Intangible Motives in Creating Health Workers Satisfaction

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Abstract

The aim of the paper is to determine how much intangible motives are involved in nursing satisfaction. The research population consisted of nurses with secondary and university degrees in the field of multiple health centers in the central part of Croatia. Random selection based on data collected from different nursing associations was used. The survey was conducted in 2019. The dependent variable is the nurses' satisfaction. There are five independent variables: position in the organization, independence in work, communication, work organization and working hours, education and career development. Among the variables included, the most significant correlation with nurses' satisfaction was their existing position in the organization of the health care institution, which is followed by education and career development. Communication is the lowest-ranked intangible motive correlated with respondent satisfaction. The lessons learned are believed to have value and carry an initial message. The intangible motives for creating nursing satisfaction identified in this research can realistically be an incentive and a roadmap for public health managers in a context where the transition economy is unable to respond to the pace of growth in health needs and health spending through an existing approach where material motivations have dominated in creating satisfaction for healthcare professionals.

Keywords: satisfaction, healthcare professionals, intangible motives.

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Introduction

Motivation and creation of employee satisfaction is especially important in sectors that play a large role in society such as public health. This is especially emphasized in the characteristics of the current state of public health in transition countries like Croatia. In addition to the increased demand for staff, the pronounced outflow of workers into developed countries and the steep rise in health care needs, creating satisfaction for healthcare professionals is becoming increasingly complex. Transition countries are increasingly unable to monitor the rise in health needs and health spending, which now puts the material motives of health care workers, which until yesterday were primary, in a secondary position. Instead, intangible motives are increasingly emphasized, and thus the need to investigate them more thoroughly. A lot of research into these motifs has been published so far, but the value of these studies is relative to transition societies, given that they are mainly based on health systems research in developed countries. Therefore, the research presented in this paper may be considered valuable and current. In an age when human and intellectual capital are key to nonprofit organizations, effective systems of employee motivation and satisfaction are the two most important factors in achieving business goals (Armstrong & Brown, 2006).

The aim of this paper is to explore the intangible motives in creating satisfaction for health care workers, namely nurses. In other words: determine how much these intangible motives are involved in nurses' satisfaction? How significant are these intangible motives and do they participate in the motivation of nurses in the study population? The hypothesis is that intangible motives play a significant role in the motivation of nurses. Namely, it can be assumed that the call of nurses to help people with health problems is that instead of material motives (which should not be underestimated), intangible motives are more significant drivers of their work. After all, in the increasingly difficult conditions of financing health care in the Republic of Croatia as a transition country, nurses have so far faced a number of situations with inadequate salaries and other material incentives, but this has almost never affected the quality of health services and patient satisfaction. Multiple regression analysis was used in the study. The research seeks to encourage management in health care institutions to take a more active approach to intangible motives in conditions of limited financing of health spending, with the aim of creating greater satisfaction for health care professionals, which would directly reflect the increase in quality of health services and patient satisfaction. The study included seven intangible motives that are thought to be primary in the work incentive of nurses.

Healthcare workers' satisfaction

There is no clear and generally accepted definition of employee's satisfaction with their jobs. First, employee satisfaction with his job represents his subjective experience and the feeling that arose from his experience in performing work tasks. The most common factors of job satisfaction are individual employee characteristics, job character, organizational culture, running the organization, etc. Understanding job satisfaction is a key factor in understanding employees' attitudes and behavior and in measuring organizational effectiveness.

Zangaro and Soeken (2007) explored the relationship between job satisfaction, job autonomy, collaboration, and stress among nurses and physicians. The results of their meta-analysis were determined and validated on a sample of 14.000 subjects.

The results of another survey of job satisfaction on a very large sample of as many as 43.000 nurses from 700 hospitals in five countries indicate generally low job

satisfaction of the nurses they perform. This satisfaction was in Canada 33%, England 36%, Scotland 38%, USA 41%, and Germany 17%.

