



Views of the Slovenian nursing profession regarding leadership

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ABSTRACT

Introduction: New, up-to-date approaches to professionalism presuppose the formation of a nursing team in such a way that relationships are not based on classical hierarchical relationships between superiors and subordinates but on relationships of interdependence and acknowledgment of the role the individual plays in the team. The objective of this article is to present the competences required by nurses in top organizational leadership positions from two viewpoints: as seen by nurses in top leadership positions and as seen by nurses in subordinate positions.

Methods: A descriptive research method using a questionnaire as the measuring instrument was used. The questionnaire was based on the competence model of leadership in public administration in Slovenia and was tested on various professional groups.

Results: Statistically significant differences were observed with regard to the majority of competences between nurses in top leadership positions and nurses in non-leadership positions. Therefore, the views regarding what competences nurses in leadership positions should have substantially differed within the professional group.

Conclusions: The first conclusion is therefore that education on leadership on both the theoretical and practical levels must be introduced into undergraduate study programmes of health colleges. With the help of factor analysis we formed five subgroups within the professional group of nurses: three subgroups within the group of nurses in leadership positions and two subgroups within the group of nurses in non-leadership positions. A special education programme should be prepared for each of these subgroups.

Keywords: leadership, nursing, education, competence, nursing team

INTRODUCTION

Leadership is undoubtedly one of the most important fields that influence successfulness or unsuccessfulness of particular organization. New concepts

of leadership include new, previously neglected topics. The assortment of competences, which should be possessed by leader, is expanding and changing, as are methods for education of leaders that should prepare them for the new conditions (1-4).

The tendency of the nursing field and nurses respectively to form a profession based on the models of medicine and doctors respectively should be viewed within the framework of the new conditions. In a transitional period we need a combination of ap-

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Submitted 10 March 2013 / Accepted 26 March 2013



proaches requiring a “classical” understanding of professionalism (5,6) and new approaches (the so called new professionalism – (7)). In leadership this indicates a transition from hierarchical leadership to the formation of nursing teams and recognition of interdependent relationships and mutual respect between all team members. Such relationships can only be formed on the basis of mutual familiarity and acknowledgment of the role that an individual plays in the team (8).

A relatively long chain of leadership hierarchy has been forged (at least in larger observed organizations) in professional groups such as nursing groups: ranging from nurses without leadership roles on the lowest level, to team leader nurses and leaders of wards, clinics and sectors to the head nurse of an organization. All are members of the same professional group. Professional identity, which is shaped by the educational process (9) can only be preserved in a group possessing such diverse members through appropriate communication and knowledge of work and competences.

The development of professions has been most pronounced within the health care system (10). An important characteristic of professionalism is the integrity of systematic and generalized knowledge which must be used by professionals to solve different problems (5,6). The basis of such knowledge is a good educational system which should provide such types of knowledge in accordance with high standards of socially recognized professionalism (11).

Equally important for a profession is an established comprehensive system of leadership which is at least partially controlled by a professional association. According to classical understanding, a profession should establish control over its work (5). Therefore, it is an essential task of both professional associations and educational system for health care to equip nurses with leadership knowledge because only those professional groups with adequate leadership can be successful.

In the new model of professionalism (7) hierarchical relationships (controlled, dependent) have been replaced with connection between team members, active creativity in the community and a committed application of knowledge and experiences. Mutual familiarity and trust are required within this framework as the majority of leaders come directly

from a huge base of subordinate professionals. Subordinates must be satisfied with relationships of leadership. In professional groups greater emphasis should be placed on relationships built on cooperation within teams rather than on hierarchical relationships. Only in this way can the power of a professional group and the satisfaction of all of its members respectively grow which will consequentially lead to increasing the team’s success with work yielding better results.

Research regarding Slovene nurses has pointed out different situations within the professional group: nurses in higher leadership positions are more satisfied with their work while those with lower educations and positioned lower on the hierarchical ladder give substantially lower grades to the quality of interpersonal and inter-professional relationships (12,13). The consequence of dissatisfaction and poor relationships is poorer work performance. As a result, a danger exists that elites will emerge within the professional group of nurses (14), a factor that additionally reduces the efficiency of entire health care system.

