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Development of management structures for future nursing services in the Republic of Kazakhstan requires change of organizational culture

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Abstract

Aim: This study's aim was to describe the development of new management structures for nursing services in pilot public healthcare organizations in the Republic of Kazakhstan by focusing on cultural change from the former Soviet system to the modern nursing management system.

Background: Because organizational culture plays an essential role in developing nursing management processes, the challenge in Kazakhstan is to change the deep-rooted Soviet administration practices, such as top-down management and the absence of a career structure in nursing, to meet the new public management system's requirements.

Method: Participatory method was used to generate organizational culture change in 31 pilot organizations.

Results: The organizational structures were reorganized with new nursing positions. Changes concerning nurses' job descriptions and educational requirements were introduced to the legislation. Workforce planning and work division between the healthcare professionals were suggested, allowing new operational functions for nurses. The implemented changes facilitate the culture change in the healthcare and nursing service system.

Conclusion: The shift of healthcare organizations towards a modern nursing management system has started in Kazakhstan.

Implications for Nursing Management: Good understanding and competence of cultural issues related to the change processes are critical in countries that are undergoing fundamental reforms in their healthcare systems.

KEYWORDS
Central Asia, delivery of healthcare, Kazakhstan, nursing management, organizational culture

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1 | INTRODUCTION

Healthcare organizations have traditionally been authoritarian, top-down governed, but as this model has become more and more ineffective, their change into organizations that emphasized shared vision, inside and outside collaboration, as well as patient participation and empowerment has begun (Kickbusch & Gleicher, 2012). This is challenging healthcare organizations to redefine their strategies and operational functions at all levels. Organizational structure defines the way in which functions are organized, and roles, responsibilities, power and authority are assigned individuals and groups within organizations, so that the organizations are able to reach their goals (Janićijević, 2013; Lunenburg, 2012).

In addition, organizational strategy, structures, systems and management practices are related to the organizational culture. Mannion and Davies (2018) remark that healthcare organizational culture can be addressed through three layers. The first layer consists of the visible manifestations that are observable and communicated in practice, including the way services and roles are divided as well as staffing, reporting, a rewarding system and facilities. The second layer includes the shared ways of thinking, the values and beliefs that make everything justified, and the third layer the deeper shared assumptions that are taught in early education (hidden professional curriculum), containing national culture (Mannion & Davies, 2018). Organizational culture is relatively stable and helps people behave in an expected manner in their organization. Moreover, organizational culture is an essential concept for understanding people's behaviour within organizations as it is related to the performance and motivation people have in the organization (Janićijević, 2013), whereas workplace culture refers to the specific identifiable subculture of a department or employee group, such as doctors and nurses (Braithwaite et al., 2017). The culture is key in either facilitating or inhibiting the development processes in all parts of the organization.

Because nurses and midwives represent over 50% of the health workforce in healthcare organizations (WHO, 2016), an essential question is: What is the nurses' role in healthcare organizations, and how are they led? Modern leadership approaches have been found to positively affect nurses' job satisfaction, engagement and innovation, and there is clear evidence that nurse leaders have a positive impact on creating a patient-centred healthcare delivery system, for example, increasing patient safety as well as satisfaction and the quality of patient care (Hughes, 2018). Workplace culture among nurses has been studied, for example, in operating rooms (Eskola et al., 2016), psychiatric care (Kurjenluoma et al., 2017) and primary healthcare (Hahtela et al., 2015) through the constructs of job stress, job satisfaction and practice environment. The findings by Arundell et al. (2017) suggest that students' learning in clinical practice is affected by the workplace culture. Some studies also demonstrate a connection between workplace culture and patient outcomes (Braithwaite et al., 2017; Hahtela et al., 2017). In addition, organizational culture has been found to affect implementation of evidence-based practice (Li et al., 2018).

