

APPLICATION STUDY REGARDING THE LEVEL OF KNOWLEDGE ABOUT MANAGERIAL RISKS IN THE HEALTH UNITS IN ROMANIA

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Abstract: This paper based on a sociological survey reveals a number of useful information regarding the training and knowledge of medical and non-medical staff regarding the managerial risks in Romanian hospitals. This study was conducted in two public hospitals in Romania and the survey complies with the initial criteria for defining respondents, which entitles us to consider the results obtained as representative of the system analyzed. The aim of this study was to identify the level of knowledge and the problems within the health system in order to define the ways of monitoring and correcting the deficiencies in the system in order to make it more efficient. It is noted that the health units in Romania are not fully prepared for the efficiency of the health system, but efforts are being made in this regard.

Keywords: risk, risk management, health facilities, risk categories

1 ANALYSIS OF THE LEVEL OF KNOWLEDGE ABOUT MANAGERIAL RISKS IN SPECIALIZED WORKS

In order to draw an image in which to highlight the managerial risks, it is necessary to present some notions that represent the foundation of everything that means managerial risks highlighted in specialized works. Thus, in the opinion of the authors Pipu B. N. and Popescu I. The risk is defined as "an uncertain event, but possible, its origin being in uncertainty" [1].

Another view regarding the definition of risk is highlighted by L. Marian in the course "Risk management in health systems", in which risk is defined as "a partner of any health system with effects on the final results" [2].

Currently, risk management is growing in scale and extends to all areas of activity, so in the article presented in "Journal of Management Strategies", the author Lordache E. states that "Risk management is increasingly considered a function general management of the organization whose objective is to identify, analyze and control the causes and effects of uncertainty and risks in an organization" [4].

There is an increasing emphasis in health on risk management and the application of scientific methods, the share of which is substantial, so the authors Nikolaeva N. G and Razina IS, specify that "it is believed that over 70% of unwanted events within a medical organization can be prevented, in particular by using risk management methods and implementing management tools" [5]. An important component in this field is the activity of risk identification, essential because it has "as its purpose the detection, as far as possible, of all existing risk factors" [6] and another opinion states that "in the identification phase of potential hazards, their effects and the likelihood of their occurrence are assessed" [7].

The next major element in risk management is risk assessment, "assessment of the

probability of materialization of risks, assessment of the impact on the objectives of activities in case of risk materialization and calculation of risk exposure" [8]. Risk assessment is based on real and concrete data, which have been proven, should not bypass those affected, on the contrary the intention is to take into account all those affected by the risks.

Concern for the knowledge and control of risks is a necessity and does not present a novelty for the management of health units. Risk management in general, regardless of the department within the health units, requires knowledge of the activities, especially of the events that target both the patient and the medical staff.

Health risk research requires in-depth knowledge of the system with all its shortcomings, and Romania has institutions that control activities with a high degree of risk: National Center for Statistics and Informatics in Public Health, National School of Public Health, Management and Training in the field of health, etc. and the risks are categorized according to their nature: strategic, medical, financial, human resources, legislative, technological, political, environmental, etc. In the work of the authors LI Cioca and RIMoraru "Risk Management, psychosocial professionals" show that "Risk prevention and control bodies, insurers, social partners and public authorities, both national and European, are trying to address new risks and threats to occupational health and safety" [3].

2 PRESENTATION OF THE RESEARCH METHODOLOGY

The present investigation was carried out in two public health units in Romania that accumulate around 2500 beds, presenting both a local and county interest.

For this study, which aims at managerial risks in public health units in Romania, it was necessary to plan successively the activities specific to the scientific method. This questionnaire-based

survey was conducted over a period of fifteen days, on a representative sample of 244 employees of public health units in Romania - doctors, nurses, lawyers, through a document with 17 items, with Responses classified on the Likert scale. The representativeness of the survey by comparing the number of respondents with the total number of staff in the two hospitals shows that in the category of medical staff (nurses and doctors) we have a percentage of 93.03%, the category of university staff being represented in a percentage of 2% (n = 5), and a percentage of 12% (n = 4.9) did not meet the required classification.

2.1 Purpose of the survey, working hypotheses and questionnaire items

Purpose Highlighting the opinion of the medical staff regarding the realization of an x-ray of the system regarding the managerial risks.

Objective To identify the main problems in the health system and to visualize the components regarding the managerial risks in the health units in Romania.

