Policy Research Journal
ISSN (E): 3006-7030 ISSN (P) : 3006-7022 Volume 4, Issue 2, 2026

A STUDY TO ASSESS THE LEVEL OF KNOWLEDGE REGARDING INFECTION CONTROL PRACTICES AMONG NURSES

Noor[1], Nisha Warren Joseph[2], Aasandas[3], Muhammad Rafique[4], Syed Uzma Paiam Bukhari[*5], Imtiaz Ali Kalhoro[6], Sehrish Imtiaz[7], Raheel Royl[8]

[1]*Generic BSN Scholar, School of Nursing, Jinnah Postgraduate Medical Center Karachi Pakistan*
[2]*Lecturer, Nursing college, Indus University of Health Sciences, Karachi, Pakistan*
[3]*Clinical Nurse, Department of Surgery, Aga Khan University Hospital Karachi, Pakistan*
[4]*MSN, Assistant Professor, Department of Nursing, Indus University of Health Sciences, Karachi, Pakistan*
[*5]*PhD Scholar and Assistant Professor, Indus University of Health Sciences, Karachi, Pakistan*
[6]*Senior Lecturer, Department of Nursing, Indus University of Health Sciences, Karachi*
[7]*Staff Nurse, Department of Peads, Aga Khan University Hospital Karachi, Pakistan*
[8]*GBSN Scholar, Indus University of Health Sciences, Karachi, Sindh. Pakistan*

[*5]uzmazmat@gmail.com

DOI: https://doi.org/10.5281/zenodo.18756317

Keywords
Infection Control, Experience, Nurses, Trainings, Age, Level of Knowledge.

Article History
Received: 25 December 2025
Accepted: 09 February 2026
Published: 24 February 2026

Corresponding Author: *
Syed Uzma Paiam Bukhari

Abstract

Globally, healthcare-associated infections (HAIs) are a major contributor to higher rates of morbidity, mortality, and medical expenses. Since nurses are the main front-line healthcare providers in clinical settings, following infection control procedures is crucial to stopping the spread of infections. The basic aim of the research is to assess the level of knowledge regarding infection control practices among nurses working in tertiary care hospitals. Research design is descriptive cross sectional. The target population of the research is registered nurses working in various clinical departments such as ICU, ER, Surgical wards. Simple random sampling technique is used to select the sample. A self-administered questionnaires used to collect data. The collected data is analysed on SPSS version 21. The descriptive analysis is performed and then pearson correlation test is run to test the relationship between knowledge and demographic details of the nurses.The study comes to the conclusion that the sample's level of awareness regarding infection control methods is consistent based on the statistical analysis of the data gathered from nursing professionals. There is no proof that a nurse's years of experience, gender, or educational background have a substantial impact on their degree of understanding in this particular situation. Hospital needs pay attention on competency-based trainings rather than paying attention on mentioned demographics such as experience, education and age.

INTRODUCTION

Nurses interact with patients on a regular and extended basis; they are essential in preventing infections (Yi, 2026). Since they are frequently the first line of defence in healthcare settings, their expertise and commitment to cleaning procedures are crucial defences against cross-contamination (Walczak, 2026). To prevent healthcare-associated infections (HAIs), nurses must have a thorough understanding of infection control procedures (Sembiring, 2026). Since inadequate cleaning might result in cross-contamination, healthcare staff comprehension of cleaning procedures directly affects the efficacy of infection prevention techniques (Firdiansyah, 2026). Because of their frequent interactions with patients, nurses are able to recognize any infection risks and take the necessary safeguards (Asmaningrum, 2026).

Nurses constant presence makes it possible for them to keep an eye on and uphold hygienic standards, which is essential for preventing the spread of illnesses (Bagnasco, 2026). Studies show that many nurses have mediocre adherence to infection control procedures despite their knowledge, underscoring the necessity for continual education and assistance. Improved training initiatives can boost nurses' self-assurance and proficiency in successfully implementing infection control procedures (Yi, 2026).

Millions of patients worldwide are impacted by healthcare-associated infections (HAIs), which have serious repercussions like longer hospital stays and higher death rates (Musa, 2026). About 10% of hospital admissions in industrialized countries are complicated by HAIs; in settings with low resources, this risk might be up to 20 times higher (Anemawu, 2026).

Globally, up to 10% of patients in high-income countries and 15% in low-to-middle income countries develop HAIs during hospitalization such as Pneumonia, urinary tract infections, and surgical site infections are common types (Babatunde, 2026); Clostridium difficile is a common pathogen.HAIs have an enormous financial impact; in the United States alone, annual expenses might reach $45 billion. The economic cost of prolonged hospital stays and treatment expenses is estimated to be between 13 and 24 billion euros in Europe (Cacciuttolo, 2026).Although hospitals have put infection tracking and prevention procedures into place, there are still issues with standardizing criteria and allocating resources (García, 2026). Strong antimicrobial stewardship strategies are required because the rise of multidrug-resistant pathogens challenges preventative efforts (Rudrapal, 2026).

Problem Statement:

Globally, healthcare-associated infections (HAIs) are a major contributor to higher rates of morbidity, mortality, and medical expenses (Musa, 2026). Nurses are the main front-line healthcare providers in clinical settings (Afifah, 2026).Nurses have a crucial role in preventing hospital-acquired infections (HAIs), which continue to be a chronic problem in healthcare settings (Hammond, 2026). Numerous studies emphasize the significance of nursing interventions and ongoing education in lowering infection rates, even if it is not conclusively demonstrated that a lack of knowledge or expertise is the only cause of HAIs (Chen, 2026). Interventions—which include environmental cleaning, aseptic procedures, and hand hygiene—have been demonstrated to dramatically reduce HAIs (Csörnyei-Kelemen, 2026). The disconnect between theoretical understanding and real-world application, however, continues to be a problem (Choto, 2026).This indicates that elements other than experience and knowledge may be involved in HAIs.

