Blood Transfusion Program in Indonesia

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With a total of 185 millions population within more than 13,000 islands, 750,000 units of Blood/year run by the whole Indonesian Red Cross Blood Transfusion Services throughout Indonesia are still insufficient amount due to international standard of developed country. However, the development of blood program is proportionally following the development of health system in our developing country.

Central coordination of blood program was beginning since 1969, and since 1980, Government had entrusted Indonesian Red Cross to run the blood transfusion program by main training voluntary non remunerated donor.

There are 135 chapters of blood Transfusion Service spreading throughout archipelago with 56% BTS concentrated in Java island. 85% donors are voluntary non remunerated, whilst 15% are replacement (family, relatives) due to the insufficiency of blood especially in fasting month.

Since there isn’t any insurance system to cover the exploitation cost of serving blood to patient, IRC are allowed to collect service charge from beneficiaries (Service Cost). It is still USD 5.00-10.00/unit of blood.

Donor selection are referred from WHO guidelines and adapted to local condition, mostly 250 cc of blood have been withdrawn and 4-5 times donation a year.

Blood compatibility are done by three phases major & minor crossmatching, following by Antibody Screening and Identification.

Blood Screening against transmissible diseases cannot be done simultaneously in the whole BTS due to different condition of each BTS, mostly the problems are due to the withdrawal difficulties of service cost from majority low socio economic patients. VDRL examination are doing by ± 30% BTS, national reports are 0.2-0.6%. HBsAg Screening are doing by ± 78% BTS, national reports are 2.2-12.8%, due to reagents sensitivity and geographical distribution. HIV Screening is supported by government, and nearly 100% blood are screened, with HIV seropositive 0.000006%. HCV Screening is not yet performed, but several surveys showed the prevalence are quite high, from 3.3-4.37% by Elisa 1st gen. and from 0.5-3.3% by Elisa 2nd gen.

Blood components transfusion are beginning since 1974, up to now there are 12 BTS chapters can perform the component separation. Hemapheresis can also be done only in central mainly donor pheresis.

Plasma products is only albumin which is processed in CSL, Australia. This year we well produce 5,000 bottles of 100 cc Human Albumin 20%. National consumption of albumin can not be informed because there are many commercial brand of albumin are consumed.

National date of factor VIII consumption could not be figured out due to improper data of Hemophilia patients, average data from clinicians in Jakarta are “5 new cases per year”. Other blood banking facilities such as platelet crossmatching, tissue typing cannot yet be done due to budget limitation and other several factors. Constraint adjacent to several problems are still to be solved by priority need consideration, with greater effort and devotion.