

## COMPARATIVE STUDY OF HUMAN RESOURCES MANAGEMENT IN TWO COUNTY HOSPITALS

Iurcov Raluca\*, Daina Lucia\*, Lucan Valerian Ciprian\*\*, Todor Bianca\*, Domuta Maria\*,  
Dalai Camelia\*, Slavescu Dan\*

\*University of Oradea, Faculty of Medicine and Pharmacy, Oradea, 1 December Street,  
nr.10, Romania, e-mail: [raluirimie@yahoo.com](mailto:raluirimie@yahoo.com)

\*\*University of Medicine and Pharmacy "Iuliu Hatieganu" Cluj-Napoca

### **Abstract**

*The most difficult step in an organization's success rate in a process of transition is its own process of change. The process of change is a complex structural adjustment action which takes into account continuously modifying factors from the socio-economic, cultural, political, educational, legislative or traditional domains. Changes in the structure of organizations should first of all take into account the changes of managerial methods and procedures and then of technical and technological means (Mathis R.L., 1999). These changes can be ensured only by a highly performing management of human resources.*

*The present study proposes a comparative analysis of personnel deficit in wards with beds of two county hospitals: the Emergency County Hospital in Suceava and the Clinical Emergency County Hospital in Oradea.*

**Key words:** human resources management, Emergency County Hospital Suceava, Clinical Emergency County Hospital Oradea

### INTRODUCTION

The management of human resources entails a continuous improvement of all employees in order to attain the mission and objectives of an organization. Exercising this kind of management needs every manager to be a behavioral model for his employees as a primary condition (Badescu A., 2008, Bucurean M., 2000). The manager needs to take responsibility over the process, be involved in every action, talk personally with the employees on topics such as personal progress and reward good results. Managerial actions take into account every employee as a distinct individual with specific characteristics. Successfully applying human resources management techniques entails a system for performance evaluation, a system for stimulating employees and one for rewarding good results (Bucurean M., 2000, Constantinescu D.A., 1999, Condrey S., 1998).

## **MATERIAL AND METHOD**

The present study was done in a comparative fashion, analyzing the personnel deficit in wards with beds of county hospitals in Oradea and Suceava.

The Suceava County Hospital is the biggest health unit in Suceava county and is the only one in the city of Suceava with a capacity of 1200 beds, representing 35% of the total beds in the county, and assuring specialty medical care for a population of 250.000 people and 30% of the county's territory. The hospital medical services are divided into 33 wards and compartments, some of which being the only ones of that medical profile in the county, respectively: gastroenterology, urology, ophthalmology, medical oncology, etc. The wards contain 30 compartments where specific medical care is handed out, 9 of which are medical compartments which are unique in the county such as endocrinology, hematology, neurosurgery, vascular surgery, plastic surgery, thoracic surgery, infantile neuropsychiatry, HIV/AIDS and maxillo-facial surgery.

The medical services are continuously assured, with 21 "on-call" lines in 14 different wards. The hospital's technical block is insured by laboratories (functional explorations, anatomical pathology, radiology with CT scan) as well as a central transfusions point, sterilizing unit, distinct operating block, D.D.D. point, closed-circuit pharmacy and oxygen distribution station. The Medical Imaging compartment is equipped with latest-generation devices such as a CT scan or a digital Rx radiology unit supplied by the Ministry of Health.

The Clinical Emergency County Hospital in Oradea offers medical assistance for people suffering from acute conditions in Oradea (over 200.000 inhabitants) and Bihor County (600.000 inhabitants), as well as people from surrounding counties (Satu Mare, Salaj, etc.). The medical and administrative activity of the unit is done at four distinct buildings: Building I (wards with beds, radiology, emergency unit), Specialty ambulatory and Administrative service, Building III (Obstetrics-gynecology, Legal Medicine) and the Municipal Clinical Hospital (Urology ward, emergency unit).

The medical services are provided in 25 wards and compartments, some of which have a unique medical profile within the county such as: interventional cardiology, specialty intensive care unit, plastic surgery – burn unit, maxillo-facial surgery, thoracic surgery, vascular surgery, urology, gynecology, etc. It is the only unit in the county which has an Emergency Unit + SMURD service, medical radiology and imaging laboratory with latest-generation devices, MRI, 2 CT scanners, digital

mammograph and DEXA and a high performance medical testing laboratory.