Healthcare-associated infections (HAIs) still provide serious difficulties, especially for nursing personnel, even after infection control procedures have been put in place (Dickson, 2026). This paradox results from a number of variables that make it difficult to follow established protocols, even when they are followed in theory (Mrayyan, 2026).The ignorance of appropriate infection control methods, which affects 38% of nursing staff, has been found to be a major obstacle (Enyan, 2026). Time constraints and a lack of desire were cited as barriers to adherence by 21% and 38% of nurses, respectively (Khraisat, 2026). Although it has been demonstrated that effective supervision by Infection Prevention Control Nurses (IPCNs) improves compliance, many hospitals lack sufficient supervisory mechanisms (Getahun, 2026). Improving adherence to infection control procedures requires ongoing education and training, particularly in high-risk settings like intensive care units (ICUs) (Cheng, 2026).

Hand hygiene plays a crucial role in infection management, as seen by the 35% decrease in HAIs that can result from following guidelines (King, 2026). A 40% decrease in catheter-associated infections is linked to structured training in aseptic practices for invasive operations (Yao, 2026). The significance of keeping a clean healthcare environment is highlighted by the fact that improved cleaning procedures can reduce HAI rates by 30%. Inadequate handling of intrusive equipment and poor hand hygiene are serious problems. Effective prevention requires ongoing staff training and adherence to institutional

procedures (Jochems, 2026). Successful results and long-lasting organizational cultures can result from implementing comprehensive HAI prevention initiatives through teamwork and employee participation (Wiryawan, 2026). Although educational modules enhance nurses' attitudes and knowledge, they do not necessarily result in appreciable decreases in healthcare-associated infections (HAIs), highlighting the need for further practice reinforcement and education.

Research Objective

To assess the level of knowledge regarding infection control practices among nurses working in tertiary care hospitals.

Hypothesis

H0: There is no significant association between the level of knowledge regarding infection control practices and the socio-demographic variables of the nurses.

H1: There is significant association between the level of knowledge regarding infection control practices and the socio-demographic variables of the nurses.

Literature Review:

Theoretical Framework:

The Knowledge Attitude Practice Model (KAP) forms the basis of the research's theoretical framework.A key behavioral theory called the Knowledge-Attitude-Practice (KAP) model Schwartz (1987) formalized its application for survey design in order to assess health behaviors, contending that information shapes attitude, which in turn shapes practice. Understanding the relationships between acquiring knowledge, forming attitudes, and later changing behaviors (practices) is a common application in health education. The KAP model was created by Schwartz (1987) as an organized survey technique for quantitative research.

A public health framework called the Knowledge, Attitude, Practice (KAP) model assesses the connection between a population's knowledge, attitudes, and behaviors (Practice) with relation to a medical condition (Wang, 2026). Although it acknowledges other aspects, it attempts to direct health education and treatments by thinking that information influences attitudes, which subsequently shape actions (Alnuaimi, 2024). To provide targeted solutions, such improved cancer prevention or chronic disease management, researchers employ KAP surveys to track behavior change, identify misconceptions, and identify knowledge gaps (Khan, 2025).The paradigm implies that increased information leads to more positive attitudes, which in turn promotes desired practices, even if real-world application frequently reveals discrepancies between reported attitudes and actual behaviours (Erhabor, 2025).

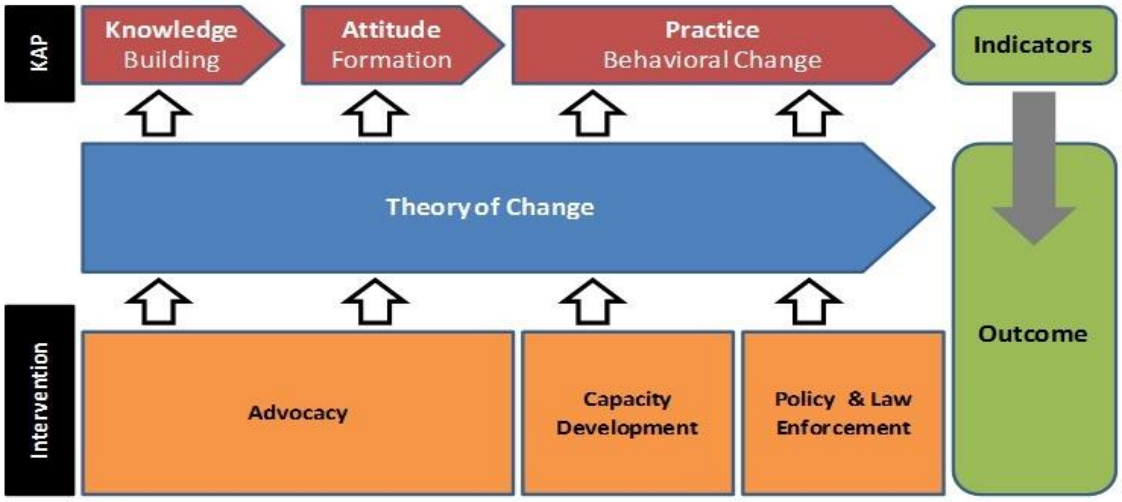

Fig 1: Knowledge Attitude Practice (KAP) Model

Global Burden of HAIs:

A major worldwide health concern, healthcare-associated infections (HAIs) significantly increase morbidity and mortality (Altintepe Baskurt, 2026). Inadequate infection control methods, the emergence of antibiotic resistance, and the growing complexity of medical procedures are the main factors affecting the burden of HAIs (Sandu, 2026). Developing successful preventative tactics requires an understanding of these elements (SINGH, 2026). One of the main causes of HAIs among healthcare professionals is poor hand hygiene (Csörnyei-Kelemen, 2026). Infection risks are increased when hospital settings and medical equipment are not properly cleaned and disinfected (Wagwula, 2026). The risk of infections like CLABSI and VAP is greatly increased by the use of invasive medical devices like ventilators and catheters . Multidrug-resistant organisms (MDROs) have emerged as a result of overuse of antibiotics, making treatment alternatives more difficult (Bartoszewicz, 2026).