The questionnaire, elaborated according to the series of working hypotheses pre-established after an initial study of the perception of risks in a health system, includes four areas of risk production: financial, human resources, legal, technological regulations.

The statistical analysis of the data in this research paper, developed using the scientific questionnaire-based survey tool, was performed using the Google Forms platform, which is extremely useful for data processing. This analysis identified a series of critical elements in terms of managerial risk in the two units investigated but which are specific to the entire Romanian health system. Multiple-choice questions were used, with each participant having the opportunity to give a single answer to each question. All questions were required. The data was collected and entered into Microsoft Excel. Descriptive and analytical statistics were compiled using SPSS v 17.0, GraphPad Prism 8 and XLSTAT-Lite 2015 software for Windows 10 Pro. Prior to the application of correlation tests, the Kolmogorov-Smirnov test was applied. Pearson Chi-Square and Asymp were used to correlate study participants' responses. Sig. (2-sided), the statistical significance derives from the percentage differences. The significance threshold chosen for p was 0.05.

3 ANALYSIS OF STATISTICAL DATA ON THE LEVEL OF KNOWLEDGE OF THE ISSUE OF MANAGERIAL RISKS IN THE STAFF ON HEALTH UNITS

Table 1. Research working hypotheses

Nr. crt.	HYPOTHESES	ITEMS
1	Healthcare professionals are not prepared to deal with managerial risk issues;	2,6,11
2	There are norms, rules, procedures, laws that manage managerial risk in the health system, but practice proves that these normative acts are little known, applied and respected.	3
3	The factors of responsibility in this area do not yet realize the importance of complying with the rules;	13
4	The financial situation is a problem that makes it difficult to achieve the objectives of the health unit;	1
5	The employees of the health units, regardless of the specialty, are not sufficiently trained from a theoretical point of view at the level of expectations.	7,8,9,10,12
6	The level of perception of problems related to risk management in public hospitals in Romania does not depend on the profession or function.	15,16,17

Hypothesis no. 1. "Medical staff are not prepared to deal with managerial risk issues" is verified by the answers to items 2, 6 and 11. According to item 2 of the questionnaire, which refers to the aspect regarding the legislation, respectively, the procedures, rules, norms regarding the management and prevention of managerial risks, the respondents answered as follows: a rather high percentage of 32.79% stated that all these are known, respected and applied. Another 43.85% indicate that they are

only partially known, respected and applied. They are respondents in a percentage of 8.20%, which fall into the category of ignorance, non-compliance and non-application of legislation, procedures, etc. I believe that following this analysis, there is a need for a better information of the medical staff on everything related to the legislation, respectively the procedures, rules, norms regarding the management and prevention of managerial risks.

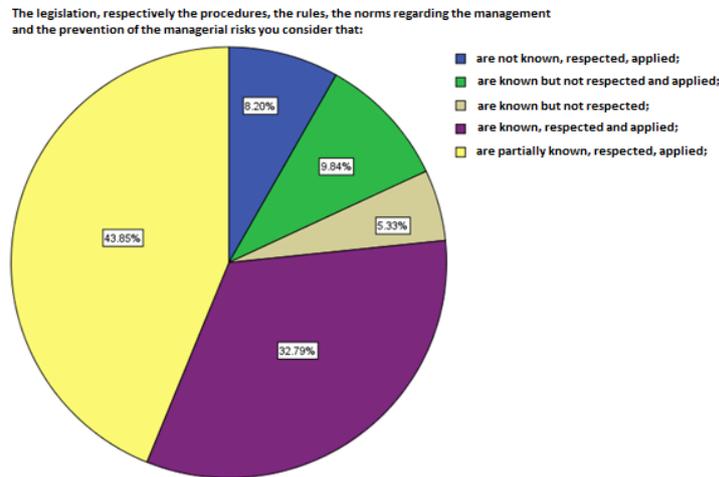


Figure 1. The perception of the respondents regarding the legislation in the field of managerial risks

Item 6 refers to the factors that affect the health system, and inevitably lead to hampering the activity of the units and highlights the factors that affect and produce risks in the health system. Thus, the first place is occupied by the financial factor with a weight of 40.98%, followed by the organization at managerial level 21.72%. Another important factor that has an influence on the activity of the health units is the lack of an organizational culture that represents a percentage of 17.21%. The three factors have a major and at the same time decisive importance in the good management of the activity of the health units. From the presented situation we note that these factors confirm the hypothesis formulated in which the lack of an organizational

culture, together with other factors such as financial, legislative, etc., support the confirmation of the hypothesis.

