

Appendix 1: Excluded Studies

Author	Year	Title	Reason for exclusion
Abramczyk et al	2011	Preventing catheter-associated infections in the Pediatric Intensive Care Unit: impact of an educational program surveying policies for insertion and care of central venous catheters in a Brazilian teaching hospital	Before-after study design
Al Kuwaiti -	2017	Impact of a multicomponent hand hygiene intervention strategy in reducing infection rates at a university hospital in Saudi Arabia	HIC
Al-Tawfiq and Abad	2010	Decreasing ventilator-associated pneumonia in adult intensive care units using the Institute for Healthcare Improvement bundle. (Special Issue: Hand hygiene.)	HIC
Al-Tawfiq et al	2013	Promoting and sustaining a hospital-wide, multifaceted hand hygiene program resulted in significant reduction in health care-associated infections	HIC
Allegranzi et al	2009	Successful implementation of the WHO multimodal hand hygiene improvement strategy and tools: A survey of 230 hospitals worldwide	Conference publication
Allegranzi et al	2018	A multimodal infection control and patient safety intervention to reduce surgical site infections in Africa: a multicentre, before-after, cohort study	Before-after study design
Alp et al	2014	Evaluation of the effectiveness of an infection control program in adult intensive care units: a report from a middle-income country	Before-after study design
Alvarez-Moreno et al	2016	Multicenter study in Colombia: Impact of a multidimensional International Nosocomial Infection Control Consortium (INICC) approach on central line-associated bloodstream infection rates	Before-after study design

Apisarntharak et al	2013	Practices to prevent multidrug-resistant <i>Acinetobacter baumannii</i> and methicillin-resistant <i>Staphylococcus aureus</i> in Thailand: a national survey	Cross sectional study design
Apisarntharak et al	2014	Effectiveness of infection prevention measures featuring advanced source control and environmental cleaning to limit transmission of extremely-drug resistant <i>Acinetobacter baumannii</i> in a Thai intensive care unit: An analysis before and after extensive flooding	Before-after study design
Apisarntharak et al	2010	Effectiveness of a catheter-associated bloodstream infection bundle in a Thai tertiary care center: a 3-year study	Before-after study design
Azab et al	2015	Reducing ventilator-associated pneumonia in neonatal intensive care unit using "VAP prevention Bundle": a cohort study	Before-after study design
Benova et al	2014	Where there is no toilet: water and sanitation environments of domestic and facility births in Tanzania	No relevant outcomes
Benova et al	2014		Review
Blencowe	2011	Clean birth and postnatal care practices to reduce neonatal deaths from sepsis and tetanus: a systematic review and Delphi estimation of mortality effect	Review
Bloomfield et al	2007	The effectiveness of hand hygiene procedures in reducing the risks of infections in home and community settings including handwashing and alcohol-based hand sanitizers	Review
Cheng et al	2014	Minimal intervention for controlling nosocomial transmission of methicillin-resistant <i>Staphylococcus aureus</i> in resource limited setting with high endemicity	HIC
Cheng et al		Successful control of emerging vancomycin-resistant enterococci by territory-wide implementation of directly observed hand hygiene in patients in Hong Kong	HIC

Cheng et al	2014	Proactive infection control measures to prevent nosocomial transmission of vancomycin-resistant enterococci in Hong Kong	HIC
Cheng et al	2018	Control of multidrug-resistant <i>Acinetobacter baumannii</i> in Hong Kong: Role of environmental surveillance in communal areas after a hospital outbreak	HIC
Chun et al	2016	Impact of a hand hygiene campaign in a tertiary hospital in South Korea on the rate of hospital-onset methicillin-resistant <i>Staphylococcus aureus</i> bacteremia and economic evaluation of the campaign	HIC
Dosher et al	2014	The effect of a nurse-led multidisciplinary team on ventilator-associated pneumonia rates	HIC
Ejemot et al	2015	Hand washing promotion for preventing diarrhoea	Review
Guanche-Garcell	2013	Effectiveness of a multidimensional approach for the prevention of ventilator-associated pneumonia in an adult intensive care unit in Cuba: findings of the International Nosocomial Infection Control Consortium (INICC)	Before-after study design
Hossain	2011	Clinical solid waste management practices and its impact on human health and environment--A review	Review
Jagi et al	2013	Impact of an international nosocomial infection control consortium multidimensional approach on central line-associated bloodstream infection rates in adult intensive care units in eight cities in India	Before-after study design
Kurlat et al	1998	Infection control strategies in a neonatal intensive care unit in Argentina	Before-after study design
Lam et al	2004	Hand hygiene practices in a neonatal intensive care unit: a multimodal intervention and impact on nosocomial infection	HIC
Leblebicioglu et al	2013	Impact of a multidimensional infection control approach on catheter-associated urinary tract infection rates in adult	Before-after study design