In Western countries, the need for nurse leaders is recognized, and they have been accorded positions within organizations' strategic management, whereas the situation is not the same in most of the post-Soviet countries. After the Soviet Union collapsed in 1991, although some of the former Soviet countries have made major reforms in their healthcare management systems, there are still countries that have not done so. Typically, the Soviet system was a centralized top-down government with strict norms and guidelines. The same top-down model—with ministry guidance, implementation monitoring and heavy reporting—has continued, even in its current healthcare facilities, maintaining authoritative organizational culture. This detailed reporting implies increased workload for individual physicians, and failure to follow protocols leads to legal consequences. In general, in former Soviet countries, the status of medical professionals other than doctors, especially nurses, has remained poor. Generally, nurses' education has been imparted in vocational colleges rather than higher education institutions, licensing is not a requirement, and nursing is still not considered a professional career (WHO, 2014).

Healthcare organizations need to respond to global societal changes and the population's healthcare needs, for example, ageing and pandemics (He et al., 2016; WHO, 2020). Further, globalization is posing a challenge to healthcare facilities, especially because the past structures and strategies are not guaranteeing the new required results. For leading the change, the new situation needs good strategies and competent leaders, who are capable change agents. The nation's cultural background affects the culture and structure of organizations and how they are managed and led. When faced with global challenges, innovative nations and organizations respond to changes better than the non-innovative ones (Strychalska-Rudzewicz, 2016).

Moonen's (2017) survey on the impact of culture on the innovative strength of European Union nations showed that moderate innovators belonged to countries—like Lithuania, Latvia and Romania—having a Soviet background, whereas the innovation leaders were from countries like Denmark, Finland, Germany and Sweden. Although this survey has not specifically reported the innovation situation in healthcare, nonetheless, it can be considered that correspondingly healthcare organizations, reflecting the national culture, to be capable to respond to the populations' care needs by innovations. Organizational structures having more flexibility and freedom will enable professionals to innovate solutions to the new demands of services in their work. Moreover, Wagner et al. (2014) reported that organizational structures that support care innovations are linked to advanced quality management systems in European hospitals. Furthermore, positive organizational and workplace culture has been found to be positively associated with patient outcomes in North American and European hospitals (Braithwaite et al., 2017).

The Republic of Kazakhstan has made ambitious reforms to its education and healthcare systems. Both the European Observatory on Health Systems and Policies and Glonti (2015) had reported attempts at increasing hospitals' managerial autonomy in comparison with other post-Soviet countries. The current Social Health Insurance Project has three components, in which the second component encompasses supporting the improvements in population services,

developing the health facility network, improving evidence-based healthcare delivery and management in the health sector and developing the human resources policy (Kamzebayeva, 2019).

The Republic of Kazakhstan joined the Bologna process, which supported it in modernizing its medical and nursing education. In 2015, the government set the aim of increasing its public health system's effectiveness through extensive nursing care reform, and the creation of new position of nurses to meet the modern societal challenges and international requirements, based on the European Commission's directive (2013/55/EU) concerning the requirements of nursing education and qualifications (European Commission, 2013).

In the Comprehensive plan for the development of nursing in the Republic of Kazakhstan, until 2020, the aim was to reform the healthcare organization structures on the basis of parallel and equal management structures, where nurses and physicians could work independently while being a part of a multidisciplinary team. In healthcare, neither legislations concerning nursing professionals' positions nor organizational structures had supported nurses in having top-level management positions in organizations. Medical doctors lead healthcare organizations, and nurses have been more to assist doctors and perform technical skills. Furthermore, at the management level, chief nurses were subordinates of a chief doctor. This situation has not made full use of the potential of both nurses and medical doctors. Nurses had been working as subsidiaries to physicians, and their general education levels in leadership positions had been low compared with international practice (Order of the Acting Minister of Health, 2014).

The strategic aims for development of nursing services are closely guided and monitored at the ministerial level, which, in this case, means that the required changes in nurses' new positions in healthcare settings are significantly changing nurses' roles in a relatively short time (Order of the Acting Minister of Health, 2014). One of the barriers was the population's cultural mentality, which aims to avoid uncertainty and therefore relies on traditions, resists reforms and does not trust the new nursing service model in medical organizations (Nezhina & Ibrayeva, 2013). In addition, representatives of medical organizations (doctors and administration heads) were used to seeing nurses as doctors' assistants, reflecting the model of medical care, which was formed in the countries of the Soviet period (Baygozhina et al., 2018).

