

**mgr Małgorzata Dawidowska**

**Analysis of the relationship between the number of nurses/midwives for 1000 inhabitants and the selected parameters determining the health status of societies in selected 46 countries of the world**

## Summary

In the industrialized countries, the shortage of medical services in relation to the growing health needs has been observed for several decades. This shortage results, on the one hand, from a constant increase in life expectancy, which generates needs in the field of medical protection, and on the other hand from the deficit of qualified medical staff. The growing quality requirements in the field of health care, generated by the mass media and the increase in health awareness of citizens of highly developed countries create definitely excessive requirements regarding the quality of healthcare. These requirements can only be met by the richest countries that base their economies on raw materials with a relatively small population: Saudi Arabia, the Sultanate of Brunei, etc. In other countries, even the richest, not all health needs are met by public funds. This state stimulated the implementation of a new concept of nursing, now called nursing of advanced practice. The basic assumption of this system was to grant nurses broad powers in the field of conducting diagnostics and therapy, which allows the doctors to be relieved of their duties in the field of preventive care and post-hospital care. It has been repeatedly shown that the inclusion of advanced practice nurses in the diagnostic and therapeutic process, results in a decrease in the mortality of cardiac patients in the period following hospitalization due to, for example, heart failure, while shortening the period of necessary hospitalization. Similar data are available in the literature regarding other acute states of life threat in the areas of paediatrics, gynecology and obstetrics, internal medicine and surgery. In the USA, where the most comprehensive statistical data come from, it has been calculated that this system brings tangible economic benefits to the growing satisfaction of patients. The introduction of nursing advanced practice required the establishment of fundamental changes in the systems of health care organization and in the system of postgraduate education of nursing staff. This was done despite the clear opposition of doctors

interested in maintaining the scope of their existing competences. In Poland, despite the evident and quantifiable benefits of this system, even legislative work leading to the introduction of an advanced practice nursing system has not yet been initiated. The aim of this work was to review the scope of competence of advanced practice nurses and the measurable benefits of introducing this system in various countries around the world. It was decided to rely on statistical data on the quality of healthcare systems measured with global data such as life expectancy, infant mortality, number of medical card and data on the wealth of societies and the amount of funds allocated to publicly funded medical services. Using the method of rank correlation analysis, analysis of variance and analysis using the principal component method, it was demonstrated that in countries with high GDP, allocating a significant percentage of funds for medical services, there is a significantly higher level of nursing staff security in comparison with poor countries. Simple dependence between wealth and development level of civilization, saturation of medical staff and health well-being of the society was shown. In the countries that were leaders in this respect, the level of nursing staff saturation as well as their competences and health well-being were the highest. It was also noted that in all countries with the best indicators of well-being and quality of life, the nursing staff are accompanied by a number of support staff, in practice absent in Poland. The quickest introduction of nursing advanced practice in our country and the inclusion of nursing aids and medical assistants is postulated.

**Key words:** nurse, midwife, education, competence, health care, expenditures, population health welfare, advanced practice nursing