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**The Possibilities and Significance of Management Training in Higher
Education of Medicine**

PhD Dissertation Theses

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2008

1. **Rationale for Thesis Topic**

The recipients of medical degrees have had to face a number of new challenges in the last several decades.

The focal points of morbidity have shifted significantly in Hungary and other developed countries. Illnesses which can be instantly treated with vaccinations, antibiotics and surgical procedures have been replaced by so-called chronic, degenerative diseases (hypertension, diabetes, cardiovascular illnesses). While in the case of the former, the patients were cured or never contracted the fatal illness without ever having actively participated, the latter – which increasingly involve stressors, environmental harm, unhealthy nutritional and lifestyle habits – the prevention of illness or reversal of the deterioration of a patient's condition is no longer possible without intensive, proactive participation from the patient.

It is a universally accepted view that the environment and personal lifestyle greatly influences the incidence of these illnesses. Therefore medical professionals have an enormous role to play to ensure the cooperation of treated patients in recovering and maintaining their health, or in arresting further deterioration in their condition. Medical professionals must also realize the need to complement the work of their colleagues in various different fields to achieve these goals. Institutions of higher education in medicine must work to provide students and future medical professionals with the tools and skills necessary to achieve these aims.

Management approach and techniques can be such tools, which could propel the development of Hungarian healthcare forward faster than the developments and inventions of medical science and technology. Having had the opportunity to teach and train several different segments of medical professionals

provided an opportunity to focus my research on the significance and possibilities of management training.

2. Thesis Goals

- Finding areas of management training which can contribute to giving skills and abilities necessary to improve the operational effectiveness of the work of medical professionals.
- Authenticating the effect of gained knowledge and professional approach on the work of medical professionals.

3. Hypotheses

1. Nurse Practitioner candidates (NPC) do not use all management styles equally well.
2. NPCs often use an inappropriate style of management..
3. Upon completion of training, the ability of candidates to select an appropriate style improves.
4. Candidates become conscious of the significance of using the correct leadership style.
5. The data in nurse practitioner (NP) reports make possible the evaluation of the effectiveness of an NP's work.
6. NPs often do not use an appropriate leadership style in dealing with the patients in their care.
7. NPs often view their own leadership style significantly differently than those around them (colleagues, patients).
8. The effectiveness of NPs depend on correctly applied style of leadership style (style effectiveness).
9. Parental satisfaction is directly correlated to style effectiveness.

10. The application of human resource management approach in healthcare would reduce the rates of staff turnover and absenteeism, and would enhance the satisfaction of both employees and patients.
11. The mentality and regulations of operating as an entrepreneur are foreign or unknown to most healthcare professionals. Gaining a deeper knowledge and understanding of these would enable many of them to make better decisions.

4. Methods

Leadership qualities, employee and patient satisfaction were measured using questionnaires.

Results were compared along each measurement axis, as well as to statistical data on efficiency.

The NP data collected was examined for utilization validity in the quality control of professional work.

Management training was conducted, and its effects were measured.

The data on absenteeism and turnover were analyzed.

5. Major research topics and results

A group of Nurse Practitioner Candidates were trained in the method of „Situational Leadership“. The training enabled the acquisition of modern leadership techniques and their application in specific situations. The questionnaires filled out before the training validated our original hypothesis, in that the participants did not utilize all leadership styles in their spontaneous roles as leaders. The participants overwhelmingly „overled“; meaning that they explained in detail tasks that the „employees“ (patients) would have been able to solve very well on their own. This is not only a very time-consuming method, but also makes

the led person passive, engenders resistance and suspicion, and acts as a detriment to the relationship between the parties. It is thus especially important to make clear that the incorrectly chosen leadership style decreases professional performance. During the course of training, our students realized that different leadership styles should be utilized depending on the competence level of the patients. By the conclusion of the training, the NPCs chose appropriate styles significantly more frequently. The conclusion from this is that the adequate shifts in leadership styles can be learned, and can increase the effectiveness of professional work, and therefore there is a need for training of this type. Based on the experiences of the pilot session, the theoretical training of Situational Leadership was incorporated in the Management course of our basic curriculum.

The next step was to examine whether the professional effectiveness of Nurse Practitioners – whose work methods were (as a function of their job tasks) focused on influencing the behavior of their patients – was correlated to their spontaneous leadership skills. As the methods of measuring the latter were already available, we sought to find objective data on the level and quality of the work of Nurse Practitioners. We assumed that the metrics derived from the systematic data collection of Nurse Practitioners could be used for this purpose.

During the course of our work, it unfortunately became evident that the majority of these metrics were not suitable for this purpose. There were only two measures in the Nurse Practitioners database that can be used to measure the professional effectiveness of nursing work. However, these two metrics are not sufficient to control for the multiple other effects (local healthcare culture, the effect of medical treatment methods, etc.) that could influence results. It is nonetheless important to note that nearly all examined variables are negatively correlated with professional effectiveness. Factor analysis shows that the measure of professional efficacy is a

characteristic of a different factor than the other variables, therefore measures a different attribute.

