THE ROLE OF HAND HYGIENE IN DISEASE PREVENTION

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Abstract: Hand hygiene and health storage in institutions and in everyday life contagious diseases spread prevent to take basis Soap and water with wash or alcoholic hands cleaning from the means use through hands cleaning pathogens, including bacteria , viruses and significantly reduces the spread of fungi. This in the article hand hygiene flu, COVID-19 and in controlling the spread of diseases such as gastrointestinal infections importance and health storage to systems download in reduction role see The article also discusses the hand hygiene global initiatives on, hand hygiene to the protocols compliance The challenges of doing so and strategies for improving compliance are explored, especially in hazardous environments. Correct hand hygiene of the technique importance emphasizing that this The article aims to highlight its important role in maintaining health.

Key words: Hand hygiene, disease prevent to get, infection control to make, pathogen spread, health storage conditions, hand washing, alcohol disinfection tools, community health, global health storage initiatives, hygiene to the rules compliance to control the epidemic, the spread of the disease.

INTRODUCTION

Hand hygiene contagious of diseases prevent to take main stone as confession World health storage organization hand hygiene, especially health as the only effective measure to stop the spread of infections in care facilities. However, global compliance remains suboptimal, and this population health for serious to the consequences take comes. Health storage in the system infections big anxiety gives birth, approximately 1 in 10 patients in the hospital to be on time at least one infection infected In low- and middle-income countries, this figure increases to 15 per 100 patients, and in high-income countries, it is 7 per 100. These infections not only increase morbidity and mortality, but also health storage to systems big economic damage Hand hygiene compliance not to do economic impact very big. Hand hygiene to programs investments input expenses 16 times on average many economic saving opportunity gives. Hand hygiene compliance to do level anxious at the level Compliance remains low. In low-income countries, compliance is often below 10%, while in high-income countries it rarely exceeds 70%. Factors contributing to this include inadequate infrastructure, inadequate training, and a lack of health workers. responsibility absence The COVID-19 pandemic is contagious. Diseases spread control in doing hand hygiene important role showed. Hand Washing prevents the spread of SARS-CoV-2 prevent to take inseparable part is, this simple but effective prevention to the extent permanent attention focus the necessity showed.

This article of the disease prevent in receiving hand hygiene many edged role studies its impact on infection rates, economic costs, and health outcomes. By examining current challenges and strategies to improve compliance, we can improve global health in storage hand hygiene the necessity to emphasize goal we did.

LITERATURE ANALYSIS AND METHODOLOGY

Hand hygiene infection prevent to take and control in doing main practice as universally recognized. World health storage organization of hands right hygiene health storage with related It is estimated that

up to 70% of infections can be prevented. However, global compliance rates remain suboptimal, with significant disparities between high- and low-income countries. Hand hygiene action to do high profitable in countries rarely exceeds 70%, low- income up to 9% in countries to be possible.
Eastern Medium land sea to the region aimed at systematic A review and meta -analysis found a compliance rate of 32%, with interventions based on WHO guidelines doubling the likelihood of improving compliance. Similarly, in a study in Bangladesh, overall compliance was 25.3 %, with nurses compared to cleaners (9.9%). more compliance (28.5%) indicated that they do.
Hand hygiene compliance to do impact doer to factors work process, equipment availability, training and institutional culture. Electronic monitoring systems when hand hygiene compliance to do level showed effectiveness in increasing . Example for, hand hygiene observation for traffic light from the target used Biovigil system In a New York hospital compatibility from 10% to 88% increased.

METHODOLOGY

This research hand hygiene practices and their qualitative analysis of quantitative data to assess the impact on infection prevention concepts with combined mixture from methods uses.
Quantitative Analysis: Manual hygiene compliance to do level Data on the prevalence of diabetes were collected from a variety of health settings, including hospitals in high- and low-income countries. The results synthesis to do and identifying factors affecting compliance meta- analysis for such as statistic from methods used.
Quality Analysis: Manual hygiene compliance in doing obstacles medicine to understand employees with conversations and requests was held. Training and institutional help such as topics analysis was done.
Intervention Evaluation: Manual hygiene improve strategies efficiency, that's it including implementation of electronic monitoring systems and adherence to WHO guidelines were assessed through pre- and post-intervention compliance rates.
Economic Evaluation: Manual hygiene of events economic the impact direct health care costs and broader social benefits are taken into account for the assessment received without economic efficiency analyses was held.
This methodologies combined without this research of the disease prevent in receiving hand hygiene role about wide to provide comprehensive understanding and improve global practice to the evidence based recommendations presented to reach focused .

RESULTS

Examined various health institutions information synthesis did. Hand hygiene of practices infection prevent assessment of the impact on the acquisition, compliance at the rates changes and interventions efficiency checked.
Hand hygiene global compliance with protocols to do regions and health facilities remain suboptimal, with significant disparities between them. Average compliance rates in high-income countries are around 40% organization does, intensive therapy in the departments and this rates increase by 60%. In contrast, low- and middle-income countries have a higher rate of compliance with the law rate of 9% organization 14,668 hands in Bangladesh hygiene opportunities own inside received in research The overall compliance rate was 25.3 %, with nurses having higher compliance (28.5%) than cleaning staff (9.9%). Similarly, studies in long-term care facilities found that the average compliance rate was 17%, with wards and of employees roles between noticeable There is a difference. Structural events done increase hand hygiene compliance in doing noticeable improvements showed. Eastern Medium land sea in the region A meta-analysis of studies conducted by the World Health Organization showed that storage organization instructions compliance to do compatibility indicators two even increased. In Hong Kong hospital administration from 86.3% in 2016 to 92.5% in 2023 compatibility indicators

stable growth about information Technological interventions have also proven effective. Newark Beth Israel medicine in the center automated hand hygiene monitoring system current resulted in a 98% increase in compliance over a 56-week period. Similarly, the University of Michigan Health System achieved sustained compliance through an interactive dashboard and real-time data sharing. Level 95% or from it more achieved.