Based on the nursing education reforms in 2018, the first group of nurses graduated with competences fulfilling the European Commission's Directive (2013/55/EU) requirements, which are defined in Kazakhstan as a nurse with extended practice (bachelor's in nursing). The increase in the proportion of nurses with extended practice is determined by the key indicator of the State Program for the Development of Healthcare for 2020–2025. Until 2025, the need to increase the share of nurses with extended practice in the total number of nursing personnel in the healthcare system of the Republic was determined as up to 18% (Order of the Minister of Health, 2019).

This study's aim is to describe the development of new management structures for nursing services in the Republic of Kazakhstan's pilot public healthcare organizations in seven regions of Kazakhstan. Its focus is mainly on cultural changes from the former Soviet system to the modern nursing management system.

2 | METHODS AND DESIGN

A participatory development process was used to facilitate the new management structures' development for nursing services during 2018–2019. The participatory development process entails the involvement of ordinary people (here chief physicians, chief and senior nurses) in a development process leading to change. From the institutional point of view, participation was used as a tool to achieve the pre-existing goals defined by the Ministry of Healthcare: From the social point of view, it was used to empower the people to handle challenges and influence the direction of their own life. The aim was to build the ownership by the participating people and organizations to ensure relevant outcomes and impact for the health services (Tufte & Mefalopulos, 2009.)

The goals were set in the national strategies and outlined in the development project's objectives by representatives of the Ministry of Healthcare to support the reorganization of the 31 pilot organizations' management structure and the division of work between the physicians and nurses; enhance the knowledge of the contemporary management systems in healthcare; and build a common understanding of the reorganized structure and management system in pilot organizations.

The process consisted of Finnish experts' continuous discussions with representatives of the Ministry of Healthcare and Republican Center for Health Development (RCHD); local working groups nominated for this purpose; providing two workshops for the management of pilot organizations; expert advice in the form of reports with recommendations to the Ministry of Healthcare; and expert reviews of created methodological recommendations. Actions are described in more detail in Table 1.

During the workshops, international examples with illustrations and figures on various organizational structures, positions, job descriptions, staffing and other issues were presented to clarify the changes in practice. The work was organized in small groups with mixed professionals to make regional comparison and networking with same types of organizations possible. The majority of the time was used to discuss, reflect and work with future organizational structures, the job descriptions of the new positions and workforce planning.

The Ministry of Healthcare chose and appointed 31 pilot organizations from seven different regions of Kazakhstan, where the first graduates with internationally comparable nursing education graduated in 2018. The pilot organizations represented all the main types of the Kazakhstan public healthcare system: perinatal centres, multiprofile hospitals, polyclinics and paediatric hospitals. During the development process, the pilot organizations' chief doctors ($n = 8$) as well as chief and senior nurses ($n = 32$) worked together to solve the challenges related to the organizations' issues for achieving the set strategic goals of the Comprehensive plan for the development of nursing until 2020.

TABLE 1 Phases and activities of the participatory development process

Phases	Activities
Groundwork	Goal setting in the strategy documents
	Order of the Minister of Health on the pilot and the organizations
	Legislative changes in the education system and financing system of healthcare facilities (HCF)
	World Bank development project SHIP
Planning	Discussions with the MoH, RCHD and World Bank on the needed changes and the implementation of the activity concerning management system changes in HCFs
Organization of the Workshop I in 2018 (5 days)	Outlining the development process and requirements for participants
	Choosing the methodology and creation of working templates
	Collection of basic data from each organization
Reflection in the pilot organizations	Creation of future organizational structures, positions, job descriptions and staffing tables
Organization of the Workshop II in 2019 (3 days)	Presentations of organizational solutions
	Collection of problems to be solved in legislative documents
Disseminating and ensuring sustainability	Writing a report with recommendations
	Expert feedback on the methodological guidelines

3 | RESULTS

During the first workshop, an agreement was formulated with the identification of changes needed in regulatory documents. The best international practices and examples on the issues of nursing management were presented to create a common understanding and outline possible future directions, followed by groups working on changes needed in the regulatory documents with similar organizational settings from different regions. The results and suggestions through group work were processed through a consensus discussion.