It was also a thought-provoking finding that the majority of the nurse practitioners who provided the data did not analyze the results of their own work, even though the analysis, evaluation and comparison of these data with the results of other fields would provide an opportunity for evaluating performance, drawing conclusions and identifying areas for improvement. Today, when the development of quality control in healthcare services is daily priority, this is an especially significant problem, and our professional education must place special emphasis on building the requirement and desire of analyzing performance results.

We also examined whether the satisfaction of patients (mothers) correlated with the professional effectiveness and leadership skill of the Nurse Practitioners. The results showed that the respondents did not evaluate the professional knowledge of the nurses, as that is not something they felt they could judge.

The majority of patient respondents highlighted the attitude (attention to detail, thoroughness, conscientiousness, helpfulness, cooperation, accessibility, etc.) of nurse practitioners. Thus it is not sufficient to provide our students with a high level of professional knowledge. Our training must also provide NPs with tools and methods that can allow them to win the confidence of patients, that can help them create an atmosphere where parents are not hesitant to ask questions, are willing to share the information they received from other sources, where these can be discussed, and thus where patients can develop the correct convictions for themselves on specific questions. One of these methods is the correct choice of leadership style, which we teach our students during the course of applied management

training.

The finding was that of the NPs measured, the primary leadership style of 86% was S3, and their S1 style (Directing/Telling) style was significantly underdeveloped. The leadership studies literature notes that leaders with this style of leadership (cooperative, convincing) are likely to effectively lead individuals with average abilities and knowledge, but have problems in maintaining discipline or compliance among those who are less prepared. Another conclusion was the fact that while a significant portion of the nurses studied used several different styles of leadership, these styles were often not utilized in the appropriate situations.

In comparing the experiences of the 21 dissertations (carried out in several countries, thus perhaps forming an international tendency), it was found that, similarly to our results – researchers identified S3 as the primary and S2 as the secondary leadership style.

The Nurse Practitioners examined in this study (who had been working for several years) often did not use the appropriate leadership style in handling their patients – similarly to NPCs in our study. The primary leadership style of NPs, is different than that of the student candidates. For the most part, NPs employed a „laissez faire” style in dealing with the scenarios presented in the questionnaire. The enthusiastic NPCs are more likely to „over-lead”, while in many cases NPs are unfortunately jaded, frustrated and most often let things run their course. Both errors can significantly degrade the relationship between nurses and their patients. The quality of nursing (and other consultative) work can be significantly enhanced, the atmosphere of trust can be more easily built between healthcare

professionals and patients through training in management skills, and teaching importance of choosing the adequate style of leadership.

Comparing the NPs own style efficiency and their leadership efficiency as perceived by others in a two-pronged “t-probe”, we observed that the perception of the mothers significantly differs from the Nurse Practitioners’ own perception of themselves. This could be explained by two things. One of them is that Nurse Practitioners can not perceive their own spontaneous leading style with the proper accuracy. If this is the case, we must place a greater emphasis on self-awareness training in our education. The other option is that mothers do not quite know their Nurse Practitioner. This could also be supported by the observation that the Nurse Practitioners leading style as evaluated by their peers do not significantly deviate from the value they attributed to themselves. The point is that mothers judge the styles of the NPs differently, suggesting a communication gap between NPs and patient, which reduces the effectiveness of the Nurse Practitioner’s work. This finding emphasizes the importance of communication training.

The reason why it is significant to deal with this question is that one of the most important quality indicators of the Nurse Practitioner’s work must be the parental satisfaction.

Based on our research, it seems feasible that at places where the level of health-culture is low or the availability of a physician is poor, the role of a Nurse Practitioner is even more significant. Therefore, NPs must use leadership abilities even better, and they are correctly applied, mothers also better appreciate the NP’s efforts.

It is important to greatly emphasize the significance of delegating as a leading technique in modern healthcare. Patients with chronic degenerative diseases must be led (and taught) to such level of preparedness that the tasks of health

maintenance or managing their condition can be delegated to them. In my work I adapted the advantages, conditions and barriers of delegating.

Our previous research - as part of an international nursing management project - examined the influence of human resource management on the nursing care effectiveness. We examined the source of the situation (absenteeism, turnover, nurses satisfaction, patients satisfaction), and the alterations in these data a year after the human resource management education. Turnover at the examined institution was not high even at the beginning. However long-term consequences could not be drawn from the decrease due to the small numbers and the relatively short time spent on monitoring, even if there had not been any significant changes made apart from the launch of the programme during the monitoring time. The satisfaction of the nurses was better at the end than at the beginning. The results showed that patient satisfaction was not altered significantly. This could be explained by the increasing expectations from the patients in the past years, however the tolerance level of the healthcare professionals decreased due to the rising pressure and poor financing.