## RESULTS AND DISCUSSIONS

The Suceava Emergency County Hospital has 1.200 beds in its structure, 315 more than the one in Oradea, which does not have wards pertaining to chronic diseases.

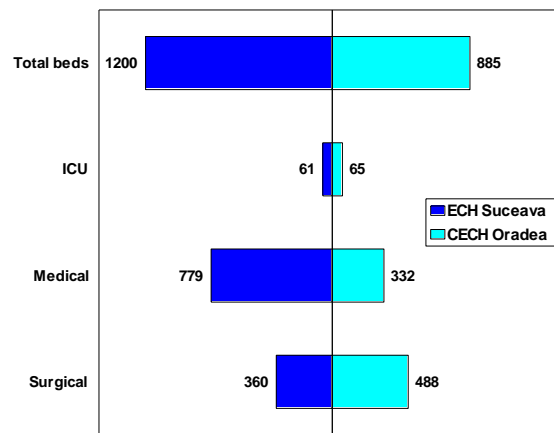


Fig. 1. Structure of the number of beds

From the point of view of specialties, medical specialties are predominant in Suceava (779 beds – 64.92%), while in Oradea we have a predominance of surgical specialties (488 beds – 55.14%). The Oncology, Hematology, Infectious diseases and Psychiatry wards belong to the Oradea Municipal Hospital.

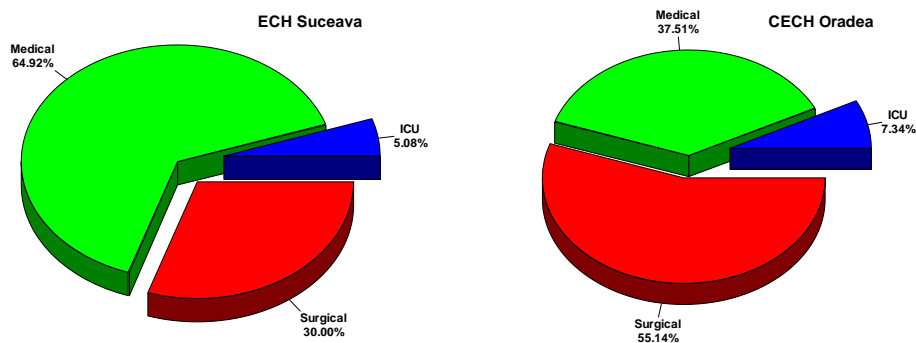


Fig. 2. Percentage of units with beds

We notice that the personnel on ward duty is larger in Oradea (820 people) than in Suceava (740 people), despite the fact that Suceava has a 315 bed gain on Oradea. In the case of wards with beds, doctors represent 16.76% in Suceava and 18.66% in Oradea, resulting in a better coverage of ward activities. It is worth mentioning that, being a clinical hospital, over 60% of doctors in the Oradea hospital have an integrated activity, also being university professors (62.09%).

In the category of “other superior personnel” we have included psychologists, professors and physio and kineto therapists. The percentage is superior for Oradea Hospital in this case as well (1.10% vs 0.95%), even though Oradea does not have specialties like Psychiatry, Infantile Neuropsychiatry and Medical Recovery.

In the case of nurses and caregivers, their percentage is larger in the case of Suceava Hospital (53.78% and 20.41% respectively) than in the case of Oradea Hospital (50.12% and 15.12% respectively). Attendants represent 6.76% of Suceava Hospital and much more of Oradea Hospital, with a value of 11.59%. In the category of “other personnel” we have included stretch bearers, social workers and technical personnel, which has a percentage in Oradea which is almost double the one in Suceava – 3.41% vs. 1.35%.