A major hazard to public health is the increasing number of HAIs brought on by resistant microorganisms like MRSA and VRE (Chao, 2026).More intrusive treatments brought about by medical technological advancements raise the danger of HAIs, especially in vulnerable groups like the elderly and immunocompromised individuals (Schiau, 2026). The frequency of HAIs is also influenced by the aging population and the increased survival rates of individuals with complicated medical conditions (Zhao, 2026). These elements emphasize the difficulties in controlling HAIs, but it's also critical to take into account the possibility that future hazards could be reduced by further efforts in infection control, antibiotic stewardship, and technology advancements.

The KAP Model in Nursing

A major worldwide health concern, healthcare-associated infections (HAIs) significantly increase morbidity and mortality (Ioannou, 2026). Inadequate infection control methods, the emergence of antibiotic resistance, and the growing complexity of medical procedures are the main factors affecting the burden of HAIs (Sandu A. M., 2026). Developing successful preventative tactics requires an understanding of these elements (Espina, 2026). One of the main causes of HAIs among healthcare professionals is poor hand hygiene (Csörnyei-Kelemen, 2026).Infection risks are increased when hospital settings and medical equipment are not properly cleaned and disinfected (Wagwula, 2026).The risk of infections like CLABSI and VAP is greatly increased by the use of invasive medical devices like ventilators and catheters (Hammond L. &., 2026).

Multidrug-resistant organisms (MDROs) have emerged as a result of overuse of antibiotics, making treatment alternatives more difficult (Hammond L. &., 2026). A major hazard to public health is the increasing number of HAIs brought on by resistant microorganisms like MRSA and VRE (Musa, 2026).More intrusive treatments brought about by medical technological advancements raise the danger of HAIs, especially in vulnerable groups like the elderly and immunocompromised individuals (Schiau, 2026). The frequency of HAIs is also influenced by the aging population and the increased survival rates of individuals with complicated medical conditions (Zhao R. Z., 2026).

Research Methodology

Research Design: A quantitative descriptive cross-sectional research design is utilized to assess the level of knowledge regarding infection control. This study is selected because this it allows for the selection of data from specific nurses at a single point in time. This design fulfills all the criteria of the research.

Sampling Technique: Simple random sampling technique is used to select registered nurses. Sample size was determined using Slovin's formula. The nurses' students and interns were excluded. Nurses on long term leave were excluded. Administrative nursing staff wasn't part of research. Full time or part time both the nursing staffs were included in research data collection.

Data Collection Instrument: The research instrument was structured self-administered questionnaire with Likert scale. The questionnaire had two majors sections.one section contained sociodemographic information and second part dealt with the

knowledge assessment of nurses regarding infection control. The second part B is further consisted of three major themes such as hand hygiene, personal protective equipment, knowledge statement and sharps and waste management, Environmental and General Control

Ethical Consideration: The ethical guidelines according to BERA framework were rigorously followed. The informed consent was taken prior to data collection. It was assured to the population that the data was used only for research purposes and will be kept in password protected file. The data will be discarded after 6 months. The rights and responsibilities of the participants were kept at priority.

Data Analysis: Data was analysed using SPSS version 21. Firstly, Cronbach alpha was run to check the internal consistency of the items.After that the descriptive statistics were run by finding mean, median, mode and standard deviation which lead to inferential statistics by applying pearson co-relation test.

Table1: Reliability Statistics

Cronbach's Alpha	N of Items
.802	3

The table suggests that Cronbach Alpha is .082,which shows internal consistency of the items is very good and the instrument is reliable .There are 3 major sections of the instrument which were computed before running reliability test.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age	27	1	3	1.74	.813
Gender	27	1	2	1.33	.480
Education	27	1	4	1.52	.849
Experience	27	1	4	2.15	1.231
Area	27	1	10	5.33	2.287
Training	27	1	2	1.89	.320
k	27	3.00	13.00	8.0000	3.18651
PPE	27	3.00	15.00	9.4815	4.00356
Sharp	27	4.00	14.00	9.3333	3.39683
Environment	27	3.00	15.00	9.1852	3.38591
Valid N (listwise)	27				

Table 2 presents the descriptive statistics of the research data. The data consisted of 27 nurses with an age mean of 1.74 predominated younger aged with falling in the first and second category of the given ages slot. The gender means 1.33 suggests majority of female nurses considering 1 as female and 2 as male. The training section mean is 1.89 which suggests that vast majority of the sample hasn't attended advanced training.

The descriptive statistics for the study variables (N=27) are shown in Table 1. The majority of nurses identify as female, and the workforce is comparatively young (Mean = 1.74, SD =.81), according to the demographic data study. The sample appears to be predominantly composed of diploma or bachelor-level nurses with early-to-mid-career experience, based on the mean scores for education (1.52) and experience (2.15).The average score for General Knowledge (k) across the core infection control categories was 8.00 (SD = 3.18). The practice-related areas with the highest mean score were Environmental Hygiene (M = 9.18, SD = 3.38), Sharp Disposal Management (M = 9.33, SD = 3.39), and PPE Usage (M = 9.48, SD = 4.00).There is a moderate range in scores across all knowledge and practice categories, according to the standard deviations, which suggests that staff members have different levels of

competency. Notably, a particular subgroup of nurses who would urgently need remedial training in infection control procedures is highlighted by the minimal scores in many domains (3.00).

