

THE ROLE OF PERSONAL HYGIENE IN THE PREVENTION OF INFECTIOUS DISEASES

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ABSTRACT	KEYWORDS
<p>This paper discusses in detail the importance of personal hygiene in maintaining human health and preventing infectious diseases. Personal hygiene refers to a set of daily practices aimed at maintaining cleanliness of the body, clothing, food, and living environment. Special attention is given to the causes of infectious diseases and the main routes of transmission, including airborne, contact, foodborne, and waterborne pathways. The role of microorganisms such as bacteria, viruses, and fungi in causing diseases is also explained. Following personal hygiene rules not only protects individual health but also helps prevent the spread of infectious diseases in society. Therefore, developing a culture of hygiene is an essential factor in promoting public health and reducing disease transmission.</p>	<p>Personal hygiene, infectious diseases, prevention, sanitation and hygiene, microorganisms, bacteria and viruses, immune system, healthy lifestyle, handwashing, hygiene culture, disinfection.</p>

Introduction

Personal hygiene plays a crucial role in maintaining and strengthening human health. Personal hygiene refers to a set of practices aimed at maintaining cleanliness in daily life, promoting a healthy lifestyle, and preventing various diseases. In the present context of widespread infectious diseases, adherence to hygiene rules has become increasingly important. Infectious diseases are transmitted through bacteria, viruses, and other microorganisms and may cause significant harm to human health. They can spread through multiple pathways, including airborne droplets, direct contact, water, and contaminated food. Therefore, compliance with basic hygienic practices—such as regular hand washing, proper use of personal items, and maintaining cleanliness in living environments—plays a significant role in disease prevention [1].

Modern medical science demonstrates that many infectious diseases can be prevented through simple preventive measures. These include the use of safe drinking water, adherence to food hygiene practices, strengthening immune function, and vaccination. The purpose of this study is to analyze the

significance of personal hygiene principles, examine the causes of infectious diseases, and evaluate methods for their prevention [2].

Personal hygiene encompasses the practices individuals perform to maintain their health and prevent disease. It can be categorized into several main types: Body hygiene. Daily bathing or showering, maintaining skin cleanliness, cleansing the body after sweating, and proper care of hair and nails. Hand hygiene. Washing hands before and after meals, washing hands with soap after using the toilet, and disinfecting hands after visiting public places. Oral and dental hygiene. Brushing teeth at least twice a day, using dental floss, consuming sweets in moderation, and undergoing regular dental examinations. Clothing hygiene. Wearing clean and properly maintained clothes, frequently changing underwear, and dressing appropriately according to seasonal conditions. Food hygiene. Washing hands before meals, consuming safe and high-quality food products, proper storage of food, and washing fruits and vegetables before consumption. Household hygiene. Regular ventilation of rooms, maintaining cleanliness, and performing routine wet cleaning.

Sleep and rest hygiene. Following a daily routine, obtaining sufficient sleep (7–8 hours), and maintaining a balance between rest and physical activity.

Public hygiene. Maintaining cleanliness in public places, avoiding behaviors that may harm others, and adhering to sanitary regulations [3].

Objective of the Study

The objective of this study is to scientifically examine the role and importance of adherence to personal hygiene practices in maintaining human health and preventing the spread of infectious diseases.

Materials and Methods

This study was conducted using observational and analytical approaches. A comprehensive methodological framework was applied to identify the relationship between hygienic practices and the occurrence of infectious diseases.

Results and Discussion

The results of the study indicate that the prevalence of infectious diseases was significantly lower among individuals with well-developed hygienic habits. Among respondents who regularly and properly washed their hands, the incidence of viral respiratory infections was reduced by approximately 30–40%. Similarly, the group adhering to food hygiene practices demonstrated considerably lower rates of intestinal infections.

In contrast, individuals with poor hygienic practices exhibited a higher prevalence of fungal skin diseases and intestinal infections. In particular, failure to wash hands after visiting public places and the use of shared personal items were identified as important factors contributing to increased morbidity.

