5539/ibr.v14n8p67
32. Barcan M. Study on human resources management systems in health organizations at global level. *Revista Tinerilor Economisti*. 2019;33:32–41.
33. Haldane V, Chuah FLH, Srivastava A, et al. Community participation in health services development, implementation, and evaluation: a systematic review of empowerment, health, community, and process outcomes. Maulsby C, ed. *PLoS One*. 2019;14(5):e0216112. doi:10.1371/journal.pone.0216112
34. Manzoor F, Wei L, Hussain A, Asif M, Shah SIA. Patient satisfaction with health care services; an application of physician's behavior as a moderator. *IJERPH*. 2019;16(18):3318. doi:10.3390/ijerph16183318
35. Dunsch F, Evans DK, Macis M, Wang Q. Bias in patient satisfaction surveys: a threat to measuring healthcare quality. *BMJ Glob Health*. 2018;3(2):e000694. doi:10.1136/bmjgh-2017-000694
36. Ng JHY, Luk BHK. Patient satisfaction: concept analysis in the healthcare context. *Patient Educ Couns*. 2019;102(4):790–796. doi:10.1016/j.pec.2018.11.013
37. Azman NA, Rashid N, Ismail N, Samer S. A conceptual framework of service quality and patient loyalty in muslim friendly healthcare. *Int J Hum Technol Interact*. 2020;4(1):101–106.
38. Jego M, Abcaya J, Ștefan DE, Calvet-Montredon C, Gentile S. Improving health care management in primary care for homeless people: a literature review. *IJERPH*. 2018;15(2):309. doi:10.3390/ijerph15020309
39. Wendt R. *Zarządzanie zmianą w polskiej firmie: Jak w praktyce wykorzystać szansę na rozwój bez porażek [Change management in a Polish company: How to take practical advantage of growth opportunities without failures]*. Zacharek Dom Wydawniczy; 2010. Polish.
40. Mohiuddin AK. Patient satisfaction with healthcare services: Bangladesh perspective. *Int J Pub Health Sci*. 2020;9(1):34. doi:10.11591/ijphs.v9i1.20386
41. De Rosis S, Cerasuolo D, Nuti S. Using patient-reported measures to drive change in healthcare: the experience of the digital, continuous and systematic PREMS observatory in Italy. *BMC Health Serv Res*. 2020;20(1):315. doi:10.1186/s12913-020-05099-4
42. Alagoz E, Chih MY, Hitchcock M, Brown R, Quanbeck A. The use of external change agents to promote quality improvement and organizational change in healthcare organizations: a systematic review. *BMC Health Serv Res*. 2018;18(1):42. doi:10.1186/s12913-018-2856-9
43. Xiao Q, Cooke FL, Chen L. Nurses' well-being and implications for human resource management: a systematic literature review. *Int J Manag Rev*. 2022;ijmr.12295. doi:10.1111/ijmr.12295
44. Androniceau A, Sabie M, Pegulescu A. An integrated approach of the human resources motivation and the quality of health services. *Theor Empir Res Urban Manag*. 2020;15(1):43–53.
45. Buchelt B, Frączkiewicz-Wronka A, Dobrowolska M. The organizational aspect of human resource management as a determinant of the potential of Polish hospitals to manage medical professionals in healthcare 4.0. *Sustainability*. 2020;12(12):5118. doi:10.3390/su12125118
46. Wehde M. Healthcare 4.0. *IEEE Eng Manag Rev*. 2019;47(3):24–28. doi:10.1109/EMR.2019.2930702
47. Stasicka J, Szymański I. *Employee Satisfaction -Empirical Study Among Medical Record Clerks in Poland*. Scientific Papers Of Silesian University Of Technology, Organization And Management; 2022:157.
48. Bromber P, Hady J, Lachowska H, et al. *System ochrony zdrowia w Polsce [The health care system in Poland]*. Wydanie II. CeDeWu; 2020. Polish.
49. Szajt M. *Zróżnicowanie poziomu innowacyjności regionów Unii Europejskiej w latach 2000–2016, Wydawnictwo Politechniki Częstochowskiej [Variation in the level of innovation of the European Union regions from 2000 to 2016]*. Częstochowa; 2020:29–30. Polish.
50. Nobakht S, Shirdel A, Molavi-Taleghani Y, Doustmohammadi MM, Sheikhbardsiri H. Human resources for health: a narrative review of adequacy and distribution of clinical and nonclinical human resources in hospitals of Iran. *Int J Health Plann Manage*. 2018;33(3):560–572. PMID: 29542194. doi:10.1002/hpm.2510
51. Sheikhbardsiri H, Esamaeili Abdar Z, Sheikhasadi H, Ayoubi Mahani S, Sarani A. Observance of patients' rights in emergency department of educational hospitals in south-east Iran. *Int J Hum Rights Healthc*. 2020;13(5):435–444. doi:10.1108/IJHRH-09-2019-0072
52. Sheikhbardsiri H, Khademipour G, Nekoie-Moghadam M, Aminizadeh M. Motivation of the nurses in pre-hospital emergency and educational hospitals emergency in the southeast of Iran. *Int J Health Plann Manage*. 2018;33(1):255–264. PMID: 28877388. doi:10.1002/hpm.2455
53. Jamebozorgi MH, Karamoozian A, Bardsiri TI, Sheikhbardsiri H. Nurses burnout, resilience, and its association with socio-demographic factors during COVID-19 pandemic. *Front Psychiatry*. 2022;12:803506. PMID: 35095618; PMCID: PMC8795765. doi:10.3389/fpsy.2021.803506
54. Aminizadeh M, Saberinia A, Salahi S, Sarhadi M, Jangipour Afshar P, Sheikhbardsiri H. Quality of working life and organizational commitment of Iranian pre-hospital paramedic employees during the 2019 novel coronavirus outbreak. *Int J Healthc Manag*. 2022;15(1):36–44. doi:10.1080/20479700.2020.1836734
55. Sahebi A, Yousefi A, Abdi K, et al. The prevalence of post-traumatic stress disorder among health care workers during the COVID-19 pandemic: an umbrella review and meta-analysis. *Front Psychiatry*. 2021;12:764738. PMID: 34867550; PMCID: PMC8634396. doi:10.3389/fpsy.2021.764738

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