Table 3:Correlations

		Knowledge	Gender	Education	Experience	Training	Area
Knowledge	Pearson Correlation	1	.013	.073	-.010	-.058	.213
	Sig. (2-tailed)		.949	.717	.960	.773	.286
	N	27	27	27	27	27	27
Gender	Pearson Correlation	.013	1	.031	.303	.000	.350
	Sig. (2-tailed)	.949		.876	.124	1.000	.073
	N	27	27	27	27	27	27
Education	Pearson Correlation	.073	.031	1	.439*	.220	-.053
	Sig. (2-tailed)	.717	.876		.022	.270	.794
	N	27	27	27	27	27	27
Experience	Pearson Correlation	-.010	.303	.439*	1	.043	.433*
	Sig. (2-tailed)	.960	.124	.022		.830	.024
	N	27	27	27	27	27	27
Training	Pearson Correlation	-.058	.000	.220	.043	1	-.368
	Sig. (2-tailed)	.773	1.000	.270	.830		.059
	N	27	27	27	27	27	27
Area	Pearson Correlation	.213	.350	-.053	.433*	-.368	1
	Sig. (2-tailed)	.286	.073	.794	.024	.059	
	N	27	27	27	27	27	27

*. Correlation is significant at the 0.05 level (2-tailed).

The table 3 shows the results of pearson correlation Gender (r =.013, p =.949), education (r =.073, p =.717), experience (r = -.010, p =.960), and specialized training (r = -.058, p =.773) were not found to be statistically significantly correlated with infection control knowledge.

Nonetheless, there were notable positive associations found between years of experience and education (r =.439, p =.022) and between experience and clinical area (r =.433, p =.024). According to these results, a nurse's theoretical understanding of infection control procedures in this particular context is not significantly predicted by demographic characteristics, despite the fact that they are associated within the workforce structure.

The majority of nursing schools adhere to a rigid national curriculum. A diploma nurse and a BSc nurse were taught the same fundamentals of infection control, which is probably why their scores were comparable. Every year, "Infection Control" is a required orientation at many hospitals. As a result, experience or training becomes less important, leveling the playing field. Sample Size (N=27): Small groups make it more difficult to "pass" (get significance) statistical tests.

Experience and education have a moderately favourable, statistically significant association (r =.439, p =.022). This suggests that nurses in the sample with more education also often have more years of work experience. A somewhat positive, statistically significant association exists (r =.433, p =.024). This implies that nurses are more likely to be found in particular or specialized clinical areas as their expertise grows.

Discussion

The basic aim of the study is to assess the level of knowledge regarding infection control practices among nurses working in tertiary care hospitals. The study's demographic data findings suggest that 44% of the population with highly experienced rate such as more than 10 years of experience and infection control training show significant gaps in evidence-based knowledge e.g. 40% of staff was either neutral or agreed at the statement that wearing gloves

replaces the need for hand washing. This result aligns with the 'complacency effect' frequently mentioned in clinical literature, which suggests that seasoned professionals may depend more on ingrained routines than on modernized procedures (Pagnozzi, 2026). This is consistent with studies which indicates that theoretical understanding of changing infection control standards does not always follow from practical experience (Parslow, 2026).

Significant gaps in evidence-based knowledge about infection control techniques are frequently seen among healthcare professionals with more than ten years of experience and infection control training (Yi, 2026). Even with their vast experience, these experts might not always know enough or follow best practices, which could jeopardize infection control procedures (Nyarko, 2026). The lack of uniform norms in various healthcare settings and the variation in training quality exacerbate this problem (Adewojo, 2026). . The wide variations in infection control training cause gaps in healthcare workers' readiness (Henderson, 2026). For example, firefighters and emergency medical services workers across report differing degrees of training success, with a preference for hands-on, scenario-based training (Stretton, 2025).Sustaining excellent infection control standards requires both certified training and ongoing education (Ruch, 2025). However, a lack of frequent updates or refresher training in many healthcare settings causes experienced professionals to have out-of-date information (Ellis, 2026). Even when there are infection control guidelines, they are frequently not followed consistently, which causes gaps in healthcare personnel' knowledge and practice (Ibrahim, 2025). Knowledge retention and application can be improved by creating training programs tailored to the requirements of various healthcare vocations (Alsaqer, 2025). Dental practices, for instance, gain from instruction from specialists in both microbiology and dentistry (Constant, 2026). Finding knowledge gaps and strengthening learning can be facilitated by putting in place regular evaluations and feedback systems (Karimpour, 2025). It has been demonstrated that this strategy enhances healthcare settings' knowledge, attitudes, and behaviors (Zoromba, 2025). Training on infection control can be made more approachable and pertinent by using web-based resources and real-world examples, which will increase student engagement and recall of the subject (Yuan, 2025). It's critical to acknowledge the part played by systemic elements like uneven training and application of guidelines (Albakri, 2025). By addressing these problems with specialized training programs and ongoing education, infection control procedures in various healthcare settings can be greatly improved.

