



HUMAN RESOURCES SUPPORT FOR THE PHARMACEUTICAL INDUSTRY: CHALLENGES IN TRAINING SPECIALISTS

G.U. Azlyarova¹

S.L. Zhuraeva²

Tashkent Pharmaceutical Institute, Tashkent city, Republic of Uzbekistan

e-mail: azgulnoza644@gmail.ru

<https://doi.org/10.5281/zenodo.17312306>

Relevance: Human resources support for the pharmaceutical industry is one of the key factors in its sustainable development and in improving the quality of healthcare services for the population. In the context of dynamic growth of the pharmaceutical market, the introduction of innovative technologies, the expansion of the range of medicines, and increasing safety requirements, the demand for highly qualified specialists is steadily rising. At the same time, problems persist, such as the mismatch between the level of training and modern requirements, the lack of practice-oriented competencies, as well as an imbalance between supply and demand in the labor market. Solving these issues directly affects the efficiency of pharmacy organizations, the level of pharmaceutical provision for the population, and the overall development of the national healthcare system.

Purpose of the study. To apply approaches of structural-functional analysis, systematic search, creative thinking, and innovative design.

Materials and Methods. Approaches of structural-functional analysis, systematic search, creative thinking, and innovative design.

Results. The proposed approach to human resources support in the pharmaceutical industry is based on a professional competence model developed with reference to the life cycle of a medicinal product and its related processes. This model makes it possible to comprehensively account for the directions of professional activity, highlight industry-specific features, typical tasks, and define the fundamental areas of knowledge and specialized modules required to perform specific functions.

The system of personnel training in the pharmaceutical industry includes several levels: secondary specialized and higher education, as well as a segment of continuing education. A distinctive feature of pharmaceutical education is the inclusion of residency (internship), characteristic of the medical field. An important element of the continuing education system is the management of professional development and the organization of internal training.

The formation of educational programs based on a comprehensive approach makes it possible to present them as a single continuum of knowledge and skills — from preparatory stages (senior school classes) to specialist degree, master's and doctoral studies, followed by lifelong professional education. Such an approach ensures consistency in workforce planning for the pharmaceutical industry, the creation of unified criteria for evaluating educational outcomes, and the readiness of specialists for professional activity.

Conclusions. Thus, human resources support for the pharmaceutical industry requires a systemic approach based on a professional competence model for training specialists. The use of the life cycle concept of a medicinal product makes it possible to design educational programs as a single continuum of knowledge and skills — from preparatory to lifelong professional education. This ensures coherence between levels of training, alignment of specialists with modern industry requirements, and provides the foundation for the effective development of the pharmaceutical system and the improvement of pharmaceutical provision for the population.