Best practice in nursing teams should therefore comprise good interpersonal relationships that incorporate mutual familiarity and respect for the work of other team members (15). This is influenced by several factors, some of which undoubtedly comprise appropriate communication and good work knowledge and division of labour within the professional group. A study of other professional groups also showed that appropriate communication between team members (and with other stakeholders) is important component of team success being even more important than experience, work history and education (16). The team members all must be familiar with their competences and those of the other team members. Research regarding team success also shows that teams with better relationships or where the leader is attempting to be a “positive leader” and where the team members are attempting to be “positive team members” are more successful (17).

The competences of nurses in top leadership positions, which were main subject of the study, are particularly important in the professional group of nurses. We were interested in establishing the opinions of leaders regarding what competences are required for nurses in leadership positions on their

TABLE 1. Description of competences

Competence	Characteristics	Number of leadership behaviours
Flexibility at work	Quick adaptation and ability to shift in concrete problem situations. This involves gaining mastery over the area of work, efficient use of resources currently available for a high-quality performance of services and situations (e.g. resistance to stress). Three dimensions can be defined: the execution of the processes, communication and resistance to stress.	13
Creativity	Ingenuity and adaptability in new situations, expanding beyond the usual way of coping with situations. Three dimensions can be defined: strategic thinking, openness to novelties and use of efficient methods.	15
Leadership	The process through which a leader influences people based on his/her competence of a typical approach aimed at (mutually) attaining (agreed) goals. Two dimensions can be defined: responsibility and animation.	14
Organizational climate	The complex influences affecting the well-being, motivation and satisfaction of co-workers and customers.	14
Organizing	The organization of efficient work based on knowledge of the organization and the system of public administration operations. Quick, but deliberate decision-making and economical handling of all available resources.	8
Networking and influencing	Establishment of connections with persons and networks that have influence on key decisions and the search for information on that basis. Mastering public relations and media as well as appearance in front of an audience. Well-versed and follows the current novelties.	7
Realisation skills	Focus on goal achievement. Ability to transform strategies into clear, reasonable (attainable) and ambitious operational goals. Persistence in overcoming difficulties and putting into force one's own ideas.	6
Ethics of conduct	Relatives, acquaintances and colleagues are not given precedence, violations of nursing regulations are reported, patient privacy is protected and patients are informed about nursing activities.	7
Inter-professional relationships	Cooperation and communication with doctors on an equal footing, differentiation between nursing and medicine, knowledge of nursing and its position in the health care system and assumption of responsibility for the sphere of nursing in the health care team.	5
Positive attitude toward knowledge and education	Knowledge of work in leadership and economic-business fields, communication in foreign languages, knowledge of work involving new technologies, knowledge of standards of quality and the encouragement of to obtain additional education.	6
Total		95

levels and the opinions of their subordinates in non-leadership positions within their organization.

METHODS

Study design

Competence is defined as an internal psychological characteristic that enables the individual to perform above the average. It is based on the proper physical, social, psychic and spiritual potential, knowledge, skills, values and beliefs which will result in the capability to efficiently use available resources (18). The competence model of leadership was introduced into the public administration sector of Slovenia in

2007. In this study, the model was complemented with areas specific to health care. The competence model of leadership was tested on various professional groups in Slovene public administration (19, 1).

The basic model consists of 77 items (behaviours or actions) organized in 7 groups of competences (Table 1). Health care specific behaviours were added to these behaviours. Three research projects were carried out in Slovenia on a representative sample of nurses. Three groups of competences characteristic for those in leadership positions in nursing were developed on their basis:

TABLE 2. Demographic data on the samples of nurse leaders and non-leaders

		Occupational position		Total
		Top leadership position (Sample 1) (*)	Non-leaders (Sample 2)	
Sex	Female	40	52	92
	Male	2	4	6
Education	Professional college degree	22	48	70
	University degree	13	3	16
	Specialization, master's degree, doctorate	7	5	12
Age in years	21 to 30	1	14	15
	31 to 40	10	16	26
	41 to 50	21	20	41
	51 to 60	7	3	10
	No reply	3	3	6
Total		42	56	98

(*) head nurses and their assistants and clinic leaders

- Ethics: 7 competences demonstrating the ethical or non-ethical conduct of nurses in leadership positions were selected (20);
- Inter-professional relationships: 5 competences demonstrating correct understanding of the position of nurses in the health care system and their relationships to doctors were selected (13);
- Positive attitude toward knowledge and education: 6 competences demonstrating the attitude of nurses in leadership positions towards their own and their subordinates' education were selected (12).

