

**THE ROLE OF MID-LEVEL HEALTHCARE PROFESSIONALS IN THE  
HEALTHCARE SYSTEM OF ANDIJAN REGION****Mamasoliyeva Guldonga Anvarbekovna**Teacher of the Department of World History,  
Andizhan State University<https://doi.org/10.5281/zenodo.20912802>

**Abstract:** This article analyzes the role of mid-level healthcare professionals within the healthcare system of the Andijan region. It examines their contributions to providing primary health care, inpatient care, and maternal and child health protection, as well as the shifts occurring during the transformation of primary healthcare models.

**Keywords:** Andijan region, mid-level healthcare professionals, nursing, primary health care, patronage, human resource capacity.

Following Uzbekistan's attainment of independence, significant emphasis was increasingly placed on developments within this sector. In 1991, the workforce in the Fergana region alone comprised 22,810 mid-level medical professionals. By 1993, the number of mid-level medical training institutions operating across the Republic had reached 44. Furthermore, by 1995, a total of 246,124 mid-level medical personnel across all specializations were actively engaged in professional practice nationwide[1]. During this period, 47 mid-level medical educational institutions operated under the Ministry of Health of the Republic of Uzbekistan. These institutions provided training to over 47,000 students across 8 distinct specializations, with a faculty comprising nearly 3,000 instructors. The teaching staff included 3 Doctors of Medical Sciences, 30 Candidates of Sciences, 310 educators of the highest professional category, and approximately 1,000 instructors of the first category. Concurrently, the personnel staffing rate stood at 50–60 percent[2].

During the years of independence, the primary healthcare delivery system for the population of the Andijan region underwent significant structural transformations. The transition from feldsher-obstetric stations and rural physician clinics to modern family physician clinics and family polyclinics fundamentally altered and expanded the functional responsibilities of mid-level medical personnel, particularly family and visiting (patronage) nurses. In 1999, the regional healthcare infrastructure comprised 70 hospitals, 287 independent outpatient polyclinics, 4 maternity hospitals, and 207 rural physician clinics and outpatient centers. These medical institutions were staffed by 21,891 mid-level medical professionals, ensuring a 100 percent staffing density per 10,000 residents[3]. The training and professional development of mid-level medical



personnel within the region remained a key priority for the local administration. Consequently, the Andijan and Asaka medical schools were upgraded and reorganized into medical colleges[4].

In 2011, there were 2,825 mid-level medical personnel positions available within the rural physician clinics of the region, of which 2,824 positions were occupied by 3,195 nurses. By 2016, the regional healthcare institutions were allocated 16,188 full-time equivalent (FTE) positions for mid-level medical staff and 6,394.75 positions for junior medical staff; these roles were fulfilled by 19,820 mid-level medical professionals and 7,130 junior medical staff members, respectively. Inclusive of individuals on maternity leave, the regional density of mid-level medical personnel stood at 88.8 per 10,000 residents. Analytical data regarding the physician-to-nurse ratio indicated that there were 4.3 nurses for every single physician. During this period, a total of 10,551 mid-level medical professionals in the region held valid professional certification categories, with 5,709 classified under the highest category, 2,214 under the first category, and 2,628 under the second category. Furthermore, an additional 3,230 mid-level medical workers underwent professional development training over the course of the year, accounting for 12.3 percent of the total mid-level medical workforce[5].

By the end of 2016, the region operated a total of 353 outpatient and polyclinic institutions. This infrastructure comprised multidisciplinary central polyclinics within 18 district medical associations and city medical departments, 312 rural physician clinics, 6 dispensaries, 8 family polyclinics, 2 dental polyclinics, 4 specialized centers, 2 polyclinics integrated into centers, and 1 hospital-affiliated polyclinic. The collective single-shift intake capacity of these facilities stood at 38,865 patients. However, due to population growth, the capacity of outpatient and polyclinic institutions per 10,000 residents decreased from 133.5 to 131.0. In 2016, a total of 26,573,200 outpatient visits were recorded across these institutions, averaging 9.0 visits per capita. This indicator was notably lower than the regional average in the city of Qorasuv, as well as in the Oltinko'l, Asaka, Xo'jaobod, Baliqchi, Qo'rg'ontepa, Izboskan, and Jalaquduq districts, where it averaged 7.5 visits. During this period, 11,116 mid-level medical professionals in the region held professional certification categories; among them, 5,599 were classified under the highest category, 2,425 under the first category, and 3,092 (representing 27.8 percent) under the second category. Additionally, 3,694 mid-level medical workers underwent professional



development training during the year, accounting for 13.3 percent of the total mid-level medical workforce.

