In healthcare sector, human resource is the main category of resources absolutely necessary to ensure the provision of healthcare services. In Western countries, providing an optimal rate of specialized medical staff is one of the health policies subjects and development and quality improvement in nursing field is a major component of government health policies.

In Romania, it highlights a lack of regulation in this area and also territorial inequalities and a shortage number of nurses determined by the inadequate planning of the medical staff and also by the increase of the phenomenon of migration to countries where their profession and human being are respected and where they can live in better conditions.

Profile of nursing profession in Romania

Nurses are present in all structures of the Romanian health services system, being by far the largest group of healthcare workers. The evolution of the nursing profession during the second part of the 20th century has followed the pathway that was common to all the Central and Eastern Europe Semasko-type systems. Two aspects of nursing in Romania differ slightly from their Western European counterparts: professional autonomy and education. Except for some community nurses, all others practise under the supervision and responsibility of a doctor. Nursing education has been aligned on EU requirements, especially during the accession process. Before that, the curriculum and the period of training was shorter than the one in the EU (two years post high school and then vocational high school). There are also some differences in the content of daily activities and responsibilities.

Numbers, age, sex

Romania reported a number of 85,785 nurses and midwives in 2006 (WHO 2008). A similar figure was reported also in 1989 – the year of political change in Romania. Between the two dates, there was an increase and then a decrease of over 10,000. The highest number (99,685) was recorded in 1996, and afterwards it decreased to figures similar to those from the late ’80s (Graph 1). The initial increase and the following decrease are explained by the reforms of the health sector and the development of the private sector. As the numbers reported to WHO do not include the private health sector, the
important observed decrease after 1996 reflects the rapid development of the private sector, which has no obligation to report numbers of staff to the health authorities. Consequently, the exact number of nurses and midwives employed in the whole healthcare system was not known until two years ago.

In 2004, new legislation on nursing and midwifery gave their professional association the authority to self-regulate and introduced compulsory licensing. A national registry was introduced, and now all nurses and midwives are registered regardless of where they work or if they work at all. Their total number was 127,155 in 2006 according to the national registry of nurses and midwives(5), a difference of about 41,000 with the figures reported to WHO for the same year.

The number of nurses per 100,000 inhabitants was about 400 in 2006. This was almost half of the EU average. Midwives were about 25.6 per 100,000 compared 38.9 in EU countries where this profession exists. However, according to the national registry of nurses and midwives their number is around 578 per 100,000, but with an unknown number of those still working in Romania.

The evolution of the total number of midwives in Romania reflects an important decreasing trend that started in 1978 when midwifery education was abolished. In 1989, there were 12,479 midwives, in 2006 only 4,913 were reported. The function of the midwife was passed to nurses, who worked under the label of “nurse specialized in obstetrics and gynecology”. Statistics of midwives to persons trained prior to 1978. The geographical distribution of nurses specialized in obstetrics and gynecology between districts is highly skewed as it ranges from 264 to 964 per 100,000,. The number of male nurses is about 8,000 (less than 7%). The population of nurses and midwives is rather young (Figure 1): 37.1% are between 26-35, 29.1% between 36-45 and 22.3% between 46-55. The small number aged over 55 (7%) results from the retirement policies of the past 15 years [6]. Immediately after the political changes in 1989, early retirement was common during the first decade. Women could retire at 56 and men at 63.

The law on nursing and midwifery (307/2004) defines 18 specialties for the nursing profession. The majority of nurses are generalists (69%), followed by pediatric (10%) and obstetric-gynecology (7%). The rest are divided...
between more technical specialties as radiology, laboratory, nutrition, dentistry or public health.

There is no midwifery post-graduate specialization. During their career, nurses and midwifes can move up one professional step called “principal degree” by passing an exam organized yearly, accessible to nurses and midwifes with at least 5 years experience.

Regulatory framework

Until 2004, the legislative framework that regulated the profession was very restrictive, as regards the scope of practice. Once the EU accession process started, Romania had to implement the directives on free movement and mutual recognition of qualifications. In 2004, the new law strengthened professional autonomy and aligned nursing education with EU standards and set up the professional association of nurses. The law defines who has the right to practice, defines the two professions and describes the contents of their respective activities. The right to practice is given by the Ministry of health through its district authorities, with the approval of the professional association.

The scope of practice in nursing is defined by law and includes treatments prescribed by doctors, evaluation of care needs, education for health, health promotion, research. A recent study [5] reported that less than 30% of nurses have activities related to assessment of health care needs, promoting a healthy environment or health protection of vulnerable/risk groups. Only 6% are involved in research.

Training capacity, education

Before 1990 there were several different training schemes in nursing. Since 1990 nurses have been trained exclusively in nursing colleges – a non-university form of education. Current training takes three years of study after completion of high school. In the early 1990s, the Ministry of Health conducted an intense retraining program to update the skills of nurses who graduated from specialized nursing high schools, which was the only form of training in the 1980s. The Nursing University Colleges have been established in 2003, with a four-year training, in compliance with Romania’s EU accession agreement.