The questionnaire contained a total of ninety-five items organized into 10 groups or competences.

Respondents assessed the extent to which each of the ninety-five actions (or behaviours) was typical for people in top leadership positions in the organization. A 5-division scale was used for assessment with values of 1 (completely atypical action) to 5 (decisive action). Values of individual actions were used to calculate the values of 10 competences using a simple arithmetic mean.

Sample and Data collection

The survey was carried out from 11 to 13 May 2009 at the 7th Congress of Nursing and Midwifery of Slovenia. The congress is a special form of expert work of the Nurses and Midwives Association of Slovenia, where expert recommendations for the development of nursing and midwifery profession are

presented. This is a biennial congress where nurses from all Slovene healthcare institutions get together. Registered nurses working in hospitals and community health care centres were included in sample. A total of 250 questionnaires were distributed to the participants in the Congress, with 42 nurses in top (formal) leadership positions (Sample 1) and 56 nurses not in leadership positions (Sample 2) returning completed questionnaires (Table 2).

The nurses in top leadership positions were questioned about behaviours they felt were characteristic for their level of leadership. This meant that the respondents answered questions about behaviours that should be characteristic for their level of leadership and not about actual conditions (how they behave or should be behaving). The nurses who were not in leadership positions were instructed to assess which competences nurses in top leadership positions (head nurses in the organization) should have.

There are 24 public hospitals (general, specialized, two university clinical centres) and 64 community health care centres in Slovenia. These institutions employ more than 84% of all registered nurses, midwives and nursing technicians (21).

Statistically significant differences between both samples were observed:

- in age: the average age of nurses in leadership positions was 45.3 years and of those in subordinate positions 37.9 (F-test=16.2; $p<0.001$);
- in education: nurses in leadership positions are more educated (Chi-square = 14.5; $p<0.005$).

TABLE 3. Attributed grades by individual competences – comparison between both samples

Competences	Means (*) (\pm SD)		T-test for Equality of Means		z-score	
	Leaders	Non-leaders	t-test	p	Leaders	Non-leaders
Flexibility at work	4,30 \pm 0,32	3,69 \pm 0,84	4.5	0.00	0.3	0.1
Creativity	4,16 \pm 0,32	3,46 \pm 0,88	4.9	0.00	-0.8	-1.6
Leadership	4,41 \pm 0,33	3,63 \pm 0,95	5.1	0.00	1.2	-0.3
Organizational climate	4,29 \pm 0,34	3,59 \pm 0,97	4.5	0.00	0.2	-0.7
Organizing	4,21 \pm 0,34	3,59 \pm 0,90	4.3	0.00	-0.4	-0.7
Networking and influencing	4,06 \pm 0,43	3,57 \pm 0,86	3.4	0.00	-1.5	-0.8
Realisation skills	4,37 \pm 0,34	3,74 \pm 0,84	4.5	0.00	0.8	0.5
Ethics of conduct	4,09 \pm 0,65	3,88 \pm 0,86	1.3	0.18	-1.3	1.5
Inter-professional relationships	4,44 \pm 0,47	3,86 \pm 0,1,03	3.4	0.00	1.4	1.4
Positive attitude toward knowledge and education	4,27 \pm 0,55	3,76 \pm 0,98	3.1	0.00	0.1	0.6

(*) Attributed grades: 1 – completely atypical action/behaviour; 5- decisive action/behaviour

Statistical analysis

The data were analysed using IBM SPSS Statistics 19.0. Descriptive statistics were used to describe the sample. Internal consistency was examined using the Cronbach's alpha. Factor analysis was used to determine the construct validity (22). The Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity was applied to measure sampling adequacy (23, 24). Relationships between variables were analysed using T-test for equality of means. A significance level of $\alpha = 0.05$ was used for all statistical tests.

RESULTS

The reliability of the measuring instrument was assessed using Cronbach's alpha (Sample 1= 0.90, Sample 2 = 0.98). The values indicated the high level of reliability of the measuring instrument. Factor analysis was applied to determine the construct validity of the measurement instrument. The KMO measure of sampling adequacy was 0.82 for sample 1 and 0.92 for sample 2 and indicated that factor analysis was appropriate. Bartlett's test was significant (p -value less than 0.005). This indicates good construct validity.

