

1. Project title
The Project for safer blood transfusion service and stem cell transplantation in Myanmar
2. Country name
3. Background
Blood transfusion service has been a priority of Myanmar's Ministry of Health as free blood transfusion policy has introduced recently. It was recognized as one of the service contents of Universal Health Coverage in Myanmar. National Center for Global Health and Medicine has been supporting blood transfusion services in Myanmar through dispatching expert for JICA Major Infectious Disease Control Project for 10 years. As a result of this collaboration, blood transfusion service in Myanmar has been improved remarkably in past decade, blood group testing at hospital laboratories. On the other hand, challenge remains have become apparent, such as improvement of clinical use of blood product. Strengthening the capacity of organization expected to be controlling the blood transfusion in Myanmar is urgently required to provide the well-organized services to the people in needs.
4. Objective
To strengthening the capacity of National Blood Center, which is responsible organization for blood transfusion services
5. Program outline
Japan has experience of strengthening the blood transfusion services with contribution of Japan Red Cross Society as the only organization in Japan collecting and supplying blood for use in transfusions under the supervision of Ministry of Health, Labour and Welfare. The academic society of blood transfusion have been taking the important role to improve the services especially for improvement of clinical use of blood and blood products in Japan. The project aims to transfer those expertise based on experience to Myanmar by conducting the training in Japan, dispatching the experts, and holding the educational seminar. In order to establish the effective mechanism for technical transfer, the project also support the development of National Expert Panel of blood transfusion in Myanmar, which involved clinicians. The expert panel expected to be functioned as mechanism of technical transfer.
6. Implementation structure
6-1. Japanese side
(1) National Center for Global Health and Medicine <ul style="list-style-type: none"> • Bureau of International Cooperation: Focal point and coordinator • Hospital; Hematology departments/ Clinical Laboratory (2) Collaborative organization <ul style="list-style-type: none"> • Japan Red Cross, Bone marrow bank, Cord blood bank, etc. (3) Contributing companies <ul style="list-style-type: none"> • Terumo • Kubota • Daido
6-2. Counterpart country side
(1) National Blood Center: Focal point of Myanmar side (2) Other stakeholders <ul style="list-style-type: none"> • Myanmar Medical Association (Prof. Rai Mra) • Yangon General Hosp, North Okkra Hosp.,

7. Indicator	
7-1. Output	1) Number of high rank (Decision maker) participated in the training (more than 15 after three years) 2) Number of training participants on blood-group testing who pass the assessment of the skill at the end of training 3) Number of blood transfusion which use the leukocyte filter to reduce the adverse events. 4) Number of participants of Educational Symposium (More than 400 after three years)
7-2. Outcome	1) Number of the meetings of blood transfusion committee held in 2019. 2) Number of hospitals which introduce the tube methods for blood grouping. 3) Number of hospitals which reported adverse events regularly. 4) Number of new technique/technology related to safety of blood transfusion introduced to Myanmar with the support from the project
7-3. Impact	1) Percentage of voluntary donors are more than 95% even after increase of the blood demands 2) Number of reported adverse events related to blood transfusion
8. Main activities	
8-1. Training in 2019	
1)	Training in Japan; Observational tour on blood program management in Japan (1 weeks): Blood system in Japan including health service provision system.
2)	Dispatching the Japanese experts to Myanmar; ① Blood group examination (1 week): To provide hands on training on blood grouping using tube method. ② Organizing the Educational Symposium on Blood Transfusion; To support organizing annual symposium on blood transfusion and hematopoietic stem cell transplantation for facilitating the better use of blood product and preparing for the future introduction of hematopoietic stem cell transplantation.