Nurses believe that wearing gloves eliminates the need to wash their hands, which is consistent with research findings (Ejaz, 2025). Many healthcare workers are conflicted about hand hygiene, frequently thinking that wearing gloves makes hand washing less important (Worku, 2025). Given the significant danger of hospital-acquired infections, this perception may result in insufficient adherence to advised cleanliness practices. In one survey, a sizable percentage of healthcare professionals (80%) believed that hand washing was superfluous when using gloves (Mahrous, 2025). Another study found that nurses frequently disregard hand cleanliness before and after treatments because they think gloves offer adequate protection (Muschitiello, 2025). According to research, many healthcare workers do not regularly practice hand hygiene, especially when gloving is involved, even though they understand how important it is (Afework, 2025). According to research, wearing gloves drastically reduced adherence to hand hygiene guidelines, with many professionals only washing their hands after taking them off (Afework, 2025).

Conclusion

Based on the statistical analysis of the data collected from 27 nursing professionals, the study concludes that the sample's level of awareness regarding infection control measures is consistent. In this specific context, there is no evidence that a nurse's years of professional experience, gender, or educational background significantly affect their level of knowledge. Consequently, the Null Hypothesis (H0) is accepted and the Alternative Hypothesis (H1) is rejected. These findings suggest that current hospital practices or general nursing education

have provided a consistent foundation of knowledge for all personnel, regardless of their demographic differences. Numerous interconnected factors influence the differences in infection control knowledge, specialized training, and education across healthcare personnel. These consist of demographic factors, educational background, professional experience, and the healthcare environment. It is essential to comprehend these elements in order to create training programs that work and enhance infection control procedures. According to a study, infection prevention and control (IPC) competencies are frequently greater among female healthcare workers. Senior employees also typically do better in IPC procedures. Improved IPC knowledge and practices are significantly correlated with higher educational achievement, underscoring the significance of educational background in forming competences. Long-term work experience is linked to better IPC abilities, indicating that practical experience is essential for learning. Bridging knowledge gaps among healthcare workers requires regular training and assessments, especially in high-stakes settings like hospitals. Disparities in infection control practices are exacerbated in low- and middle-income countries (LMICs) due to resource shortages and inadequate training opportunities. Particularly in long-term care settings, technical information might alienate staff members with less formal education because it frequently demands a high level of prior knowledge.

The data indicates that there are still large gaps in evidence-based knowledge, even among medical professionals with more than ten years of experience and infection control training. This situation calls into question the general comprehension of infection control procedures as well as the efficacy of the training programs that are already in place.The ongoing knowledge gaps among healthcare professionals, in spite of experience and training, point to the need for more specialized and successful educational interventions. This highlights the significance of continual training and evaluation by showing that expertise alone does not ensure thorough knowledge.

Recommendation:

- Hospital needs pay attention on competency based trainings rather than paying attention on mentioned demographics.
- Efforts should be directed towards bridging the gap between theoretical/educational knowledge and clinical practice.

REFERENCES

Adewojo, A. A., & Olalere, P. (2026). Exploring barriers to adoption of telemedicine platforms in rural Nigerian communities. *Informatics for Health and Social Care*, 1-14.

Afework, A., & Tamene, A. (2025). Uncovering the obstacles: a comprehensive analysis of barriers to hand hygiene adherence among healthcare providers: a systematic review. *BMC infectious diseases*, *25*(1), 502.

Afifah, N., Yulian, H., & Saputra, R. D. (2026). The Lived Experience of Healthcare Workers in Navigating Workload, Stress, and Professional Identity in Modern Medical Practice. *Qriset Indonesia Journal of Medical Science*, *1*(1), 15-23.

Albakri, M., & Wood-Harper, T. (2025). Revisiting Critical Systems Thinking: Enhancing the Gaps Through Sustainability and Action Methodologies. *Systems Research and Behavioral Science*, *42*(1), 157-170.

Alsaqer, K., Ireifij, A., Al-Maghaireh, D. F., Kawafha, M., Nsour, A. A., Farraj, R., ... & Nabulsi, M. (2025). Effectiveness of a continuous training program on knowledge and professional development of healthcare providers in healthy community clinics in Jordan: a quasi-experimental study. *BMC nursing*, *24*(1), 566.

Altintepe Baskurt, N., Akdas Tekin, E., Okur, O., & Turgut, N. (2026). Healthcare-Associated Infections in Critically Ill COVID-19 Patients Across Evolving Pandemic Waves: A Retrospective ICU Study. *Medicina*, *62*(1), 118.

Anemawu, B., Tirist, A., Mohamedsaid, A., Belay, S. A., & Arega, G. (2026). The magnitude of surgical site infection and its associated factors among pediatric central nervous system (CNS) tumor patients at tertiary referral hospitals in Ethiopia: a multi-center study. *Journal of Neuro-Oncology*, *176*(1), 49.

Asmaningrum, N., Ferguson, C., Ridla, A. Z., Sulistyono, R. E., A'La, M. Z., & Wijaya, D. (2026). Exploring nurses' perspectives underwent redeployment in hospital during the COVID-19 pandemic: A qualitative study. *Contemporary Nurse*, 1-31.

Babatunde, A. O., Ibrahim, A. D., Egbewande, O. M., Olabode, W., Aroyehun, N., Tieosapjaroen, W., ... & Kpokiri, E. (2026). Antimicrobial stewardship interventions currently implemented at primary healthcare settings across low- and lower-middle-income countries (LLMICS). *International Health*, ihaf136.

Bagnasco, A., Mazzoleni, B., Barbieri, M., Cattani, D., Pagnucci, N., Cosmai, S., ... & Catania, G. (2026). The process of addressing fundamental needs by nursing students during internship: A qualitative study. *Nurse Education in Practice*, 104735.

Bartoszewicz, M., Wilczyk-Chrostek, E., Czaban, S. L., Ładny, J. R., & Krysik, M. (2026). Bacterial Coinfection in Critically Ill Patients With COVID-19. *Immunology*.