The results displayed a large difference on absolute level of assessments (Table 3). Statistically significant differences ($p < 0.05$) between both samples in relation to the majority of principal competences

(except ethics of conduct) were also observed. The largest differences were seen in fields of leadership ($t=5.1$; $p < 0.01$) and creativity ($t=4.9$; $p < 0.01$).

On average the nurses in leadership positions graded all ten principal competences 0.57 of a grade higher than their colleagues who were not in leadership positions. Due to the extreme absolute difference on the general level of grades it is better to compare standardized scores, because the absolute differences can be a consequence of a lack of criticalness in one group (leaders) or too much criticalness in the other group (non-leaders).

The average values of individual key competences were standardised to enable easier comparison. Such representation led to the greatest differences seen in ethics which received the highest grades from non-leaders and the lowest from leaders.

Standardized z-scores revealed that the comparison showed that non-leaders found the additional competences characteristic for nursing profession most important while leaders assigned the greatest importance to competences from the narrower field of leadership (leadership, realisation skills) and to competence within nursing which fortifies relationships with stronger groups (inter-professional relationships). The factor analysis was used to create sub-groups within individual groups of nurses sharing similar views on questions on which competences

TABLE 4. Rotated component matrix for competencies

Competences	Occupational position				
	Leaders (sample 1) Component(*)			Non-leaders (sample 2) Component(*)	
	1	2	3	1	2
Flexibility at work	0.716				0.722
Creativity		0.624		0.760	
Leadership	0.753				0.705
Organizational climate		0.771			0.862
Organizing		0.743		0.821	
Networking and influencing	0.863			0.819	
Realisation skills		0.781		0.766	
Ethics of conduct			0.770		0.733
Interprofessional relationships	0.813				0.729
Positive attitude toward knowledge and education			0.816	0.812	

(*) Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization.

should be possessed by leaders in the organization. Three factors were extracted from the 10 competences for the sample of leaders, which accounted for a 79% share of variability (Table 4). Two factors were extracted from the sample of non-leaders, which accounted for a 91% share of variability.

DISCUSSION

The comparison of absolute values points out great differences between both samples. The leaders felt that actions from all groups of competences were very important since their average grades across all areas were higher than 4 (on a 5 division scale). The lowest grades were given to competences of ethics of conduct and of networking and influencing. The grades in the non-leaders group were also relatively high but were 0.6 of a grade lower than those of the leaders (from 3.5 to 3.9). Nurses in leadership positions definitively believe that competences of a higher level are needed at their workplaces.

Standardization of data enabled a better comparison between the groups. The comparison showed that non-leaders prefer “classical” competences of the nursing profession, such as ethics of conduct, inter-professional relationships and a positive attitude toward knowledge and education, while leaders prefer competences that are not exclusively characteristic for their professional group: leadership, realisation skills and partially, inter-professional skills. Leaders therefore find competences characteristic for group

of leaders of general public services more important. Ethics of conduct was highly rated by both groups for the portion of competences related to the narrower field of nursing. The relative comparison of grades within the groups shows that non-leaders placed ethics of conduct in first place while leaders placed it in last place. As leaders are not in contact with patients as frequently, they do not find this competence as important. However leadership must also be classified as “ethical, unethical and non-ethical” (25). Non-leaders also desire to perceive the leader of their organization as an ethical leader.

Subgroups from both samples were formed using factor analysis (Table 4). Three groups of nurses in leadership positions and two groups of nurses in non-leadership positions (Table 5) were formed based on the participants’ opinions regarding the question of which competences leaders of organization should have.

The views of the nurses in leadership positions regarding the question of which competences they should have, are evading clear definitions, congruent with classical theory. The first two groups could be defined in the framework of the Blake-Mouton grid as a country club and organizational man (26). The third group, however, which advocates high ethical standards and a positive attitude toward knowledge and education does not fit into the established frameworks and is probably more characteristic of professions with a dominant ethical component.

