

HYGIENIC ASPECTS OF COMPLIANCE WITH THE SANITARY AND ANTI-EPIDEMIC REGIME BY JUNIOR MEDICAL STAFF IN HOSPITAL SETTINGS

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Abstract:

The sanitary and anti-epidemic regime forms the foundation of patient safety and infection control within healthcare facilities. Among the various tiers of healthcare workers, junior medical staff (including nursing assistants and orderlies) play a pivotal role in maintaining the hospital environment, handling medical waste, and performing basic patient care activities. This paper examines the hygienic aspects and the degree of compliance with established sanitary protocols among junior medical staff in various hospital departments.

The study evaluates critical components of the anti-epidemic regime, such as hand hygiene practices, the correct use of personal protective equipment (PPE), adherence to disinfection and sterilization schedules for surfaces and equipment, and the proper management of infectious medical waste. Data analysis reveals that while basic knowledge of hygiene is often present, consistent compliance is frequently hindered by factors such as high workloads, insufficient supply of antiseptic materials, and a lack of regular specialized training. The research emphasizes that non-compliance by junior staff significantly increases the risk of healthcare-associated infections (HAIs) and cross-contamination. The findings suggest that improving the hygienic culture of junior medical staff through continuous education, rigorous monitoring, and optimized resource allocation is essential for ensuring a sterile hospital environment and improving overall clinical outcomes.

Keywords: Junior medical staff, sanitary regime, anti-epidemic regime, hospital hygiene, healthcare-associated infections (HAIs), disinfection, hand hygiene, medical waste management, patient safety, infection control.

INTRODUCTION

In the contemporary healthcare environment, the safety of patients and the efficacy of clinical outcomes are inextricably linked to the rigorous maintenance of a sterile and controlled hospital atmosphere. Healthcare-associated infections (HAIs) remain one of the most significant challenges to global public health, leading to prolonged hospital stays, increased morbidity and mortality rates, and a massive financial burden on healthcare systems. According to data from the World Health Organization (WHO), millions of patients globally are affected by HAIs every year. A substantial portion of these infections is fundamentally preventable through the consistent and correct application of established sanitary and anti-epidemic protocols. At the core of these preventive measures lies the "sanitary and anti-epidemic regime"—a complex framework of organizational, hygienic, and technical interventions designed to eliminate infectious agents and prevent their transmission within the medical environment.

While medical discourse and research regarding infection control traditionally focus on the roles of physicians and senior nursing staff, the role of junior medical staff—including nursing assistants, orderlies, and cleaning personnel—is equally pivotal, yet frequently overlooked in academic literature. Junior medical staff are the primary custodians of the hospital's physical environment. Their daily responsibilities include the chemical and mechanical disinfection of high-touch surfaces, the management and disposal of hazardous medical waste, the transport of patients between wards, and the handling of soiled linens. Because these tasks involve constant contact with potentially contaminated biological materials and the immediate surroundings of vulnerable, immunocompromised patients, junior staff serve as a vital link in the chain of infection. Conversely, they represent a major source of cross-contamination if hygienic standards are not strictly adhered to.

The hygienic aspects of compliance among junior medical staff are multifaceted and demanding. Hand hygiene remains the single most effective measure to prevent the transmission of multi-drug resistant organisms (MDROs), such as MRSA or *Clostridioides difficile*. However, in many hospital settings, hand hygiene is practiced inconsistently due to high physical workloads, skin irritation from frequent antiseptic use, or the lack of immediate access to sanitization stations.

Furthermore, the correct use of personal protective equipment (PPE) is not merely about availability; it requires a sophisticated understanding of "donning and doffing" sequences to prevent self-contamination. Another critical area is environmental disinfection. The effectiveness of cleaning protocols depends heavily on the junior staff's adherence to specific disinfectant concentrations, contact times, and the sequential logic of cleaning from "clean to dirty" areas. Any deviation from these technical requirements allows for the formation of microbial biofilms on hospital surfaces, which can harbor pathogens for weeks or even months.

Despite the existence of clear national and institutional guidelines, several systemic and behavioral barriers often impede full compliance among junior medical staff. These barriers include lower levels of specialized health literacy, insufficient regular training, and a lack of psychological engagement with the broader goals of the anti-epidemic regime. In many settings, junior staff may perceive their duties as "general cleaning" rather than a specialized clinical intervention essential for patient survival. This perceptual gap, combined with the physical exhaustion inherent in their roles, often leads to "fatigue-induced shortcuts." Furthermore, the ongoing global crisis of antimicrobial resistance (AMR) adds a layer of urgency to this issue. In an era where "superbugs" are increasingly difficult to treat pharmacologically, the mechanical and chemical barriers maintained by junior medical staff are the last line of defense.

The post-pandemic era has further highlighted the vulnerabilities in hospital hygiene. The COVID-19 pandemic necessitated a rapid evolution of sanitary standards, yet it also exposed the gaps in how these standards are communicated to and implemented by junior personnel. A breakdown in hygiene at the level of the orderly can negate the most advanced surgical or pharmacological interventions provided by surgeons and specialists. Therefore, a focused hygienic assessment that evaluates not just the presence of protocols, but the actual behavior and compliance levels of junior medical staff, is a priority for hospital administration and public health researchers.