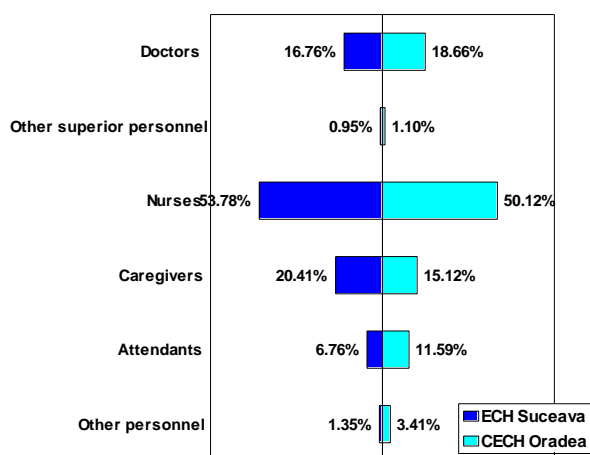


Fig. 3. Personnel structure in units with beds

From the distribution of personnel in ward units on specialties we know that 58.24% is on medical profile wads, 30.45% on surgical profile wards and 11.22% on intensive care unit wards. Analyzing the structure of personnel on the criteria of specialty, in the case of Suceava the doctors are 10.84% of ICU wards, 20.80% in the case of surgical wards and 15.78% in the case of medical wards. Nurses are 69.88% in ICU wards, 49.12% in surgical wards and 53.13% in medical wards, while caregivers are 14.46% of ICU wards, 21.24% of surgical wards and 21.11% of medical wards.

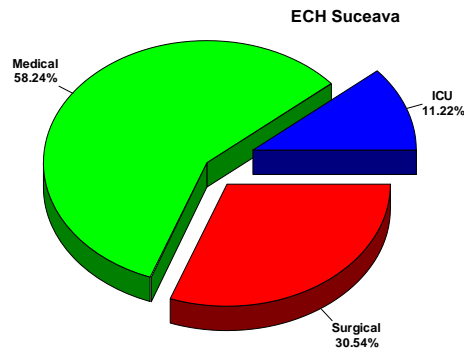


Fig. 4. Distribution of personnel from wards with beds on specialties – Suceava

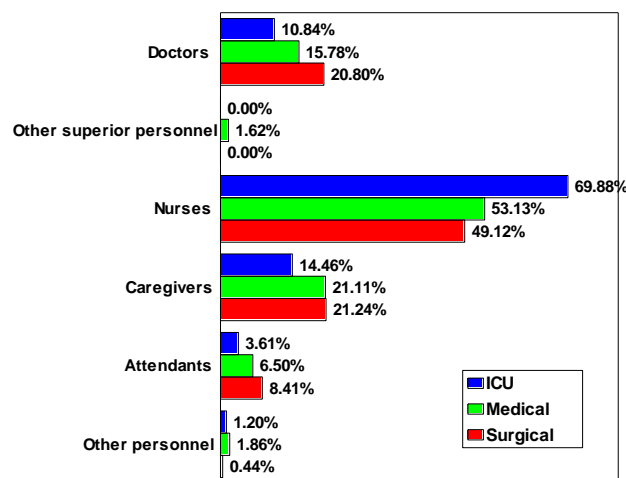


Fig. 5. Structure of personnel in wards with beds on specialties – Suceava

From the distribution of personnel in the Clinical Emergency County Hospital in Oradea on wards with beds on specialties we find that 58.24% is on medical profile wads, 30.54% on surgical profile wards and 11.22% on ICU wards. In the case of Oradea, an analysis of the personnel structure on specialties showed that doctors take up 13.92% of ICU wards, 19.53% of surgical wards and 20.14% of medical wards. Nurses are 62.03% of ICU wards, 46.17% of surgical wards and 48.76% of medical wards, while caregivers are 15.19% of ICU wards, 14.25% of surgical wards and 16.25% of medical wards.