TABLE 5. Attributed grades by individual competences – comparison between both samples

	Short description	Typical actions/behaviour
Sample 1: nurses in leadership positions	Relationship-oriented, responsible	These participants find it important that their leader be capable of dealing with people, namely that they are able to connect with key people and networks, establish proper communication channels with colleagues and clients and stimulate colleagues for creative cooperation with fair evaluation and rewards. The leader should also bear responsibility in accordance with authority, leader decisions should be manifested and tasks should be carried out rationally.
	Task-oriented, interpersonal relationships, communication with clients	This group of leaders find that leadership should be characterised by evident goal orientation, persistence in removing obstacles and ability to carry into effect one's ideas. Work should be efficiently organized and based on good knowledge of the health system and relationships between its participants that lead to co-dependence and reciprocity. The leader should also have good customer service skills.
	Ethically-oriented, equipped with knowledge	This group of leaders finds it important that nurses in leadership positions have nursing knowledge as well as knowledge from fields that are not directly related to nursing. They must also work in accordance with the highest ethical standards whether working with patients or complying to rules and the doctrine of nursing.
Sample 2: nurses in non-leadership positions	Task-oriented leaders	For this group the ideal nurse in a leadership position is capable of making quick but well considered decisions and can thriftilly manage available resources on the basis of established relationships with important persons and networks. He or she should also possess a clear orientation to task completion based on an ability to anticipate change. The leader should be well educated, follow current novelties and be open to changes and tolerant of other opinions. He or she should also have leadership knowledge and stimulate co-workers to further their education.
	Relationship-oriented leaders	These leaders would above all focus on interpersonal relationships between nurses and other members of the healthcare team and with patients and their relatives. Such leaders would motivate co-workers to creative cooperation and would also adequately reward them. At work they would follow a strict ethical code and take full responsibility for their decisions regarding the execution of procedures on the basis of expertise. They should patiently endure pressures of work and stressful and conflict situations.

This group also viewed head nurses as ethical leaders (25).

There was a clear division between the two groups of nurses in non-leadership positions: those that were task-oriented and those that were relationship-oriented. These are fairly classical divisions, congruent with theory (1)

The primary objective of this study was to examine relationships and understanding within the group of nurses: how familiar those in subordinate positions were with the competences of their superiors. The basic condition of any good relationship in a working process is mutual familiarity with the work of others and, based on this, division of labour and competences between different hierarchical levels of nursing. Improved mutual familiarity with each other's work and competences would enable nurses to more easily establish a homogeneous group which would better represent the interests of nurses in the battle of professions within health care.

CONCLUSIONS

The study points out the great differences in the views of nurses in top leadership positions and those in non-leadership positions regarding the question of which competences nurses in top leadership positions should have. Two groups were included, one from the bottom and one from the top of the hierarchical ladder of a professional group of nurses. Registered nurses are a professional group with a high share of them in a leadership position: 30 – 40% (12, 13) with the number still growing. The aforementioned differences are therefore intolerable within this professional group where great differences between subordinates and superiors should not exist. The first conclusion is therefore that education on leadership on both the theoretical and practical levels must be introduced into undergraduate study programmes of health colleges (27). All members of the profession must be educated on the basic methods of leadership and proper actions (and not only

for management). Larger organizations could develop experimental methods involving dual leadership in nursing (task orientation, relationship orientation, ethical orientation).

We must be aware that no best way to lead or ideal set of competences exist for a leader (28). We therefore, with the help of factor analysis, formed five subgroups within the professional group of nurses: three subgroups within the group of nurses in leadership positions and two subgroups within the group of nurses in non-leadership positions. A special education programme should be prepared for each of these subgroups. Nurses would be accordingly acquainted with individual competences and educated about proper actions and behaviour. The competences that the individual groups of leaders found most important should be developed in the first phase. A variety of orientated study programmes should be developed to this end: for relationship-oriented, goal-oriented and ethical-oriented leadership. The qualities that nurses themselves find important should be developed first without a doubt. In the second phase the nurses would themselves realize what competences they were still lacking.

Only in this way can the appropriate competencies and their implementation in leadership in nursing be developed in individuals. A simultaneous change of views regarding leadership by all members of the profession (from top-management to novices) is the only way to effect a change in the organizational culture of nursing and individual organizations.

COMPETING INTERESTS

Authors declare no conflict of interest.

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