		intensive care units in 10 cities of Turkey: International Nosocomial Infection Control Consortium findings (INICC)	
Lelebicioglu et al	2013	Impact of a multidimensional infection control approach on central line-associated bloodstream infections rates in adult intensive care units of 8 cities of Turkey: findings of the International Nosocomial Infection Control Consortium (INICC)	Before-after study design
Lelebicioglu et al	2013	Effectiveness of a multidimensional approach for prevention of ventilator-associated pneumonia in 11 adult intensive care units from 10 cities of Turkey: findings of the International Nosocomial Infection Control Consortium (INICC)	Before-after study design
Lenz et al	2018	Impact of a program aimed at reducing catheter-related infections implemented in nine pediatric intensive care units in Argentina	Before-after study design
Marra et al	2010	Impact of a program to prevent central line-associated bloodstream infection in the zero tolerance era	Before-after study design
Mathai et al	2010	Prevention and control of health care-associated infections through improved hand hygiene	Review
Mehta et al	2013	Effectiveness of a multidimensional approach for prevention of ventilator-associated pneumonia in 21 adult intensive-care units from 10 cities in India: findings of the International Nosocomial Infection Control Consortium (INICC)	Before-after study design
Moffa et al	2017	A systematic review of nosocomial waterborne infections in neonates and mothers	Review
Murni et al	2015	Reducing hospital-acquired infections and improving the rational use of antibiotics in a developing country: an effectiveness study	Before-after study design

Navoa et al	2013	Impact of an International Nosocomial Infection Control Consortium multidimensional approach on catheter-associated urinary tract infections in adult intensive care units in the Philippines: International Nosocomial Infection Control Consortium (INICC) findings	Before-after study design
Ng et al	2003	Infection control for SARS in a tertiary neonatal centre	HIC
Ng Y.Y et al	2015	Impact of infection control training for interns on PICU-acquired bloodstream infections in a middle-income country	Before-after study design
Nour-Eldein & Eldahshan	2015	Education Intervention for Medical Students in Primary Care Settings, Ismailia City, Egypt	No relevant outcomes
Ogwang et al	2013	Prevalence of hospital-associated infections can be decreased effectively in developing countries	Before-after study design
Price et al	2018	Effectiveness of national and subnational infection prevention and control interventions in high-income and upper-middle-income countries: a systematic review	Review
Rosenthal et al	2006	Impact of an infection control program on rates of ventilator-associated pneumonia in intensive care units in 2 Argentinean hospitals	Before-after study design
Rosenthal et al	2005	Reduction in nosocomial infection with improved hand hygiene in intensive care units of a tertiary care hospital in Argentina	Before-after study design
Rosenthal et al	2012	Impact of a multidimensional infection control strategy on central line-associated bloodstream infection rates in pediatric intensive care units of five developing countries: findings of the International Nosocomial Infection Control Consortium (INICC)	Before-after study design
Rosenthal et al	2012	Impact of a multidimensional infection control strategy on catheter-associated urinary tract infection rates in the adult intensive care units of 15 developing countries:	Before-after study design

		findings of the International Nosocomial Infection Control Consortium (INICC)	
Salama et al	2016	Implementation of central venous catheter bundle in an intensive care unit in Kuwait: effect on central line-associated bloodstream infections	HIC
Salama et al	2013	The effect of hand hygiene compliance on hospital-acquired infections in an ICU setting in a Kuwaiti teaching hospital	HIC
Seward et al	2012	Association between clean delivery kit use, clean delivery practices, and neonatal survival: pooled analysis of data from three sites in South Asia	Cross sectional study design
Srivastava et al	2007	Healthcare-associated infections in neonatal units: lessons from contrasting worlds	Review
Starling et al	1997	Applying the Centers for Disease Control and Prevention and National Nosocomial Surveillance system methods in Brazilian hospitals	Cross sectional study design
Sultangazieva et al	2015	Facility-based control of healthcare-associated infection in maternities of Kyrgyzstan	Review
Tanner et al	2016	Surgical hand antisepsis to reduce surgical site infection	Review
Vatankhah et al	2014	Effect of executive programs of infection control committees on the prevalence of nosocomial infections in Kermanshah's Hospitals (2010-2011)	No details of study design, intervention, population
Von Dolinger de Brito et al	2007	Effect of neonatal intensive care unit environment on the incidence of hospital-acquired infection in neonates	Before-after study design
Zhou et al	2015	Successful reduction in central line-associated bloodstream infections in a Chinese neonatal intensive care unit	Before-after study design
Zhou et al	2013	Efficacy of an infection control program in reducing ventilator-associated pneumonia in a Chinese neonatal intensive care unit	Before-After study