Admission to nursing schools is based mainly on school results, and skills such as social behavior and motivation are little considered. There are limited possibilities for nurses to upgrade their academic qualifications. Admission to private schools, about which no official statistics exist, is less strict, i.e there are no admission tests or the school results are not eliminatory.

The number of students entering University Colleges and public nursing colleges is strictly regulated by the Ministry of Education, which fully funds nurses’ tuition. The number of students entering the private schools is not controlled. There are an estimated 35,000 graduates per year, compared to the 2,000 which the Ministry of Health estimates to be needed, based on the absorption capacity of the public health care system. Comparing the number of graduated nurses per 100,000 inhabitants with EU average and other EU countries, Romania still has a low number of graduates.

However, this number from WHO HFA database corresponds only to graduates from public nursing colleges and do not count nurses graduating from private schools.

The necessity to implement EU requirements in nursing training led to some important changes. Since 2003, all state training programs are based in university colleges and the curriculum is compliant with the EU directive. All type of schools now need to be approved by the National Accreditation Committee. In 2008, the EC accepted also the non-university based nursing schools, but with stronger requirements for their accreditation and for quality control. Eleven public universities and an unknown number of private
universities and nursing schools compete in the field of nursing education.

Migration

There is no official data about the number of nurses migrating. The Ministry of Health has accurate data only on nurses who requested the certificates for mutual recognition of their diplomas within EU. These show that from 1 January 2007 (date of Romania membership to EU) to 31 December 2008, 4608 nurses and midwives (3.8% of total) requested the certificate for the recognition of their diploma in the EU. Out of those, only 3525 have received their certificate, the others either were not compliant or dropped the request. (6). It is now known if those receiving their certificates have migrated or not.

A recent study (5) estimated intentions to migrate of a national representative sample of nurses. 55% gave a negative answer, 22% did not to answer, and 21% expressed a desire to work abroad (Table 1).

Their age distribution shows that the majority of the nurses who expressed desire to work abroad are from the 26-45 years age group (Table 2).

The majority of respondents mentioned that they know at least one colleague who migrated; 39% said they knew more than 10 (Figure 3).

In some districts in the North-East of the country, the poorest area, emigration seems to be more intense. The profile of the Romanian nurse with a high potential of migration could be described as follows: general nurse graduated from a nursing college, aged between 26 and 35 years, living in an urban area in North-East or South of the country.

The social status of nurses can be described as modest compared to less qualified workers. Their wages in both the public and the private services do not exceed 300 Euros (net) per month. Nurses are still regarded as doctors’ assistants and not as independent and autonomous health workers. Changes in their professional training system may have future benefits, as an increasing number of nurses and midwives with university training will enter the labor market, and training at college level will disappear.

Table 1: Intention to work abroad among Romanian nurses 2007

<table>
<thead>
<tr>
<th>Q: Do you plan to work abroad?</th>
<th>NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>315</td>
<td>55.9</td>
</tr>
<tr>
<td>NA</td>
<td>126</td>
<td>22.3</td>
</tr>
<tr>
<td>Yes</td>
<td>123</td>
<td>21.8</td>
</tr>
<tr>
<td>Total</td>
<td>564</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Olsavszky 2008
Policies and strategies to address imbalances in the nursing workforce

The main shortage of nurses, as well as the other health personnel, seems to be in rural areas where almost half of the Romanian population leaves. In order to tackle these inequalities, the Government adopted different policies [7]. Criteria were introduced to define and rank remote areas with chronic shortage of nursing and medical personnel. According to this ranking, these workers could receive different incentives such as:

- Free housing, with expenses paid from local and central funds
- Installation fee for health professionals, including nurses willing to work in remote areas (equal to 2 average salaries)
- Monthly bonuses of up to 50% of the basic salary
- Subsidies for the acquisition of new medical equipment
- Reduced local taxes

However, as a recent World bank Review (8) points out, Human Resource for Health has been largely left out by all health reforms, with no official document or policy on this issue; it is suggested that a strategy is needed at least to: (i) attract young Romanian to enter the health professions, (ii) encourage graduates to practice in rural and remote areas, and (iii) limit the exodus of health professional after EU accession.

Table 2: Intention to work abroad among Romanian nurses by age groups, 2007

<table>
<thead>
<tr>
<th>AGE GROUP</th>
<th>YES</th>
<th>NO</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25 years</td>
<td>6</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>26-35 years</td>
<td>52</td>
<td>120</td>
<td>37</td>
</tr>
<tr>
<td>36-45 years</td>
<td>34</td>
<td>82</td>
<td>48</td>
</tr>
<tr>
<td>46-55 years</td>
<td>23</td>
<td>70</td>
<td>33</td>
</tr>
<tr>
<td>Peste 55 years</td>
<td>7</td>
<td>29</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>122</td>
<td>308</td>
<td>123</td>
</tr>
</tbody>
</table>

Source: Olsavszky 2008

Figure 3: Nurses who reported knowing a colleague working abroad, 2007

Source: Olsavszky 2008