In 2018, a total of 28,750 mid-level medical professionals provided healthcare services to the population across medical institutions in the Andijan region. Nurses accounted for 74.3 percent of the total mid-level medical workforce, with 0.7 percent of them holding a higher education degree. Additionally, the workforce structure comprised midwives (6.0 percent), laboratory technicians (5.3 percent), fledshers (5.2 percent), disinfection instructors (2.8 percent), sanitary and epidemiological assistants (2.7 percent), radiology technicians (0.6 percent), dental technicians (0.5 percent), and other mid-level medical specialists (1.2 percent). The density of mid-level medical personnel stood at 93.7 per 10,000 residents. The highest staffing densities were recorded in the cities of Andijan (178.2) and Xonobod (132.4), as well as in the Ulug'nor (113.8) and Xo'jaobod (104.9) districts[5].

In 2019, a total of 10,408 mid-level medical professionals in the region held valid professional qualification categories, with 5,428 classified under the highest category, 2,206 under the first category, and 2,774 under the second category. Over the course of the year, 3,806 mid-level medical workers underwent professional development training, accounting for 14.1 percent of the total mid-level medical workforce.

By 2020, regional healthcare institutions were allocated 18,013.75 full-time equivalent (FTE) positions for mid-level medical staff and 7,296.75 positions for junior medical staff; these roles were filled by 17,997.0 mid-level medical professionals and 7,271.75 junior medical staff members, respectively. During this period, 13,032 mid-level medical professionals held qualification categories, including 6,521 under the highest category, 2,795 under the first category, and 3,716 under the second category. Furthermore, 2,983 mid-level medical workers completed professional development courses throughout the year, constituting 9.9 percent of the total mid-level medical workforce.

Pursuant to Order No. 100 of the Ministry of Health of the Republic of Uzbekistan dated May 3, 2021, titled "On Conducting Meetings of Specialized Attestation Commissions for Awarding Qualification Categories to Medical and Pharmaceutical Personnel and Approving the Annual Schedule Thereof," and in accordance with Order No. 148-X of the Andijan Region Health Department dated July 23, 2021, certification reviews were implemented. Consequently, out of 160 mid-level medical professionals evaluated across the Andijan Branch of the Republican Research Centre for Emergency Medicine and the Andijan City



Medical Associations, 48 individuals were awarded the highest category, 50 received the first category, and 60 were granted the second category, whereas 2 candidates failed to pass the attestation process[5].

In conclusion, during the period under review, mid-level medical professionals operating within the healthcare system of the Andijan region successfully delivered primary, specialized inpatient, and emergency medical services to the local population. Particularly under the challenges of high regional demographic density, key processes including maternal and child health protection, reproductive healthcare, and routine immunization campaigns were fully decentralized to midwives and nursing staff. Furthermore, institutional reforms within the healthcare system fundamentally restructured the scope of practice for mid-level medical personnel. A universal-progressive patronage system was integrated at the primary care level, enabling family nurses to actively lead initiatives focused on the early detection of diseases and the promotion of health literacy within households.

#### **References:**

- 1.Fayzullayev, T., & Sarimsoqov, A. Socio-economic development of independent Uzbekistan. Namangan. 2012. p. 143.
- 2.Umarova, T. Y. Directions for reforming the nursing system in the Republic of Uzbekistan. Medical Journal of Uzbekistan, 1998. (1), 23.
- 3.Archive of the Administration of the President of the Republic of Uzbekistan. Fond 4141, List 15, File 178, Leaf 24.
- 4.Abduxalimov, A. A. From the history of social life of the rural population of Uzbekistan (On the example of Andijan, Fergana and Namangan regions of the Fergana Valley, 1991–2020) Doctoral dissertation, PhD in History, Fergana) 2022. p. 152.
- 5.Current Archive of the Andijan Regional Health Department. Document collections of 2011–2021.