The impact of unmotivated healthcare staff on patient dissatisfaction is direct. If patients are dissatisfied with the service, there is certainly a reliable reason and evidence of this dissatisfaction with unmotivated health care staff. The level of satisfaction or dissatisfaction of healthcare professionals is directly reflected in the quality of healthcare services and patients' expectations. Brent Jacobsen's survey of health service quality perceptions is known, with 6,000 patients participating (Brent, 1989). It was about the perceived quality of health care services at Intermountain Hospital, USA. Cluster analysis was used to obtain three patient segments according to the perceptions of this hospital's healthcare services. Patients presented the quality of health care services through as many as 30 factors. The twelve firsts are: hospital cleanliness; ease of procedure on arrival and departure to the hospital; precision and clarity in communication with healthcare staff; behavior of health professionals; response time of healthcare professionals upon patient invitation; availability and level of medical equipment and technology; nursing competence; physician availability; the speed of response of healthcare professionals in complications of patient health; availability and speed of operation of the emergency medical team; prices of health services provided; taste and freshness of food. All of these factors were very closely correlated with the level of satisfaction of the healthcare professionals who provided these services to patients.

Intangible motives of satisfaction

Intangible employee motives most often relate to gratitude from management and managers, praise from managers, learning and development opportunities as employees of the organization, flexible working hours, independence and autonomy in their work areas, etc. More research shows that health professionals' satisfaction is intangible rewards positively associated with less employee leave and greater commitment to health care facilities (Shields et al., 2012), commitment to work and engagement (Bakker, 2011), better communication with patients and other healthcare professionals, and even physical and mental health (Shaw & Gupta, 2015).

Among the intangible motivators of health professionals, the following are most commonly confirmed: Position in the organization, Independence in work, Communications, Organization of work, Education, Career development, and Flexible working hours.

The position held by the health care provider in the organization of the health care institutions and promotion in the institutions are confirmed motives of satisfaction of health care workers. The Nursing Survey confirms that the first rank among nursing motivational components was an area in which nurses exercise direct control (includes power, position / grade, engagement) and the ability for nurses to follow their professional and ethical standards when performing their work (Jaiswal et al., 2014). Nurse executives and nurses in leadership positions, and nurse practitioners are more motivated than other nurses (Koch et al., 2014). Furthermore, nurses were more motivated by effective communication, work and morale ethics, recognition of their hard work, and various intangible rewards such as praise, public recognition, thank-you notes, etc. (Ayyashet & Aljeesh, 2011). These motives have been confirmed in several other studies. Nurses with years of experience over 5 years have indicated as intangible motives for their satisfaction that they want recognition and rewards for their work (Gaki et al., 2013). In addition, more experienced employees in health care settings have been confirmed to be satisfied with

compensation for overtime work and special patient care, recognition for working in difficult conditions, and independence in work (Zarei et al., 2016). One study confirmed that 57% of respondents (regardless of age and status in the organization) were not satisfied with their working conditions. They rated the working conditions as the worst (Pietersen, 2005).

Independence in work has been confirmed in several studies as a significant motive in correlation with employee satisfaction. A study conducted in Estonia found that there was a positive relationship between the autonomy of health workers in work and work motivation (Toode, 2015). A study conducted among nurses in Italy also found that there is a positive relationship between job autonomy and motivation, and the autonomy and retention of healthcare professionals in a healthcare facility (Galletta et al., 2011).

Communication within a healthcare facility (among healthcare professionals as well as patients) is a significant intangible factor of satisfaction. It has been acknowledged that the very sense of membership of an effective healthcare team and the existence of a relationship of respect among team members is associated with an increase in nurses' motivation and satisfaction (Toode, 2015).

The organization of work perceived by healthcare professionals through a clear job description, competencies, responsibilities, competencies, the role of nurses and the availability of patient care aids has been identified as a motivating factor among nurses (Said et al., 2013). The results of some studies show that only 49% of the respondents were satisfied with the organization of the health institution in which they work (Pietersen, 2005). High standards of health service delivery, as part of poor organization, lead to misdiagnosis, wrong indications, omissions in therapy, inadequate care, which causes dissatisfaction among healthcare professionals. Too many patients reduce the time for healthcare professionals for each patient. The same study also found that a small number of patients do not allow healthcare professionals to make sufficient use of the knowledge they have acquired (Westawayet al., 2003).