The new organizational structures were designed by firstly describing the current organizational structures of the pilot organizations and the positions at different levels and secondly suggesting the future structure to the participants with the changes needed for including the new nursing positions. The chief doctors as well as the chief and senior nurses defined the nursing management positions in their organizations at the strategic apex and middle line levels. Mintzberg's organization theory was used as a framework for the positions (Lunenburg, 2012).

Job descriptions with educational requirements were also identified from the regulatory documents. The participants composed concrete examples of the new functions of nurses with extended practice in the pilot organizations and proposed the quantities of physicians, nurses and other personnel needed at different organizational levels in each organization for the successive years until 2025. The pilot public healthcare organizations' chief doctors as well as chief and senior nurses defined the division of work and created new staffing. For the participants, it was challenging to conduct systematic assessments and anticipate the needed nursing workforce, as it required a deep understanding of nurses' roles, skill mix and regional demographics.

Overall, because the participatory way of working was relatively new for the chief doctors as well as the chief and senior nurses, realizing the genuine possibilities to change the organization structures and positions was difficult for the participants. The discussions might first have reflected the authorial organization culture they were representing. However, one week of intensive working and discussing in an open atmosphere, which allowed critical opinions, was productive, and the participants slowly understood the possible impact of their work to the future management system.

As a result of the development process, large organizations agreed to have the new position of Deputy Vice Director in nursing, along with other Vice Directors at the strategic apex level. The tasks of these positions would focus on strategic planning and monitoring the progression towards the organization's vision and targets. In smaller organizations, it was agreed that the highest position of nursing leaders situated in the middle level would be the Chief Nurse, whose tasks would focus on organizing the nursing work in departments. It was also agreed that there should be more chief nurses to have a strong team of chief nurses to develop and support the new model of working and implement evidence-based nursing and that senior nurses would belong to the middle level, by virtue of being at the frontline to lead daily nursing work in the departments. It was proposed that nurses with extended practice would be eligible to apply for senior nurse positions. At the operative level, they would work as team leaders with nurses and junior nurses. These new positions allow completely new operational functions for nurses (e.g. leadership and decision-making responsibilities and independent duties in organizations).

During the second workshop, the participants presented their organizations' progress and created recommendations for proposed changes in the organizational structure based on the new orders (Nos. 775, 791 and 1043), in terms of the parallel structure of the medical and nursing services, positions of the chief and senior nurses, introduction of extended practice nurses and the nursing team. To support the understanding of organizational changes and its implementation, a guideline of unified recommendations for practical healthcare organizations on the effectuation of a model for the organization of nursing services (Kulanchieva et al., 2019) was formulated.

Since 2019, within the framework of the National Project "Consulting Services for the Development of the Professional Environment of Nursing Professionals and Improvement of the Nursing Retraining Systen", a new nursing service management system has been introduced in 31 pilot medical organizations in seven regions of the Republic. Figure 1 summarizes the results of participatory working.