Cacciuttolo, M. G., Specchia, M. L., Bonacquisti, M., Russo, L., Murri, R., Fantoni, M., ... & Laurenti, P. (2026). Economic impact of surgical site infection prevention across surgical units at Gemelli University Hospital: insights from a point prevalence survey. *Journal of Hospital Infection*, *167*, 181-186.

Chao, C. M., Liu, J. W., Tang, H. J., & Lai, C. C. (2026). The escalating threat of multidrug-resistant organisms: COVID-19 impact, global burden, and the Taiwanese experience. *Expert Review of Anti-infective Therapy*, (just-accepted).

Chen, L. Y. A., Wang, S. Y., & Lin, S. C. A. (2026). Predicting postoperative outcomes in lower gastrointestinal surgery: a machine learning approach using electronic health records. *AORN journal*, *123*(1), 68-80.

Cheng, L., Liu, F., Zhao, L., Liang, M., Li, R., & Wu, M. (2026). Impact of nursing safety management on the control of multidrug-resistant organisms infections in emergency intensive care units. *Medicine*, *105*(4), e46490.

Choto, H. M., & Remadan, N. M. (2026). A transformative practice-based pedagogical model for architectural design education: bridging practice, teaching, and research. *Journal of Engineering and Applied Science*, *73*(1), 28.

Constant, M. L., Kimmoun, A., Baudet, A., Lefèvre, B., Thilly, N., Simon, M., & Guillet-Thibault, J. (2026). Knowledge in Oral Infectiology and Antibiotic Stewardship of French Dental Students: A National Cross-Sectional Survey. *European Journal of Dental Education*, *30*(1), 54-62.

Csörnyei-Kelemen, A., Szabo, S., Leszkoven, J., Misak, V., & Balogh, Z. (2026). Hand hygiene compliance and glove use in intensive care units: a one-year observational study in Hungary. *Journal of Hospital Infection*, *167*, 163-169.

Csörnyei-Kelemen, A., Szabo, S., Leszkoven, J., Misak, V., & Balogh, Z. (2026). Hand hygiene compliance and glove use in intensive care units: a one-year observational study in Hungary. *Journal of Hospital Infection*, *167*, 163-169.

Csörnyei-Kelemen, A., Szabo, S., Leszkoven, J., Misak, V., & Balogh, Z. (2026). Hand hygiene compliance and glove use in intensive care units: a one-year observational study in Hungary. *Journal of Hospital Infection*, *167*, 163-169.

Dickson, S. (2026). Healthcare-associated infection. In *Oh's Intensive Care Manual* (pp. 144-150). Elsevier.

Ejaz, E., Masudi, M., Rahimi, A., Osmani, K., & Shayan, N. A. (2025). Assessment of Hand Hygiene Knowledge, Attitude, and Practice Among Health Sciences Students in Herat, Afghanistan: A Cross-Sectional Study. *Risk Management and Healthcare Policy*, 1991-2005.

Ellis, L. A., Long, J. C., Brook, P., Starr, M., Hibbert, P. D., Saba, M., ... & Braithwaite, J. (2026). Insights into clinician utilisation and perceptions of the Paediatric Improvement Collaborative Clinical Practice Guidelines: a mixed-methods study. *BMJ open*, *16*(1), e104757.

Enyan, N. I. E., Zhang, M., Ken-Amoah, S., King-Okoye, M., Agyeiwaa, J., Sarfo-Walters, R., ... & Doi, L. (2026). Acceptance of HPV Vaccination: A Systematic Review of Knowledge, Attitudes and Barriers Among Healthcare Practitioners in Low-and Middle-Income Countries. *BioMed Research International*, *2026*(1), 9294978.

Erhabor, N. I., & Erhabor, G. A. (2025). Environmental Knowledge, Attitudes, and Behaviors of Forest Guards: A Knowledge, Attitude, and Practice (KAP) Model Approach to Forest Ecosystem Protection. Forest Science, 1-25.

Espina, C., Ritchie, D., Feliu, A., Canelo-Aybar, C., D'Souza, E., Mitrou, P. N., ... & Zeeb, H. (2026). Developing evidence-based cancer prevention recommendations: methodology of the world code against cancer framework to create region-specific codes. *International Journal of Cancer*, *158*(1), 9-18.

Firdiansyah, K., Sandra, S., Niriyah, S., Indra, R. L., & Lestari, R. F. (2026). Exploring nurses' holistic understanding and practice of debridement methods in hospital wound care: A phenomenological study. *Journal of Holistic Nursing Science*, *13*(1), 25-39.

García, M. B., Muro, A., Bellido, J. L. M., Alonso-Sardón, M., Oterino, J. Á. M., Pajares, C. R., ... & Guerras, A. I. S. (2026). Hospital Preparedness and Operational Adaptation for the Safe Management of Crimean–Congo Haemorrhagic Fever Patients. *Journal of Hospital Infection*.

Getahun, T., Azale, T., Alemayehu, M., Yitayal, M., Persson, L. Å., Schellenberg, J., & Berhanu, D. (2026). Caregiver experiences and healthcare provider perspectives on managing sick young infants in primary care: a qualitative study in Awi Zone, Northwest Ethiopia. *Tropical medicine and health*, *54*(1), 7.

Hammond, L., & Moseley, K. (2026). Healthcare-associated infections. *Nursing made Incredibly Easy*, *24*(1), 45-48.

Hammond, L., & Moseley, K. (2026). Healthcare-associated infections. *Nursing made Incredibly Easy*, *24*(1), 45-48.