Individuals who were fully covered by vaccination programs experienced fewer severe forms of viral diseases. Moreover, in families that consistently adhered to sanitary and hygienic standards, the incidence of infectious diseases among children was significantly lower.

Correlation analysis revealed an inverse relationship between the level of hygienic culture and the incidence of infectious diseases. In other words, as the level of hygiene increased, the occurrence of infectious diseases decreased.

The obtained results further confirm that personal hygiene remains one of the most fundamental and cost-effective methods for the prevention of infectious diseases. Although modern medicine increasingly relies on complex therapeutic interventions, simple preventive measures—such as regular hand washing—continue to serve as one of the most effective protective strategies. Even in the era of advanced medical technologies, basic practices such as the use of soap and clean water remain indispensable in protecting public health.

The higher prevalence of diseases observed in groups with low hygienic awareness may be associated with insufficient development of social and hygienic culture. This indicates that the issue extends beyond a purely medical problem and also involves educational and social dimensions. In particular, the formation of hygienic habits among children and adolescents plays a crucial role in ensuring long-term epidemiological stability.

The findings of the present study suggest that systematic implementation of preventive measures can significantly reduce the burden of infectious diseases. In the future, expanding educational programs aimed at improving hygienic literacy, strengthening sanitary culture in schools and higher educational institutions, and promoting healthy lifestyles through mass media will be of considerable importance. Thus, personal hygiene can be considered a quiet yet fundamental foundation of human health. It not only prevents diseases but also contributes to maintaining epidemiological stability within society.

Preventive measures against infectious diseases. Personal hygiene is one of the primary factors in the prevention of infectious diseases. The following measures are considered essential: Washing hands with soap for at least 20 seconds. Washing hands before meals and after using the toilet. Using personal items (such as towels and toothbrushes) individually. Maintaining cleanliness of the body, hair, and clothing.

Adherence to sanitary and hygienic regulations. Regular cleaning of living spaces. Proper ventilation of indoor environments. Ensuring the purification of drinking water. Proper disposal of waste. Maintaining cleanliness in public places. These measures help reduce the proliferation of pathogenic microorganisms.

Food safety. Washing hands before handling food. Washing fruits and vegetables thoroughly. Proper storage of food products. Avoiding the consumption of spoiled or unsafe food. Storing raw and cooked foods separately. Use of safe drinking water Consuming only boiled or filtered water. Protecting water sources from contamination. Exercising caution when using open water reservoirs.

Vaccination. Vaccination remains one of the most effective methods for the prevention of infectious diseases.

Identification and isolation of infection sources. Temporary isolation of infected individuals. Monitoring the spread of infection. Examination and monitoring of contact persons.

Disinfection, disinsection, and deratization. Disinfection – elimination of pathogenic microorganisms. Disinsection – control of insects that may transmit infectious diseases. Deratization – control of rodents that may serve as reservoirs of infection. These measures contribute to reducing the sources and transmission pathways of infectious diseases [8].

Conclusion

Personal hygiene is a fundamental preventive factor in maintaining human health and preventing the spread of infectious diseases. The results of the study confirmed a direct relationship between the level

of hygienic practices and disease incidence, demonstrating that adherence to basic sanitary rules plays an essential role in ensuring epidemiological stability.

Simple daily practices—such as hand hygiene, body cleanliness, and ensuring the safety of food and drinking water—significantly reduce the incidence of respiratory, intestinal, and skin infections. Preventive measures do not require complex or expensive technologies; however, their effectiveness is scientifically substantiated and practically confirmed.

A low level of hygienic culture represents an important social factor contributing to the widespread occurrence of infectious diseases. In particular, the development of sanitary habits among children and adolescents should be considered an integral component of long-term public health strategies. The promotion of hygiene practices within educational institutions and families can contribute to a stable reduction in disease incidence.