A positive relationship was found between the motivation and education of health professionals. Exposure to appropriate educational programs can support the development of nursing motivation (Iranmaneshet al., 2014). Access to important work training is a major factor affecting motivation (Thu et al., 2015). Among all the motivating factors, nurses rated the professional development grade highest, as it improves self-esteem, and increases opportunities for advancement (Ayyash & Aljeesh, 2011). The results of a larger survey indicate that the majority of nursing staff (63%) are dissatisfied with their coaches. 65% think that coaches do not support them, and 68% think they are irritated and 55% do not understand their problems (Pietersen, 2005).

The results show that 80% of healthcare professionals were highly motivated by training and career development (Ankomah et al., 2016). Lack of promotion or poor promotion system were considered as demotivating factors by nurses as other health care professionals (Zinnenet al., 2012). Employee advancement in the business ranked first in the ranking of all motives in one survey (Hahn, 2006). It is confirmed that the vast majority (67%) of the respondents believe that the management of the health care institution does not support enough employees, which makes them dissatisfied (Pietersen, 2005).

Flexible working hours in several studies have been confirmed as an important motive for nurses (Bonsdorff, 2011). In addition, the vacation adequacy factor can motivate staff in the organization (Purohit et al., 2016). Motivation was very low

among healthcare professionals who worked night shifts that are more frequent or encountered high workloads (Thu et al., 2015).

Methodology

Several databases were consulted in this paper. Primarily MEDLINE and PubMed, then Science Direct and ProQuest. The primary data source was a structured survey questionnaire constructed for the purposes of this research. The constructions are derived from the questionnaires of the authors cited in this paper. The study did not present significant risks for participants as it was not primarily focused on providing ethical decisions for clinical trials involving new drugs, experimental studies, and studies requiring human biological samples. The survey was completely anonymous. Verbal consent was obtained from each participant. All participants were provided with information about the research goals and process. In order to protect participants from the risk of the survey, participants' names, identification numbers and names of health care institutions and physicians were not recorded. Interviewers interviewed respondents on premises that were not part of health facilities or premises. It was performed between March and June 2019.

The research population consisted of nurses with secondary and university degrees in the field of multiple health centers in the central part of Croatia. Random selection based on data collected from different nursing associations was used. Unfortunately, healthcare institutions have not shown the understanding and understanding to allow access to this sampling. The survey included 110 nurses, which represented more than 10% of the estimated total population. The survey was conducted through a structured survey questionnaire compiled according to the model of a five-point Likert scale with 15 statements. Respondents were offered five levels of agreement with these claims: always (1), quite often (2), sometimes (3), rarely (4), never (5).

The questionnaire had two parts. The first one included three demographic characteristics of the respondents. Age: up to 30 years, second from 31 to 50 and third 51 and above. Vocational training: medium, high. Years of service: up to ten years, from 11 to 25, and 26 and older. In the second, claims and levels of agreement were presented.

The dependent variable is: Nurses' satisfaction. There are five independent variables: position in the organization (1), independence in work (2), communication (3), work organization and working hours (4), education and career development (5). It wants to prove that nursing satisfaction as a dependent variable is influenced by these five independent variables.

Statistical analysis method with emphasis on multiple regression analysis was applied. Cronbach alpha indicators were used to determine the reliability of the scales (Cronbach, 1951). Microsoft Excel software and SPSS (Statistical Package for Social Sciences, 21.0) software were used in the data processing.

Results

Demographic characteristics of respondents (descriptive statistics of respondents) are presented in Table 1.

Table 1
Demographic characteristics of respondents

Characteristics of the respondents group	Number of respondents	Percentage participation
1. Age (years)	110	100.00
1.1. to 30	21	19.09
1.2. 31 -50	63	57.27
1.3. 51 and more	26	23.64
2. Qualifications	110	100.00
2.1. secondary	86	78.18
2.2. high	24	21.82
3. Years of working	110	100.00
3.1. to 10	27	24.55
3.2. 11-25	64	58.18
3.3. 26 and more	19	17.27

Source: author

The average age of the respondents is between 31 and 50 years of age, they have secondary education with work experience in the profession between 11 and 25 years.