According to item no. 11 on the adoption of national legislation on European norms, the respondents clearly highlight the presence of legislation adapted to European norms, but there are gaps. showing that the legislation is not in line with European standards. Looking at and analyzing the answers we can say that 15.16% note the compatibility of Romanian legislation with European law but also the fact that there are incompatibilities and imbalances and therefore, the analysis shows that only a very small percentage is adaptability to EU rules These results, obtained by processing the answers to

items 2,6,11, categorically confirm that hypothesis 1 formulated in which the compatibility between European and national legislation is stipulated as a factor of functional imbalance is true.

Table 2. Factors affecting the health system

Professional training	6. Which of the following factors, considered to affect the health system in Romania, and lead to hampering the activity of health units?				
	legislative deficiencies	the financial factor	lack of involvement of decision makers	lack of an organizational culture	organization at managerial level
Auxiliary staff	33.3%	16.7%	8.3%	16.7%	25.0%
Nurse	9.0%	48.1%	12.0%	15.0%	15.8%
University staff	0.0%	40.0%	0.0%	20.0%	40.0%
Doctor	9.6%	34.0%	7.4%	20.2%	28.7%
Total	10.2%	41.0%	9.8%	17.2%	21.7%

P = .005

Hypothesis 2 "There are rules, regulations, procedures, laws that manage managerial risk in the health system but practice proves that these normative acts are little known, applied and respected"

According to item 3, "Do you consider that the factors responsible in this area realize the

importance of compliance with the rules?" a good conduct of administrative activities in accordance with the law. However, the percentage differences of approximately 42.22% indicate that there are deficiencies in the interpretation of the need to comply with the rules.

Do you consider that the factors of responsibility in this area realize the importance of complying with the rules?

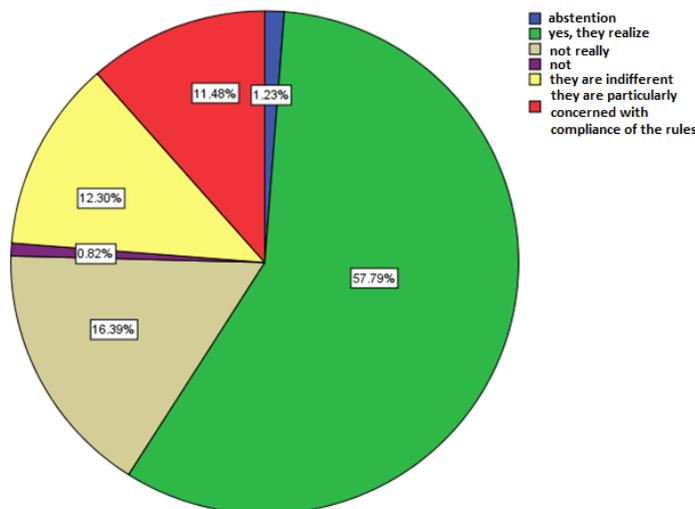


Figure 2. Factors that generate managerial risks in hospitals

Hypothesis 3, Factors responsible in this area do not yet realize the importance of compliance with the rules. % Graphically viewing the percentage distribution, one can notice a

certain approximation of the percentages, which supports the activity of informing the staff of the health units about the objectives, mission and vision of the health unit. Hypothesis 3 is true.

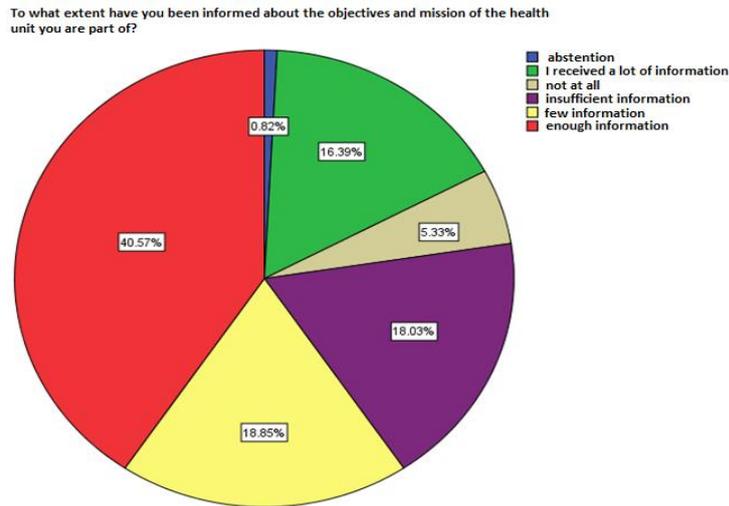


Figure 3. The extent to which respondents are informed about managerial risks

Hypothesis 4, "The financial situation is a problem that makes it difficult to achieve the objectives of the health unit." Item 9 of the questionnaire does not come as a surprise to respondents. This is explained by obtaining a very high percentage of 59.02% which emphasizes that the financial aspect is a problem that reduces the chance of achieving the objectives of the health units. Along with the