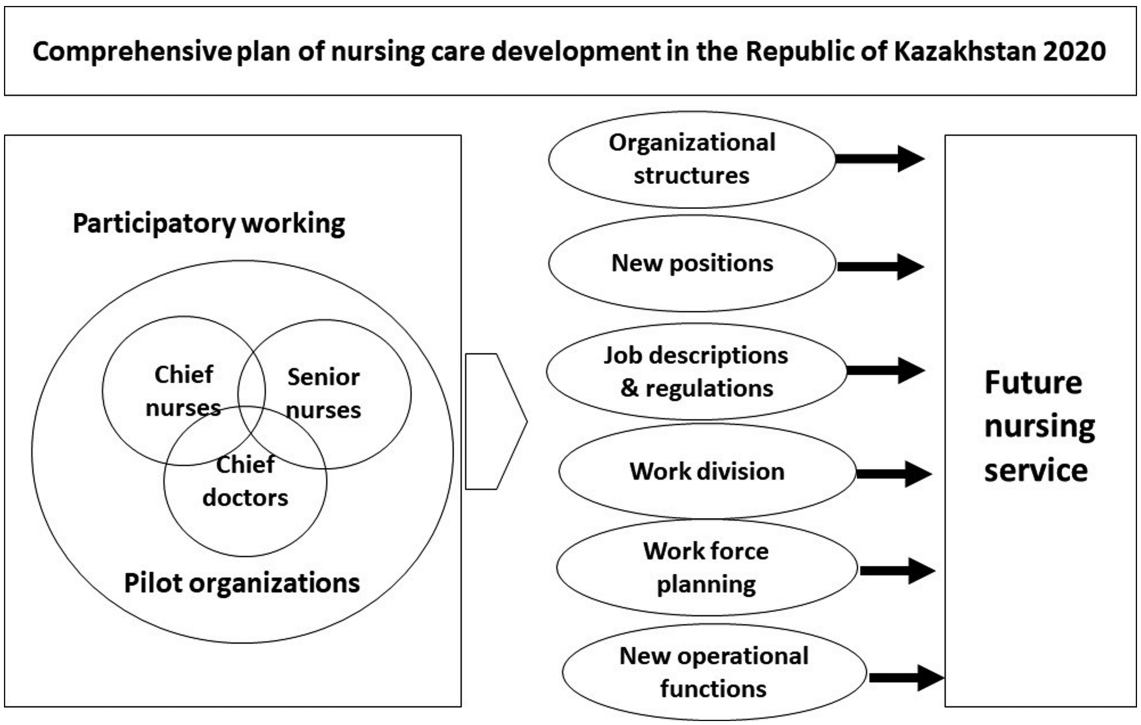

FIGURE 1 Results of participatory working

4 | DISCUSSION

The participatory development process of new management structures for nursing services in the pilot public healthcare organizations in Kazakhstan has led to legislative changes, recommendations and policy papers, confirming that nurses currently have the prospect for new, more independent positions at all levels in healthcare organizations. The created national fundamentals for the nursing management system are the visible manifestations for the new organizational culture; however, it will require time for the shared ways of thinking and the deeper assumptions to change. It is good to remember that legislative changes by themselves do not guarantee a successful change in healthcare organizations, unless the top management does not determine the need for culture change and consider culture management as a crucial management competency (Őnday, 2016).

Monobayeva and Howard (2015) pointed out the difficulties in changing the deep-rooted Soviet administration practices to meet the new public management requirements. For example, at the organizational level, it means that ongoing control does not encourage innovations or the development of managerial capacities but discourages people from responding to challenges and adapting to changes (ICN, 2016). During the participatory development process, it was challenging for the chief nurses and doctors to comprehend that they could influence by participating and giving their suggestions for the regulatory documents and that their opinions on the practical problems in staff positions and requirements would be considered. As many of the participants were senior staff members with experience of the former Soviet culture, they expected the solutions to come from the ministry or from the foreign experts.

Among the post-Soviet Central Asian countries, the Republic of Kazakhstan has been the most active and ambitious to reform its public administration (Monobayeva & Howard, 2015). Its health system reforms and nursing system development have significantly strengthened the role of nurses in healthcare. It has reformed its nursing education at all levels—vocational and higher levels of education—to fulfil the European nursing education requirements and established masters' and doctoral degree programmes (Order of the Minister of Health, 2020). Educational reforms give a totally new status and offer career possibilities for nurses. The new educational programmes contain courses on nursing management and support the new generation's shared way of thinking as well as the deeper shared assumptions on the role of nurses and their power in the management of services (Mannion & Davies, 2018). The reforms in nursing education have been fast, and as nurses with the new status graduate and enter healthcare organizations, it starts to disturb the old culture in organizations. However, the education of other healthcare professionals, especially medical professionals, needs to address these changes as well to support the organizational culture change.