Table 2
Rating reliability of scales (Cronbach alpha values)

Intangible motives	Calculated alpha	Reference alpha	Reliability
Position in the organization (1)	0.8104	0.8 do 0.9	good
Independence in work (2)	0.7922	0.7 do 0.8	acceptable
Communication (3)	0.9516	0.9 do 1.0	excellent
Organization of work and working hours (4)	0.9401	0.9 do 1.0	excellent
Acquisition of new knowledge and career development (5)	0.8275	0.8 do 0.9	good

Source: author

All intangible motive variables are acceptable given that their calculated Cronbach alpha values are greater than 0.7 (Table 2). It should be noted that of the five independent variables, two are good, two are excellent and one is acceptable. The reliability of all five variables included is acceptable for further statistical analysis.

Table 3
Correlation matrix of independent variables

	1	2	3	4	5
1	1				
2	0.8215	1			
3	0.7496	0.6301	1		
4	0.4917	0.3724	0.2619	1	
5	0.9038	0.5372	0.4608	0.6620	1

Meanings: 1 - position in the organization, 2 - independence in work, 3 - communication, 4 - organization of work and working time, 5 - acquisition of new knowledge and career development

Source: author

To determine whether there was a statistically significant relationship between the independent variables, degrees of linear dependence were determined. The Pearson coefficients shown (Table 3) indicate that all values obtained are statistically significant at a significance level of 0.01. The correlation is strongest between position in the organization and acquisition of new knowledge and career development. A strong correlation was found between position in the organization and independence in work. There is a moderate correlation between position in organization and communication, independence in work and communication, and between organization of work and working hours and acquisition of new knowledge and career development. Poor correlation was found in the independence of work and organization of work and working hours and communication and organization of work and working hours.

Table 4
Multicollinearity of independent variables

	(1)	(2)	(3)	(4)	(5)
VIF	0.2571	0.4059	0.1836	0.3802	0.2729

Source: author

The values of VIF coefficients (variance inflation factor) were calculated based on the approach and procedure presented by Field (2000) and Yoo et al. (2014). The calculated values for all five independent variables are less than 5.00 which means that the calculated data are suitable for applying multiple regression analysis and that there is no multicollinearity problem among the included variables (Table 4).

Table 5
Results of multiple regression analysis

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Intangible motives	$oldsymbol{eta}$	t	р		
Position in the organization	0.3102	1.3752	0.04273		
Independence in work	0.1104	0.8603	0.38961		
Communication	0.0574	- 0.2207	0.44852		
Organization of work and working hours	0.0886	1.9478	0.06380		
Acquisition of new knowledge and career development	0.1415	2.3511	0.35016		

Source: author

The coefficient of determination indicates that all five of the included independent variables, i.e. intangible motives, influence nurses' satisfaction with 33.76% of the variance. This percentage of the sum of the total squares of deviations was interpreted by the relationship between intangible motives and the nurses' job satisfaction. Therefore, this indicator can be accepted as a statistically significant result.

Table 5 presents the results of the multiple regression analysis. Among the variables included, the most significant correlation with nurses' satisfaction was their existing or target position in the organization of the health care institution (β = 0.3102, t = 1.3752, p <0.05). This is followed by acquisition of new knowledge and career development (β = 0.1515, t = 2.3511, p <0.05). Independence in work is a third-ranked intangible motive that correlates with respondent satisfaction (β = 0.1104, t = 0.8603, p <0.05).

It is interesting that work organization and working hours do not have a stronger correlation with nurses' satisfaction, that is, the same independent variable is not significantly perceived in creating satisfaction ($\beta = 0.0886$, t = 1.9478, p >0.05).

Communication is the lowest-ranked intangible motive correlated with respondent satisfaction (β = 0.0574, t = -0.2207, p <0.05).

Four independent variables: position in the organization, independence in work, communication and training and career development have a statistically significant effect on job satisfaction (since p < 0.05), whereas work organization and working time have no statistically significant effect (p > 0.05).

None of the three nurses' demographic characteristics showed significant statistical differences, and for this reason (but also because of the limited space of presentation of results, they are omitted from presentation.