percentage of 29.51% which is highlighted as a very big problem, the hypothesis regarding the financial situation is confirmed, presenting a problem in achieving the objectives of the health units in Romania. Hypothesis 4 is confirmed 18.03% say they are prepared, 14.75% said they are only slightly prepared, another percentage, quite high of 19.67%, tells us that respondents do not think their involvement is necessary.

Table 3. Financial problems generate managerial risks in hospitals

Professional training	9. Is the financial aspect a problem that makes it difficult to achieve the objectives of the health units?					
	abstention	yes, this is the problem	very big problem	not the biggest problem	not	is a minor issue
Auxiliary staff	8.3%	41.7%	25.0%	16.7%	0.0%	8.3%
Nurse	0.8%	66.9%	21.1%	7.5%	3.8%	0.0%
University staff	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Doctor	0.0%	47.9%	43.6%	4.3%	1.1%	3.2%
Total	0.8%	59.0%	29.5%	6.6%	2.5%	0.8%
P . = .001						

To these percentages are added the 15.16% representing a fairly high share in which respondents have a categorical answer that they are not prepared to deal with managerial risk issues. In conclusion, we can say that a relatively small part of the total respondents can be said to be prepared to deal with managerial risk problems. Hypothesis 4 is confirmed.

Hypothesis 5 "Employees of health units, regardless of specialty, are not sufficiently theoretically trained in expectations"

The answers to item 1 of the questionnaire show that 32.38% of respondents are only

prepared to some extent to deal with managerial risk issues. 18.03% say they are prepared, 14.75% said they are only a little prepared, another percentage, quite high of 19.67%, tells us that the respondents do not think that their involvement is necessary. To these percentages are added the 15.16% representing a fairly high share in which respondents have a categorical answer that they are not prepared to deal with managerial risk issues. In conclusion, we can say that a relatively small part of the total respondents can be said to be prepared to deal with managerial risk issues.

Table 4. Level of training to deal with managerial risks

Professional training	You are prepared to deal with managerial risk issues				
	Yes, I'm ready	I don't think my involvement is necessary	I am not prepared	I am prepared to some extent	I'm a little prepared
Auxiliary staff	0.0%	33.3%	16.7%	33.3%	16.7%
Nurse	21.1%	21.1%	11.3%	31.6%	15.0%
University staff	0.0%	20.0%	0.0%	60.0%	20.0%
Doctor	17.0%	16.0%	21.3%	31.9%	13.8%
Total	18.0%	19.7%	15.2%	32.4%	14.8%
P = 0.007					

According to the answers to item 7 of the questionnaire, which refers to the neglect of managerial risks as a consequence of poor management, 36.89% of respondents say that it is possible that neglect of managerial risks is the consequence of poor management.

A percentage of 21.31% of the respondents are convinced and answered unequivocally categorically that the neglect of managerial risks is the consequence of poor management, and these results confirm the hypothesis.

Item 8 verifies whether the Romanian health system has benefited from a unitary management a relatively high percentage, of 45.90% of the respondents underlined the fact that the Romanian health system did not benefit much from a unitary management. Only 24.18% find answers in which it was categorically stated that the system did not benefit from unitary management. Item 9 of the questionnaire does not present a surprise for the respondents. This is explained by obtaining a very high percentage of 59.02% which emphasizes that the financial

aspect is a problem that reduces the chance of achieving the objectives of the health units. Along with the percentage of 29.51% which is highlighted as a very big problem, the hypothesis

regarding the financial situation is confirmed, presenting a problem in achieving the objectives of the health units in Romania.