At the same time it has been proven that we have some gaps in the field of practical nursing management compared to our Western European partners. We are attempting to adopt certain methodologies, and we intend to incorporate them in to the training curriculum provided to our students.

Another significant implication of our participation was that - apart from the settlement of financing - the legal regulation of the competence field of different medical experts (doctor, college degree nurse, nurse, assistant nurse, etc.), the introduction of the performance-evaluation system, as well as the propagation of the human resource management approach was also of fundamental importance, since these are the prerequisites of the cost effective, responsible, motivated work. In the medical higher education we attempt to emphasize these areas as part of the "change-management" tool kit.

Finally, the ongoing reform of the health care system, the change in the legal and financial environment has made it necessary and created the possibility for us to work out an enterprise management training programme for healthcare professionals, and to investigate the inevitable important competence to enterprise of the healthcare professionals.

The possibility of the enterprise form is a central step in terms of simultaneously increasing the efficiency and standard, as well as the healthcare professionals' work satisfaction. This form allows for the utilization of the available resources in the way it serves their tasks the most, while making free and responsible decisions. The proprietary position motivates the improvement of working conditions (workplace, tools), which indirectly also influences the medical attendance in a positive way. The changes in approach and preparedness that these necessitate have not yet been accomplished.

The goals of our training were

- to contribute to the development of the entrepreneurial approach among healthcare professionals,
- to ensure the knowledge and information material required by the underlying decision of the choice of entrepreneurial form, and by the initiation and management of the enterprise.

Our experience was that the key competences from the aspect of the enterprise, such as good communicative capacity, motivation, conflict and change management, are inevitably essential in the healthcare work as well. In general, our students have already possessed these competences on a high level. What most of them completely were missing were self-esteem, validation of interests, and

profit-orientation. During the training this was discovered by the students themselves, they realized their values and the potentials of the validation of their interests.

The training thus accomplished its main goal; the participant is able to decide whether it is worth starting an enterprise in the actual economic and legal state of affairs, since his/her decision must take into account the individual conditions, the peculiarities of the habitation, the number of clients, and the financing, which might be quite different concerning the individual.

The participants have acquired the material of knowledge which allows them to make the right decision, they have learned how to obtain the information necessitated by their decision making, and they have become encouraged to deal with this issue.

6. New methodologies and original findings

According to certain researches the following accentuated statements have been made:

1. The demand for the proper leading of clients' has been present for decades. In spite of this fact, this aspect has been emphasized neither in the education, nor in the evaluation of the work done by healthcare workers.
2. In Hungary, the healthcare professionals' leadership capacities have been examined with the "Situational Leadership" method for the first time.
3. We were the first to examine Nurse Practitioners, for whom, as a group of healthcare workers, their leadership capacities are almost the only means of work, since their main task is to influence the behaviour of the clients, with the above mentioned method.

4. I compared the following elements:
 - the capacity of leadership style selection of last year Nurse Practitioner students with NPs who have several years of experience
 - the leadership capacities of NPs with the clients satisfaction, as well as with the data characterizing the NP's professional efficiency, and
 - the NPs' own view about their leadership capacities with the clients' and colleagues' view of it.
5. A new statement based on the results of our research is that Nurse Practitioner's supply of data examined by us in this form cannot be used as the basis for the quality assurance of the profession. Our work might provide some help in the elaboration of a new form of supply of data, which will be suitable for the quality assurance of the Nurse Practitioner profession.
6. An undesirable outcome was that the results of the Nurse Practitioner profession's supply of data can be used effectively neither by the actual Nurse Practitioners, nor by the organizers of the health care system.
7. Another new discovery was that most of the healthcare workers, trained by us for entrepreneurial knowledge, were in lack of the competence of self-esteem, validation of interests, and profit-orientation.
8. Our seemingly obvious statement is that an efficient way to decrease turnover and absenteeism – in lack of financial tools – is the human-resource approach management. That must be made conscious.
9. It is important to raise attention to the conscious deployment of delegation as method of leadership desirable in many fields concerning the nurtured patients.
10. Our silent statement is that one of the main tasks of the Hungarian health care system's reform is the precise definition and legal regulation of the competency of healthcare professionals, since this is the prerequisite of

the cost effective work, which is unfortunately present only in certain fields.

On the basis of the above mentioned results and experiences we can state that the management approach has key importance in the reorganization of the Hungarian health care system. The main tool of its dissemination is the education, which, however cannot be efficient without working close together with the professional and legal regulation, working out and following uniform principles. I intend to proceed with my work in this spirit.

7. Acknowledgments

I would like to thank Professor Éva Szél and my husband, who directed my attention to this topic separately, but almost at the same time, and Dr. Magdolna Pogány, with whom we started the research together. I would like to thank my family and my colleagues, who made it possible for me to take this journey, and József Kovács M.D., whose reassurance enabled me to complete this work.

In particular I would like to thank the constructive critiques of Márta Boda M.D. and Professor Kornélia Helembai.

Finally I am very grateful for the grants that provided the financial support for conducting this research.

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