An additional challenge to overcome in reforms is the organization's external culture. A study by Nezhina and Ibrayeva (2013) emphasized that despite a cultural heritage of Soviet times, a society

tends to withstand modernization. Because healthcare service clients in Kazakhstan and other Central Asian post-Soviet countries are used to consulting specialized physicians, not nurses, in connection with their health issues (WHO, 2014), the external culture is not supporting nurses to have more independent roles, or even more, to have their own appointments. Nurse leaders play a key role of interacting with the public to build trust between the clients and the service system, because they have competences to respond the clients' care needs. Such external relationships are important to support resilient healthcare services for the population (ICN, 2016).

5 | CONCLUSIONS

The development of new management structures for nursing services in the Republic of Kazakhstan is gradually progressing in all healthcare organizations, and not just in pilot public healthcare organizations. The organizational culture change has started from the post-Soviet system to the modern nursing management system, where the nurse leaders have recognized positions at all levels of healthcare organizations. The approach used to generate the organizational culture change in pilot organizations was a participatory method where the chief physicians and chief nurses of the pilot organizations defined the division of work and staffing in cooperation. As the changes needed in nursing service systems are fundamental, the strength of the development process was that the chief physicians and chief nurses were working together to achieve a common understanding of the needed changes. The commonalities of their work led to legislative changes that guarantee the sustainability of nursing service development.

The Republic of Kazakhstan is showing other post-Soviet countries in Central Asia the way for nursing service development, which is important to make the culture influence visible in change situations. O'Donell and Boyle (2008) state that when organizations are implementing major reforms, cultural issues are particularly important, especially if the reforms change the old culture and value traits, and therefore, cannot be underestimated. The cultural changes described here have a profound impact on the healthcare system, as the roles of nurses change to respond to the modern understanding of nurses' competences and independent roles. This also has an impact on the people living in Kazakhstan, as in the future, they can also receive health services from nurses. In post-Soviet countries, improvements in the quality and safety of healthcare are strongly dependent on the development of nursing work. This means that nursing education needs to be at a higher level so that nurses can work at their full potential, especially because in healthcare organizations, there are nurse leaders leading the nursing work at all levels in the organization.

Prior research relevant to nursing leadership and culture influence in the post-Soviet country context is very limited, and therefore, more research is needed in the future in this area. Further research utilizing internationally validated questionnaires (e.g. Eskola et al., 2016; Hahtela et al., 2015) would help nurse leaders to focus on cultural issues when developing nursing services. This is especially important in post-Soviet countries, where history and external culture strongly influence the healthcare system, and nursing work in particular. The described development process has potential limitations related to the participatory methodology and its implementation. Although the main development aims were achieved, the effect of cultural issues on the transition phase of the pilot organizations was not emphasized enough, which can hinder the progress of nursing service modernization.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Effective nursing management requires a good understanding of cultural issues and competences related to change processes. Nurse leaders drive change processes (WHO, 2016), and an integral component of successful change is to understand the importance of the assessment of cultural influences and have adequate culture competences to lead the change process. Developing cultural competences among nurse leaders is of critical importance, especially in countries where fundamental reforms are implemented or planned to be implemented in healthcare systems. However, there are considerable barriers in developing the nurse leaders' culture competences when the top management does not understand the importance of the impact of cultural issues on modernization or there is controversy between the different healthcare professionals. Future strategies should recognize culture as an important element that needs to be developed systematically in the organization to support the change processes and overall organizational strategy. As the focus on nursing service development is crucial in Central Asian post-Soviet countries, the recognition of nurse management education and nurse management positions will be of increasing importance.

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CONFLICTS OF INTEREST

The authors declare no conflicts of interests.

ETHICAL STATEMENT

No ethical approval was required for this article.

DATA AVAILABILITY STATEMENT

Data sharing not applicable—no new data generated.

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