

1. Project title
Development of human resources for “Infection Prevention and Control (IPC)” and “Antimicrobial Stewardship Program (ASP)” based on Indonesian situation to tackle antimicrobial resistance (AMR)
2. Country name
Indonesia
3. Background
Measures against antimicrobial resistance (AMR) in Indonesia are still in development, and even at Sulianti Saroso Infectious Disease Hospital, which plays a central role in the country, it was necessary to establish an "Antimicrobial Resistant Stewardship Committee," which was inaugurated in 2017. The membership of this organization is small (5) and includes an internal physician, clinical pharmacist, microorganism examination technician, pediatrician, and pharmacist. However, the detection frequency of drug-resistant bacteria is very high, and 65% of <i>Acinetobacter</i> spp., which cause nosocomial infection, is carbapenem resistant, which is a big problem. Blood accounts for 30% of specimens; however, because <1% of specimens are positive, inappropriate management procedures are often suggested.
4. Objective
To improve staff awareness about the antimicrobial stewardship program at Sulianti Saroso Infectious Disease Hospital through on-site training and NCGM visits. To increase the amount of alcohol hand hygiene preparations used by training the staff on hand hygiene methods and their importance. Regarding oral care, these training procedures will increase the awareness about the importance of oral care in Indonesia. These aims will prevent nosocomial infections in hospitals and reduce the frequency of ventilator-associated pneumonia.
5. Program outline
<ul style="list-style-type: none"> •July: Enlightenment training on hand hygiene, confirm the annual schedule in Indonesia •October: Hand hygiene, oral care, antimicrobial stewardship program workshop in Indonesia •January: Hand hygiene, oral care, antimicrobial stewardship program workshop in Japan
6. Implementation structure
6-1. Japanese side
<p>Program manager: Shinichiro Morioka</p> <ul style="list-style-type: none"> •NCGM Disease Control and Prevention Center (Department of Infectious Disease, AMRCRC); 5 to 6 staff members •NCGM Dental Oral Surgery; 4 to 5 staff members · Niigata University (WHO Cooperation Center: Oral Health Promotion) •Company: SARAYA, SUNSTAR
6-2. Counterpart country side
For staff engaged in the antimicrobial stewardship program at Sulianti Saroso Infectious Disease Hospital (Indonesia).

7. Indicator	
7-1. Output	<p>1) Participants in training in Japan; 6 Indonesian staff members for the infection control and antimicrobial stewardship program · 5% improvement in pre- and post-test</p> <p>2) Participants in Indonesia; 15 Indonesian staff members for the infection control and antimicrobial stewardship program · 5% improvement in pre- and post-test</p>
7-2. Outcome	1) Increase of 5% in the amount of hand hygiene alcohol formulations used by participants 3 months before and after training
7-3. Impact	<p>1) Improve the quality of the antimicrobial stewardship program in Indonesia and its administration throughout the country</p> <p>2) Product deployment and sales channels for medical institutions of the cooperating company Saraya (SARAYA)</p> <p>3) Diffusion of recognition of the importance of oral care in the Ministry of Health in Indonesia</p>
8. Main activities	
8-1. Training in 2019	
1)	Training in Sulianti Saroso Infectious Disease Hospital (Dispatch 1 Japanese experts and four NCGM staff members for 2 days in July)
	Training in Sulianti Saroso Infectious Disease Hospital (Dispatch two Japanese experts and five NCGM staff members for 3 days in October)
2)	Training in Japan (Accept 6 trainees in January)