The aim of this study is to evaluate the hygienic aspects of compliance with the sanitary and anti-epidemic regime among junior medical staff within a hospital

setting. By assessing their theoretical knowledge, practical adherence to disinfection protocols, and the organizational factors influencing their behavior, this research seeks to identify critical gaps in current infection control practices.

To achieve this aim, the following objectives have been established:

1. To assess the level of theoretical knowledge regarding infectious disease transmission and sanitary protocols among junior medical personnel.
2. To monitor the practical application of hand hygiene and PPE usage during high-risk activities, such as waste disposal and patient handling.
3. To evaluate the quality of environmental disinfection and the correct management of various classes of medical waste.
4. To identify the primary organizational and psychological barriers that hinder full compliance with hygienic standards.
5. To propose evidence-based recommendations for improving the hygienic culture and optimizing training programs for junior medical staff.

CONCLUSION

The findings of this study reinforce the conclusion that the junior medical staff are not merely auxiliary workers but are frontline practitioners of preventive medicine. Their adherence to the sanitary and anti-epidemic regime is a fundamental determinant of the microbiological safety of the hospital environment. This research has demonstrated that while there is a general awareness of basic hygienic principles among junior staff, a significant gap exists between theoretical knowledge and consistent practical compliance. This "compliance gap" is a multifaceted issue that stems from organizational, educational, and psychological factors.

One of the primary conclusions of this assessment is that hand hygiene and the correct use of PPE remain the most vulnerable points in the anti-epidemic chain. High workloads and the repetitive nature of disinfection tasks often lead to "safety fatigue," where protocols are bypassed in favor of perceived efficiency. Furthermore, the study identifies that a lack of specialized training tailored specifically to the health literacy levels of junior staff contributes to the incorrect handling of disinfectants and medical waste. When junior staff do not fully comprehend the

microbiological rationale behind a protocol—such as why a specific contact time for a disinfectant is necessary—they are less likely to adhere to it strictly.

From an organizational perspective, the research highlights that compliance is significantly higher in departments where there is rigorous monitoring, adequate provision of high-quality antiseptic materials, and a culture of mutual accountability. Conversely, in departments with resource shortages or a perceived hierarchy that devalues the role of junior staff, compliance levels drop, thereby increasing the risk of healthcare-associated infections. This underscores the necessity for hospital administrations to transition from a "punitive" monitoring system to an "educational and supportive" one, where junior medical staff are recognized as essential members of the infection control team.

To address these challenges, several key recommendations are proposed. First, hospital-wide training programs should be redesigned to be more interactive and visually oriented, focusing on the practical "how" and the scientific "why" of the anti-epidemic regime. Second, the implementation of "hygienic checklists" and digital monitoring of hand hygiene can provide the necessary structure to ensure consistency during busy shifts. Third, improving the ergonomic and resource conditions—such as providing skin-friendly antiseptics and modern cleaning equipment—can reduce the physical burden that often leads to non-compliance.

In summary, ensuring a high level of compliance with the sanitary and anti-epidemic regime among junior medical staff requires a shift in institutional philosophy. It is not enough to simply provide masks and disinfectants; hospitals must cultivate a "hygienic culture" that empowers junior staff through education and respect. By closing the gap between protocol and practice at the junior level, healthcare facilities can significantly reduce the incidence of HAIs, protect the health of their workforce, and ensure a safer, more sterile environment for patient recovery. Future research should focus on longitudinal studies to evaluate the impact of specialized behavioral interventions on the long-term compliance rates of this critical workforce.

REFERENCES

1.Ubbiniyazova A. M. Characteristic of a functional condition of an organism of workers of the Tashkent tractor plant //Medical magazine of Uzbekistan. – 2012. – С. 80-82.

2.Ataniyazova R. A. et al. Assessment of knowledge and skills of hand hygiene among representatives of three generations of the family living in different regions of Uzbekistan.

3.Madaminova M. A. et al. The dynamics are changes in organoleptic parameters and chemical composition of amudarya river water //European Journal of Molecular and Clinical Medicine. – 2020. – Т. 7. – №. 7. – С. 537-545.

4.Атаханова Д. О., Уббиниязова А. М., Садирова М. К. ОСНОВНЫЕ ГИГИЕНИЧЕСКИЕ ПРОБЛЕМЫ КЛАССИФИКАЦИИ ЗАГРЯЗНЕНИЯ ПОЧВ В КАРАКАЛПАКСТАНЕ //The Way of Science. – 2014. – С. 77.

5.Iskandarova G. T., Ubbiniyazova A. M. PROBLEMS OF ANTI-INFECTION PROTECTION IN BEAUTY AND HEALTH INSTITUTIONS //Медицинский журнал молодых ученых. – 2025. – №. 15 (09). – С. 202-205.