Table 5. Consequence of poor risks management

Professional training	7. Do you consider that the neglect of managerial risks is the consequence of poor management?					
	abstention	yes	it is unlikely	I am inclined to believe that, yes	not	possible
Auxiliary staff	8.3%	16.7%	8.3%	41.7%	8.3%	16.7%
Nurse	1.5%	21.8%	8.3%	12.8%	16.5%	39.1%
University staff	0.0%	0.0%	0.0%	60.0%	0.0%	40.0%
Doctor	3.2%	22.3%	6.4%	23.4%	8.5%	36.2%
Total	2.5%	21.3%	7.4%	19.3%	12.7%	36.9%
P = .001						

Table 6. Influence of financial aspects on the achievement of objectives

Professional training	9. Is the financial aspect a problem that makes it difficult to achieve the objectives of the health units?					
	abstention	Yes, it's a problem	very big problem	it is not the biggest problem	not	is a minor issue
Auxiliary staff	8.3%	41.7%	25.0%	16.7%	0.0%	8.3%
Nurse	0.8%	66.9%	21.1%	7.5%	3.8%	0.0%
University staff	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%
Doctor	0.0%	47.9%	43.6%	4.3%	1.1%	3.2%
Total	0.8%	59.0%	29.5%	6.6%	2.5%	0.8%
P . = .001						

Item 10. From this questionnaire, we indicate a percentage of 53.28% of respondents who justify the usefulness of introducing in the topic of professional training the topic related to managerial risks, respectively, 21.72% say that it would be very helpful to introduce this topic in the professional training. And these data guide us to confirm the hypothesis that medical staff still need training to deal with managerial risk issues. Item 12. Another analysis that boils down to the current theory in which the measures for the prevention and management of managerial

risks are provided, which shows us according to question no. 12 of the questionnaire, indicates a percentage of 49.59% in which the respondents consider that the current theory provides to some extent the prevention and management of managerial risks, along with 16.80% in which it shows that the theory provides for all measures, but they are not respected, and only a relatively small percentage of 14.75% suggests that yes, the current theory provides for all measures to prevent and manage managerial risks. Consequently, hypothesis 5 is confirmed.

Hypothesis No. 6 "The level of perception of problems related to risk management in public hospitals in Romania does not depend on profession or function"

Item 15 of the questionnaire, regarding the involvement of the executor in the risk prevention and management process, suggests

that 35.25% of the respondents claim that they are actively involved in the risk prevention and management process in the health units in Romania, and the participation in the process of prevention and management of managerial risks is a process of 33.20%.

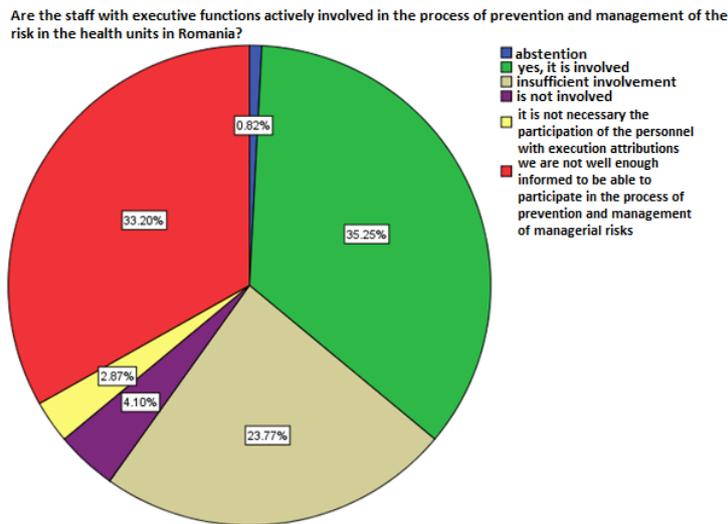


Figure 4. Involvement of staff with executive functions in the risk prevention and management process

Regarding the regular information about the legislative changes that is stipulated in the text of item 16, a large part of the respondents, respectively a percentage of 47.54% say that they are generally informed, 28.69% categorically say that they are informed about the legislative changes. Therefore, although most respondents stated that they were informed of the legislative changes, a total of 23.77% of respondents did not know the legislation, or only partially. . That is why I consider that following the analysis, it can be argued that in theory the rules are known but their application is difficult. about half of the respondents, respectively 48.77%, say that these rules and methodologies regarding risk management are followed, to which is added the

percentage of 17, 21% which is the share of those who say that these rules are not followed, summed these percentages, results an assessment that confirms the hypothesis formulated. Consequently hypothesis 6 is fully confirmed.

4 CONCLUSION

Considering the results obtained from the interpretation of the database, a conclusion can be formulated leading to the confirmation or refutation of the hypotheses formulated and following the study it can be stated that the management of the Romanian healthcare system does not completely identify managerial risk problems ready to face major or minor

challenges related to the effective and efficient management of profile units.

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