Discussion

Since the coefficient of determination was found to indicate that all five included independent variables, ie intangible motives, influence nurses' satisfaction with 33.76% of the variance, it can be considered that, the set work goal was achieved and the hypothesis was confirmed. The most significant correlation with nurses' satisfaction is their existing or targeted position in the organization of the healthcare institution. Jaiswal et al. (2014) also found on a much larger sample than this that the first rank among the motivational components of nurses was an area in which nurses exercise direct control. The study did not identify the positions of nurses, respondents in the health care hierarchy, so it was not possible to determine whether nurses in leadership positions were more motivated by this position than other nurses, as investigated by Koch et al. (2014). Nurses with more than five years of experience have not shown statistically significant differences with respect to other age groups within the variable of positions in the organization through an aspiration for awards and awards for their work, which Gaki et al. (2013). So the results of these studies do not confirm their findings. Communication in this research is the lowest ranked variable correlated with nursing satisfaction. The results obtained by Ayyashet and Aljeesh (2011) autonomy is the third ranked variable correlated with nursina satisfaction creation. This confirms the results obtained by Toode et al. (2015). Work organization and working hours do not have a stronger correlation with nurses' satisfaction, which is in contrast to the results of Said et al. (2013). Where work organization is perceived by healthcare professionals through a clear job description, competencies, responsibilities, competencies, the role of nurses and the availability of patient care aids. The low correlation of nursing organization and perceived nursing satisfaction is a highly debatable result, as these nurses have highlighted their position in the organization and autonomy in work as significantly correlated variables with satisfaction. However, both of these variables showed poor interconnection in the correlation matrix as well.

Acquisition of new knowledge and career development is a highly correlated variable in nursing satisfaction in research. This result confirms the findings of earlier studies by numerous researchers: Iranmanesh et al. (2014), Toode et al. (2015), Ayyash and Aljeesh (2011). The claims in the Likert scale were constructed with an emphasis on acquiring new knowledge and implementing that knowledge in work, and did not significantly relate to the career development and nursing career plans. This left out the possibility of validating the results obtained by Ankomah et al. (2016), Zinnen et al. (2012), Hahn (2006), and Pietersen (2005).

Conclusion

Although the results of this research cannot be compared with the results of a similar research in the Republic of Croatia, because they have not been reported by the authors so far, it is believed that the lessons learned have their value and carry an initial message. They primarily point out that health care facilities should be managed by people trained in the modern concept of health care management. Existing management concepts that are not based on management are proven ineffective on a daily basis. The concept of management in healthcare includes, among other things, the management of human resources as the most valuable resources of healthcare institutions. Creating satisfaction and managing employee satisfaction in health care facilities is directly reflected in the quality of healthcare services and patient satisfaction. In a situation where the transition economy is unable to respond to the pace of growth in health needs and health spending, management knowledge in healthcare institutions in managing the motivation and satisfaction of healthcare professionals becomes a crucial issue. The intangible motives for creating this satisfaction, as identified in this research, can realistically be both an incentive and a roadmap for managers in both public and private health care settings.

References

- Ankomah, S. E., Kumah, E., Karikari A. K. (2016), "Health worker motivation in Ghana: the role of non-financial incentives. A case study of Accident and Emergency Department of KomfoAnokye Teaching Hospital", International Journal of Biosciences, Healthcare Technology and Management, Vol. 6, No. 4, pp. 34-49.
- 2. Armstrong, M., Brown, D. (2006), Strategic reward: making it happen, Kogan Page, London.
- 3. Ayyash, H., Aljeesh, Y. (2011), "Nurses' motivation and their performance at European Gaza Hospital in Gaza Strip", Journal of Al Azhar University-Gaza (Natural Sciences), Vol. 13, pp. 55-68.
- 4. Bakker, A. (2011), "An evidence-based model of work engagement", Psychological Science, Vol. 20, No. 4, pp. 163-178.
- 5. Bonsdorff, M. E. (2011), "Age-related differences in reward preferences", The International Journal of Human Resource Management, Vol. 22, No. 6, pp. 1262-1276.
- 6. Brent, C. J. (1989), Quality management for health care delivery. The Hospital Research and Educational. Trust of the American Hospital Association, Chicago.
- 7. Cronbach, L. J. (1951), "Coeficient Alfa and the internal structure of test", Psychometrica, Vol. 16, No. 3, pp. 297-334.
- 8. Field, A. (2000), Discovering statistics using SPSS for Windows, Sage, Thousand Oaks.
- 9. Gaki, E., Kontodimopoulos, N., Niakas, D. (2013), "Investigating demographic, work-related and job satisfaction variables as predictors of motivation in Greek nurses", Journal of Nursing Management, Vol. 21, No. 3, pp. 483-490.
- 10. Galletta, M., Portoghese, I., Battistelli, A. (2011), "Intrinsic motivation, job autonomy and turnover intention in the Italian healthcare: The mediating role of affective commitment", Journal of Management Research, Vol. 3, No. 2, Article E7.
- 11. Hahn, O. K. (2006), Patient relationship management, Springer.
- 12. Iranmanesh, S., Fuladvandi, M., Ameri, G. F., Bahrampoor, A. (2014), "Iranian nurses' organizational commitment and job motivation", Asian Journal of Nursing Education and Research, Vol. 4, No. 2, pp. 189-194.
- 13. Jaiswal, P., Singhal, A. K., Gadpayle, A. K., Sachdeva, S., Padaria, R. (2014), "Level of motivation amongst health personnel working in a tertiary care government hospital of New Delhi, India", Indian Journal of Community Medicine, Vol. 39, No. 4, pp. 235-240.

