



COMPETENCE MODEL OF A PHARMACEUTICAL MANAGER

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Relevance: the modern pharmaceutical industry is undergoing profound transformation. The digitalization of production and management processes, the introduction of artificial intelligence, increased competition in the global market, and the development of biotechnology and personalized medicine require specialists to possess not only professional pharmaceutical knowledge but also a comprehensive set of managerial, strategic, analytical, and communication skills. Stricter regulatory requirements (GMP, GDP, drug labeling), demographic changes, and a shortage of qualified personnel pose additional challenges. Under these conditions, traditional educational programs, focused primarily on imparting academic knowledge, are no longer meeting labor market demands. This necessitates a reconsideration of approaches to personnel training and the development of a competency-based model for pharmaceutical managers capable of effectively managing business processes, adapting to a rapidly changing environment, and implementing innovative solutions.

Purpose of the study: to validate a competency-based model for modern pharmaceutical managers and develop recommendations for updating educational programs in the digital economy.

Materials and methods: an analysis of regulatory documents and educational programs in Russia, Kazakhstan, and India was conducted, along with a survey of senior students at pharmaceutical universities (n=212). Comparative and content analysis methods were used.

Results: key competency groups were identified: managerial (85%), analytical (81%), communication (78%), strategic (71%), and marketing (68%). Recommendations have been developed for modernizing educational programs, including strengthening modules on strategic and project management, digital marketing, BI analytics, regulatory affairs (GMP, GDP), and soft skills development.

Conclusions: the pharmaceutical manager competency model integrates managerial, analytical, strategic, and digital skills. Educational programs should become interdisciplinary, practice-oriented, and take into account the dynamics of the pharmaceutical market, which will enable the training of specialists prepared to work in an environment of uncertainty and innovative change.