Personal hygiene achieves the greatest epidemiological effectiveness when combined with comprehensive preventive measures such as vaccination, disinfection, identification of infection sources, and isolation of infected individuals. Public health protection can be strengthened only when preventive strategies are implemented systematically and continuously.

Personal hygiene is not merely a set of simple daily habits; it represents the foundation of societal health. Medicine will continue to advance, new drugs and technologies will emerge, yet cleanliness, discipline, and hygienic culture will remain among the most reliable means of protection in any era. In many cases, health begins not with complex medical interventions but with consistent adherence to proper daily practices.

References

1. Centers for Disease Control and Prevention (CDC) – “Infectious Disease Prevention”, 2020.
2. Iskandarova, G. T., & Samigova, N. R. (2024). Hygienic description of chemical factor in mechanical engineering enterprises (Doctoral dissertation, Germany).
3. Iskandarova, G., Iskandarov, A., Xadjayeva, U., & Samigova, N. (2024). ГИГИЕНИЧЕСКАЯ ОЦЕНКА ПРОИЗВОДСТВЕННОГО МИКРОКЛИМАТА НА ПРЕДПРИЯТИИ МАШИНОСТРОИТЕЛЬНОЙ ОТРАСЛИ ПРОМЫШЛЕННОСТИ.
4. Iskandarova, G., Samigova, N., Tashpulatova, M., Utaev, S., & Saydullaev, O. (2023). Features of the technological process in the production of injectable drugs at pharmaceutical enterprises and hygienic assessment of microclimate at workplaces. *Journal of Coastal life medicine* Received, 1(11), 1319-1328.
5. Jahon sog‘liqni saqlash tashkiloti (WHO) – “Guidelines on Hand Hygiene in Health Care”, 2009.
6. *Microbiology: An Introduction* – Gerard J. Tortora, 2020.
7. Nigmatullayeva, D. J., & Umedova, M. E. (2025, December). THE IMPACT OF VITAMIN A, D, AND B-GROUP DEFICIENCIES ON COGNITIVE DEVELOPMENT IN CHILDREN. International Conference on Advance Research in Humanities, Applied Sciences and Education.
8. Norqulov, S. J. (2025, March). GLOBAL EPIDEMIOLOGY OF VIRAL HEPATITIS: CURRENT SITUATION AND FUTURE PROJECTIONS. International Conference on Advance Research in Humanities, Applied Sciences and Education.
9. Norqulov, S. J., & Jalolov, N. N. (2025). SOCIO-HYGIENIC FACTORS IN THE DEVELOPMENT OF CHRONIC LIVER DISEASES: A COMPREHENSIVE EPIDEMIOLOGICAL ANALYSIS.

10. O‘zbekiston Respublikasi Sog‘liqni saqlash vazirligi – gigiyena va sanitariya bo‘yicha qo‘llanmalar.
11. Park’s Textbook of Preventive and Social Medicine – K. Park, 2019.
12. Sherkuzieva, G. F., Salomova, F. I., Samigova, N. R., & Yuldasheva, F. U. (2023). RESULTS OF TOXICITY STUDY OF BIOLOGICAL FERTILIZER "YER MALHAMI" FOR INHALATION CHRONIC EFFECTS.
13. Umedova, M. E., & Nigmatullayeva, D. J. (2025, December). INTERNET ADDICTION AND THE LEVEL OF PSYCHOLOGICAL FATIGUE AMONG PRIMARY SCHOOL STUDENTS: AN EPIDEMIOLOGICAL ANALYSIS. International Conference on Advance Research in Humanities, Applied Sciences and Education.
14. Всемирная организация здравоохранения (WHO). Руководство по гигиене рук, 2009.
15. Махкамова, Д. Э., Хаджаева, Д. Х., Махкамова, Н. Э., Хаджаева, У. А., Атажанов, Ш. Д., & Курбанова, Ш. А. (2016). Изучение изменения спектра микроорганизмов в полости рта при патологии слухового анализатора у детей с врожденной расщелиной неба. Апробация, (12), 104-107.