- 14. Koch, S. H., Proynova, R., Paech, B., Wetter, T. (2014), "The perfectly motivated nurse and the others: workplace and personal characteristics impact preference of nursing tasks", Journal of Nursing Management, Vol. 22, No. 8, pp. 1054-1064.
- 15. Pietersen, C. (2005), "Job satisfaction of hospital nursing staff", South African Journal of Human Resources Management, Vol. 3, No. 2, pp. 132-144.
- 16. Purohit, B., Maneskar, A., Saxena, D. (2016), "Developing a tool to assess motivation among health service providers working with public health system in India", Human Resources for Health, Vol. 14, Article 15.
- 17. Said, R. M., Abed, F. A., Abdo, L. M. (2013), "Work motivating factors as identified by nurses in Children Hospital at Elmonira and Specialized Pediatric Hospital Cairo University", The Medical Journal of Cairo University, Vol. 81, No. 2, pp. 27-31.
- 18. Shaw, J., Gupta, N. (2015), "Let the evidence speak again! Financial incentives are more effective than we thought", Human Resource Management Journal, Vol. 25, No. 3, pp. 311-326.
- 19. Shields, J., Scott, D., Bishop, J., Golezer, P. (2012), "Pay perception and their relationship with cooperation, commitment and intent to quit", International Studies of Management and Organizations, Vol. 42, No. 1, pp. 87-103.
- 20. Toode, K., Routasalo, P., Helminen, M. and Suominen, T. (2015), "Hospital nurses' work motivation", Scandinavian journal of caring sciences, Vol. 29, No. 2, pp.248-257.
- 21. Thu, N. T. H., Wilson, A., McDonald, F. (2015), "Motivation or demotivation of health workers providing maternal health services in rural areas in Vietnam: findings from a mixed-methods study", Human Resources for Health, Vol. 13, Article 91.
- 22. Westaway, M. S., Rheeder, P., Zyl, D. V. (2003), "Interpersonal and organizational dimensions of patient satisfaction: the moderating effects of health status", International Journal for Quality in Health Care, Vol. 15, No. 4, pp. 311-327.
- 23. Yoo, W., Mayberry, R., Rae, S., Singh, K., He, Q. P., Lillard, J. W. (2014), "A study of effects of multicolinearity in thr multivariable analysis", International Journal of Applied Science and Technology, Vol. 4, No. 5, pp. 9-19.
- 24. Zangaro, G., Soeken, K. (2007), "A meta-analysis of nurses' job satisfaction", Research in Nursing and Health, Vol. 30, No. 4, pp. 463-482.
- 25. Zarei, E., Najafi, M., Rajaee, R., Shamseddini, A. (2016), "Determinants of job motivation among frontline employees at hospitals in Tehran", Electronic Physician, Vol. 8, No. 4, pp. 2249-2254.
- 26. Zinnen, V., Paul, E., Mwisongo, A., Nyato, D., Robert, A. (2012), "Motivation of human resources for health: a case study at rural district level in Tanzania", The International Journal of Health Planning and Management, Vol. 27, No. 4, pp. 327-347.

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