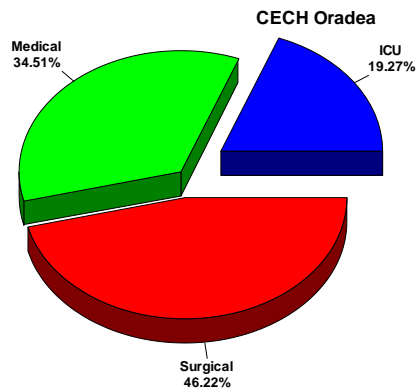


Fig. 6. Distribution of personnel from wards with beds on specialties – Oradea

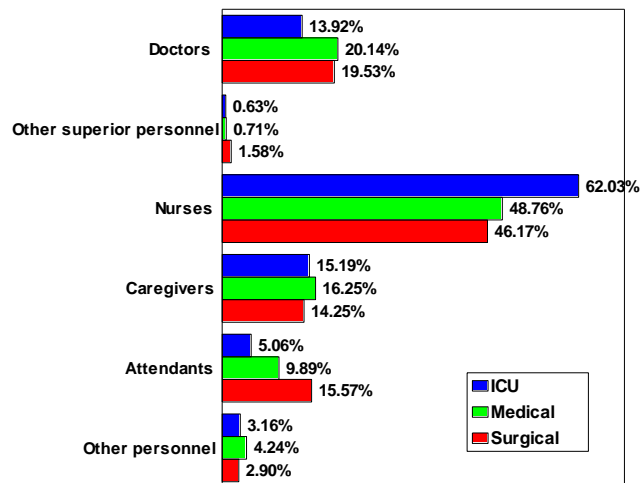


Fig. 7. Structure of personnel in wards with beds on specialties – Oradea

In Suceava Hospital a doctor has on average 9.68 beds, while in Oradea Hospital the number reaches 5.78. The differences are consistent regardless of specialty: 6.78 vs 2.95 in ICU, 7.66 vs. 6.59 in surgical specialties and 11.46 vs 5.82 on medical specialties.

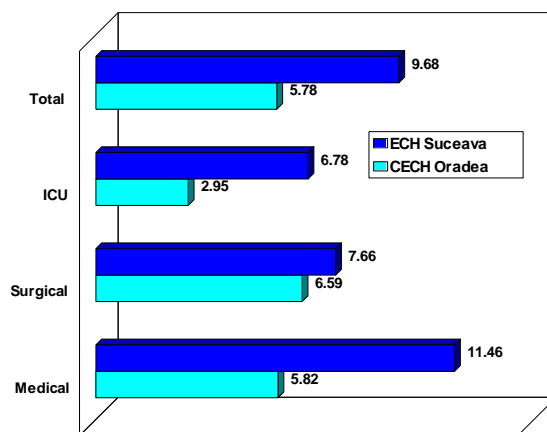


Fig. 8. Average number of beds/doctor

A nurse in Suceava Hospital has to care for a number of 3.02 beds, while in Oradea the number reaches 2.15. Even though the average number of beds/nurse is larger in the case of Suceava Hospital than in Oradea, the differences are not significant: 1.05 vs 0.66 in ICU, 3.24 vs 2.79 in surgical specialties and 3.40 vs 2.41 in medical ones.

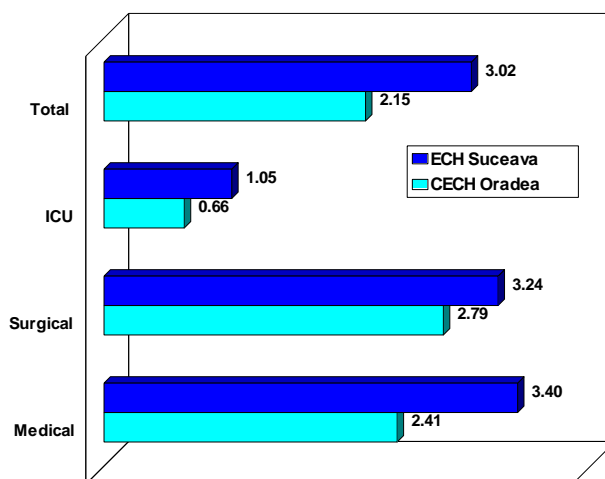
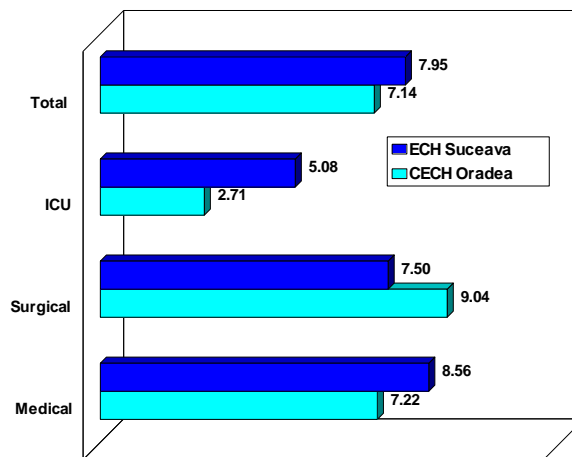