Henderson, B., Doidge, M., O'Brien, K., McLean, T., Healy, S., Carroll, H., ... & Shaban, R. Z. (2026). Structures, processes and outcomes for establishing a statewide infection prevention and control service for Queensland, Australia. *Infection, Disease & Health*, *31*(2), 100399.

Ibrahim, M. L., Sawyerr, H. O., Opasola, O. A., Adiama, Y. B., & Raimi, M. O. (2025). Bridging Knowledge and Practice Gaps in Lassa Fever Prevention: Awareness, Attitudes, and Infection Control Measures Among Healthcare Workers and Residents in Edo, Ondo, and Kwara States. *JMIR Preprints*, *30*(03), 2025.

Ioannou, P., & Kofteridis, D. (2026). Editorial for the Special Issue "Healthcare-Associated Infections and Antimicrobial Therapy—2nd Edition". *Microorganisms*, *14*(2), 267.

Jochems, S. H., Vilahur, N., van Tongeren, M., Albin, M., Baldi, I., Consonni, D., ... & Kromhout, H. (2026). European Code Against Cancer, –occupational exposures and cancer. *Molecular Oncology*, *20*(1), 68-80.

Karimpour, S., Namaziandost, E., & Kargar Behbahani, H. (2025). Contributions of computerized dynamic assessment and digitalized feedback to L2 learners' grammar acquisition: Technology-enhanced learning facilitation theory. *Journal of Educational Computing Research*, *63*(1), 147-172.

Khan, M. M., Masum, A. A., & Hossain, M. A. (2025). Earthquake preparedness perception among youth: Assessing through knowledge, attitude and practice (KAP) framework. Journal of Human Behavior in the Social Environment, 1-15.

Khraisat, F. S., Jarrar, M. T., Issa, M. R., Al-Bsheish, M., Hannan, J., Aljabri, M. M., & Rayani, A. M. (2026). Development and Validation of the Needle Stick Injury Prevention Beliefs Scale (NSI-PBS) Based on the Health Belief Model (HBM). *Risk Management and Healthcare Policy*, 1-11.

King, C., Diaz-Campos, D., Mollenkopf, D., Van Balen, J. C., Mathys, D., Zuckerman, K., ... & Wittum, T. E. (2026). Management of carbapenem-resistant Enterobacterales in a veterinary hospital environment utilizing surveillance with infection control and prevention measures. *Journal of Veterinary Internal Medicine*, *40*(1), aalaf023.

Mahrous, A. J., Alfaifi, S. H. M., Alqurashi, B. F., Abuhussain, S. S. A., Ahmed, W. A., Alrowais, H. H., ... & Aziz, A. (2025). Assessment Knowledge and Practice Among Pharmacy, Nursing, and Medical Students Regarding Hand Hygiene in Saudi Arabia. *Journal of Pharmacology and Pharmacotherapeutics*, 0976500X251409488.

Mrayyan, M. T., Almomani, S., & Rahhal, E. (2026). In academia: Do nursing leaders' humble leadership predict nursing faculty members' psychological safety?. *Journal of Workplace Behavioral Health*, 1-26.

Musa, M., Aminu, S. B., Bakori, H. S., & Muhammad, Z. A. (2026). Prevalence and Public Health Threat of Multidrug-resistant Hospital-acquired Infections in Nigeria: A Comprehensive Review. *South Asian Journal of Parasitology*, 9(1), 52-66.

Musa, M., Aminu, S. B., Bakori, H. S., & Muhammad, Z. A. (2026). Prevalence and Public Health Threat of Multidrug-resistant Hospital-acquired Infections in Nigeria: A Comprehensive Review. *South Asian Journal of Parasitology*, 9(1), 52-66.

Musa, M., Aminu, S. B., Bakori, H. S., & Muhammad, Z. A. (2026). Prevalence and Public Health Threat of Multidrug-resistant Hospital-acquired Infections in Nigeria: A Comprehensive Review. *South Asian Journal of Parasitology*, 9(1), 52-66.

Muschitiello, V., Marseglia, C., Cusanno, L., Termine, M., Morgigno, A., Schingaro, M., & Calamita, M. (2025). Nurses' knowledge, attitudes, and practices on CLABSI prevention in the Intensive Care Unit: An observational study. *The Journal of Vascular Access*, *26*(4), 1161-1172.

Nyarko, R., Tornu, E., & Mensah, G. P. (2026). Sepsis under pressure, intraoperative surgical site infection prevention practices among nurses in emergency surgical settings: A qualitative study. *PloS one*, *21*(1), e0340833.

Pagnozzi, F., Pescatore, I., Cartone, A., & Antonelli, G. (2026). Future work now: organizational culture in hybrid work modes. *Management Decision*, 1-29.

Parslow, R. M., Gibbison, B., Pufulete, M., Rowan, K. M., Moore, A. J., OPTIC Study Group, ... & Johnson, A. F. (2026). Barriers and facilitators to the delivery of delirium care in intensive care units: an analysis informed by the Theoretical Domains Framework. *Anaesthesia*, *81*(2), 213-221.

Ruch, K. E., Rodriguez, A., Ostrosky-Zeichner, L., & Brown, E. L. (2025). Evaluation of Certification Board of Infection Control and Epidemiology, Inc Certification in Infection Control (CIC) examination rates. *American Journal of Infection Control*, *53*(3), 285-290.

Rudrapal, M., & Estrada-Garcia, T. (2026). Perspectives in Clinical Microbiology for Combating Multi-drug Resistant Bacterial Infections 2024/2025. *Frontiers in Cellular and Infection Microbiology*, *16*, 1783280.