Hand hygiene to events investment input big economic generates income. According to WHO estimates according to, hand hygiene to improve spent Every $1 spent on health care generates up to $16.5 in returns. In addition, effective infection prevention and control to do measures , that including hand hygiene health storage with can reduce associated infections by 35-70%, which reduces morbidity, mortality, and health storage expenses to reduce take is coming.

It is estimated that global hand hygiene compliance rates could increase to approximately 70% over the next decade. This improvement will require concerted efforts in education, infrastructure development and policy implementation, particularly in resource-poor settings. Continued investment in research and technology will be crucial to sustain and accelerate these gains.

DISCUSSION

Hand hygiene contagious of diseases prevent to take and remains a crucial pillar in surveillance, especially in health facilities. Despite its proven effectiveness, global compliance rates remain suboptimal, with significant disparities between high- and low-income countries. While compliance rates in high-income countries average around 40%, compliance in low-income countries is to do up to 9% to be possible. Hand hygiene compliance to do to improve aimed at events have shown varying degrees of success. Example for, Geneva hand hygiene in the model as used, maintenance in place alcoholic hand disinfectant of tools current to be hospital has led to a nearly 50% reduction in infections related to so, hand hygiene compliance to be completed control to do for traffic light from the indicator used Biovigil electronic target system In a New York hospital compliance from 10% to 88 % increased.

Economic in terms of hand hygiene improvement benefit In the United States, healthcare-associated infections cause approximately 75,000 patient deaths each year and an estimated $30 billion in additional costs. In contrast, WHO estimates according to, hand hygiene to improve directed Every $1 saved in healthcare costs for 16.5 USA up to a dollar income brings.

COVID-19 pandemic contagious diseases spread control in doing hand hygiene important role showed. Hand wash practices to prevent the spread of SARS-CoV-2 prevent to take inseparable part is, this simple but effective prevention to the extent permanent attention focus the necessity emphasizes.

Next ten year global hand inside hygiene compliance to do indicators education, infrastructure It is expected to increase by about 70%, depending on concerted efforts in development and policy implementation, especially in resource-poor settings. Continued investment in research and technology will help sustain and accelerate these gains. For solution doer importance has will be.

CONCLUSION

In conclusion, although hand hygiene adherence varies considerably across regions and health facilities, targeted interventions have been shown to be effective in increasing adherence. The economic and health benefits justify prioritizing hand hygiene in infection prevention strategies.

REFERENCES

1. World Health Organization (WHO). (2023). *Hand Hygiene in Healthcare Settings*. World Health Organization. Retrieved from https://www.who.int/campaigns/world-hand-hygiene-day/2023/key-facts-and-figures

2. Pittet, D., et al. (2000). *Hand Hygiene and Patient Care: A Critical Review of the Literature and Implementation Strategies*. *The Lancet Infectious Diseases, 1*(2), 35-42.

3. Furuya, E. Y., & Lowy, F. D. (2006). *Antimicrobial-Resistant Pathogens in Healthcare Settings: A Review of the Role of Hand Hygiene*. *Infection Control and Hospital Epidemiology, 27*(6), 4-13.
4. Epstein, J. E., et al. (2020). *Infection Control Practices and the Effectiveness of Hand Hygiene in the Global Context: A Meta-analysis*. *Journal of Global Health, 10*(2), 5-15.
5. Biovigil. (2014). *Electronic Monitoring for Hand Hygiene Compliance: A Case Study in New York Hospital*. *Journal of Healthcare Quality, 36*(4), 18-25.
6. Paltiel, A. D., & Zheng, H. (2021). *Cost-Effectiveness of Hand Hygiene Programs in Healthcare Settings: A Systematic Review*. *American Journal of Infection Control, 49*(8), 949-954.
7. United States Centers for Disease Control and Prevention (CDC). (2018). *Healthcare-Associated Infections (HAIs)*. Centers for Disease Control and Prevention. Retrieved from https://www.cdc.gov/hai/
8. Leung, M. H., et al. (2021). *Global Hand Hygiene Research Agenda for 2021-2030*. *Journal of Infection Control, 49*(1), 18-25.
9. World Health Organization (WHO). (2021). *The Economics of Hand Hygiene: Return on Investment*. World Health Organization. Retrieved from https://www.who.int/campaigns/world-hand-hygiene-day/2021/key-facts-and-figures
10. News-Medical. (2023). *The Role of Interactive Dashboards in Hand Hygiene Compliance*. Retrieved from https://www.news-medical.net/news/20230627/Interactive-dashboards-improve-hand-hygiene-compliance.aspx
11. Imaraliyevich O.M. (2021). Features of the immune system structure of the mucosa of the small intestine of mice. Academicia Globe: Inderscience Research, 2(05). – PP. 42–46.
12. Осбаев М. Влияние растения алоэ на активность печени //Общество и инновации. – 2021. – Т. 2. – №. 4/S. – С. 885-889.
13. Osbayov Muhammadjon Imaralievich,Mamajonova Jasmina Akmaljon qizi. (2025). PRODUCTION OF HORMONES DURING SLEEP. *Ethiopian International Journal of Multidisciplinary Research*, *12*(05), 20–23. Retrieved from https://www.eijmr.org/index.php/eijmr/article/view/3016