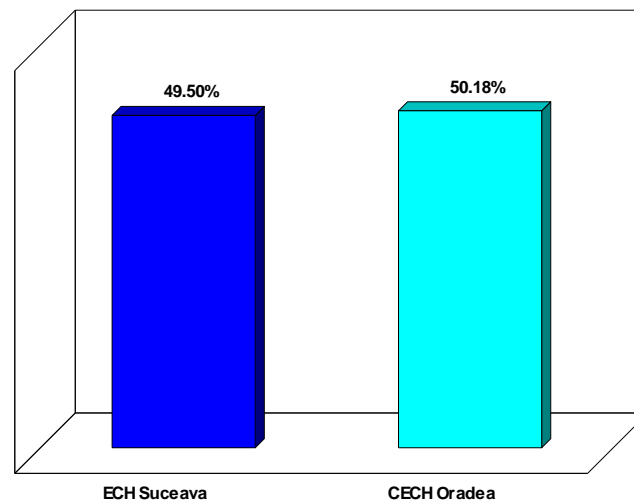
Fig. 9. Average number of beds/nurse

A caregiver in Suceava Hospital has to care for an average of 7.95 beds while in Oradea the number reaches 7.14. In the ICU and medical wards the average number of beds/caregiver is larger in the case of Suceava (5.08 vs 2.71 and 8.56 vs 7.22 respectively) while in the case of surgical wards the rapport is different (7.50 vs 9.04).



*Fig. 10. Average number of beds/caregiver*

In the case of wards with beds, the expenses with personnel represent half of the total expenses of the wards (49.50% in Suceava Hospital and 50.18% in Oradea hospital).



*Fig. 11. Percentage of expenses with personnel*

We can remark on the fact that the personnel deficit in the case of Suceava Hospital is of at least 206 people, with first place being taken by nurses followed by doctors, while in the case of Oradea Hospital the personnel deficit is of at least 92 people, with first place taken by nurses followed by caregivers. As a result of applying norming to the number of beds we have obtained the following results:



Table 1

The shortage of medical staff on wards with beds

	<b>Suceava Hospital</b>		<b>Oradea Hospital</b>	
	<b>Minimum</b>	<b>Maximum</b>	<b>Minimum</b>	<b>Maximum</b>
Doctors	75	127	24	51
Nurses	98	146	26	78
Caregivers	33	62	42	67
<b>Total</b>	<b>206</b>	<b>335</b>	<b>92</b>	<b>196</b>

## CONCLUSIONS

1. The Emergency County Hospital in Suceava, as the only hospital in the city of Suceava is 315 beds larger than the Clinical Emergency County Hospital in Oradea and the structure of beds is different, with Suceava having more medical wards and Oradea more surgical wards.
2. In the case of wards with beds doctors are 16.76% of Suceava Hospital and 18.66% of Oradea Hospital, resulting in a better coverage of ward activities.
3. In the case of nurses and caregivers, their percentage is larger in the case of Suceava Hospital (53.78% and 20.41% respectively) than in the case of Oradea Hospital (50.12% and 15.12% respectively).
4. On the wards with beds the personnel expenses represent half of total ward expenses (49.50% in the case of Suceava Hospital and 50.18% in the case of Oradea Hospital).
5. The personnel deficit in the case of Suceava Hospital is of at least 206 people, with first place being taken by nurses followed by doctors and in the case of Oradea Hospital the personnel deficit is of at least 92 people, with first place being taken by nurses followed by caregivers.
6. There is a personnel deficit throughout the health system, caused firstly by doctors and nurses leaving for jobs abroad, but also due to the fact that salaries are very low.
7. In these conditions, the only way to attract medical personnel is through equipping hospitals with latest-generation devices which can offer professional satisfaction.

## REFERENCES

1. Robert L. Mathis, Panaite Nica: *Managementul Resurselor Umane*, Editura Economică, București, 1999
2. Petre Burloiu: *Managementul resurselor umane*, Edit. Lumina Lex, București, 1996.
3. Adriana Bădescu, Codruța Mirci, Gabriela Bogre : *Managementul resurselor umane : manualul profesionistului*, Ed. Brumar, Timișoara, 2008
4. Mirela Bucurean: *Management General*, Editura Universității din Oradea, 2000
5. Mirela Bucurean: *Managementul întreprinderilor mici și mijlocii*, Editura Universității din Oradea, 2000
6. Eugen Burdus : *Management Comparat*, Editura Economică, București, 1998
7. Petru Armean: *Managementul calității serviciilor de sănătate*, Ed. Coresi, București, 2002
8. Dan Anghel Constantinescu : *Management Comparat*, Colecția Națională, București, 1999
9. \*\*\* *Handbook of Human Resource Management in Government* / Stephen E. Condrey, (ed.) - San Francisco: Jossey-Bass Publishers, 1998