Sandu, A. M., Vrancianu, C. O., Tantu, A. C., Dumitrache, V. M., Diaconescu, D., Cristian, R. E., ... & Tantu, M. M. (2026). Epidemiology of Healthcare-Associated Infections Caused by Multidrug-Resistant Bacteria and Antimicrobial Resistance Patterns in a Romanian Tertiary Care Hospital. *Journal of Clinical Medicine*, *15*(2), 667.

Schiau, C., Csutak, C., Ciurea, A. I., Pintican, R., Dulgheriu, I. T., & Manole, S. (2026). Mayer–Rokitansky–Kuster–Hauser Syndrome: From Radiological Diagnosis to Further Challenges—Review and Update. *Diagnostics*, *16*(1), 138.

Schiau, C., Csutak, C., Ciurea, A. I., Pintican, R., Dulgheriu, I. T., & Manole, S. (2026). Mayer–Rokitansky–Kuster–Hauser Syndrome: From Radiological Diagnosis to Further Challenges—Review and Update. *Diagnostics*, *16*(1), 138.

Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. Journal of personality and social psychology, 53(3), 550.

Sembiring, A. B., Sifrani, S., & Sepriani, S. (2026). The Relationship Between Nurses' Knowledge and the Prevention of Healthcare-Associated Infections (HAIs) Among Inpatients at Efarina Hospital Berastagi. *Jurnal EduHealth*, *17*(01), 75-83.

Singh, V., Kumar, V., Verma, A., & Chouhan, A. P. S. (2026). Strategies for Prevention and Control of Infection for Health and Well-Being. *Allied Healthcare in Practice: An Introduction to Integrated Patient Care*.

Stretton, S. M., MacDermid, J. C., Lomotan, M., & Killip, S. C. (2025). A comparison of firefighter mental health education programs: A descriptive thematic analysis of firefighter experiences. *Comprehensive Psychiatry*, *136*, 152547.

Wagwula, P. M., Ofem, A. C., Umoh, R. A., & Oti-Ashong, R. C. (2026). Infection control gaps in rural Cross River State, Nigeria: medical students' observational study of traditional health practitioners. *Discover Public Health*, *23*(1), 34.

Wagwula, P. M., Ofem, A. C., Umoh, R. A., & Oti-Ashong, R. C. (2026). Infection control gaps in rural Cross River State, Nigeria: medical students' observational study of traditional health practitioners. *Discover Public Health*, *23*(1), 34.

Walczak, Ł. J., Kwiatkowska, M., Twarowski, B., Kubacka, M., Paluch, J., & Herbet, M. (2026). Disinfectant-induced bacterial resistance and antibiotic cross-resistance—mechanisms and clinical relevance. *Clinical and Experimental Medicine*, *26*(1), 26.

Wang, F., Chen, X., Jiang, Y., Liu, Y., Li, Y., Yang, X., ... & Gan, X. (2026). Knowledge, Attitude, Practice, and Awareness Regarding Disease Management Among Patients with Chronic Lower Limb Ischemia: A Cross-Sectional Study. *Patient Preference and Adherence*, 1-15.

Wiryawan, I. W. G., Julianti, L., Permadhi, P. L. O., & binti Abdullah, N. (2026). Integrated Spatial Governance for Sustainable Tourims in Bali. *Journal of Sustainable Development and Regulatory Issues (JSDERI)*, *4*(1), 1-29.

Worku, A. D., & Melaku, A. (2025). Barriers to hand hygiene practice among healthcare workers in health centres of Kirkos and Akaki Kality sub-cities, Addis Ababa, Ethiopia: a qualitative study. *Infection Prevention in Practice*, *7*(2), 100450.

Yao, X., & Zhang, L. (2026). The role of pediatric nurses in managing post-vascular surgery complications in children. *Journal of Pediatric Nursing*, *86*, 291-299.

Yi, Y. M., Lee, S. M., Noh, E. Y., & Park, Y. H. (2026). Healthcare workers' perspectives on evidence-based infection control in South Korean nursing homes: A qualitative study. *Geriatric Nursing*, *69*, 103874.

Yi, Y. M., Lee, S. M., Noh, E. Y., & Park, Y. H. (2026). Healthcare workers' perspectives on evidence-based infection control in South Korean nursing homes: A qualitative study. *Geriatric Nursing*, *69*, 103874.
Yi, Y. M., Lee, S. M., Noh, E. Y., & Park, Y. H. (2026). Healthcare workers' perspectives on evidence-based infection control in South Korean nursing homes: A qualitative study. *Geriatric Nursing*, *69*, 103874.

Yuan, Q., Tang, J. W., Chen, J., Liao, Y. W., Zhang, W. W., Wen, X. R., ... & Wang, L. (2025). SERS-ATB: A comprehensive database server for antibiotic SERS spectral visualization and deep-learning identification. *Environmental Pollution*, *373*, 126083.

Zhao, R., Zhang, Q., Sun, H., Zhang, Y., Mao, Y., An, Z., & Zhu, K. (2026). Digital Geriatric Medical Care in the Era of Big Data: A Narrative Review and Case Study of a Chinese Aged Care Facility. *International Journal of General Medicine*, 1-13.

Zhao, R., Zhang, Q., Sun, H., Zhang, Y., Mao, Y., An, Z., & Zhu, K. (2026). Digital Geriatric Medical Care in the Era of Big Data: A Narrative Review and Case Study of a Chinese Aged Care Facility. *International Journal of General Medicine*, 1-13.

Zoromba, M. A., & El-Gazar, H. E. (2025). Nurses' attitudes, practices, and barriers toward sustainability behaviors: a qualitative study. *BMC nursing*, *24*(1), 437.