ABSTRACT

BACKGROUND AND AIM

Unrelated HSC donor registries in India require donor-pool expansion. Voluntary blood donors are suitable for motivation regarding unrelated HSC donation. The aim of the study was to assess the knowledge, attitude and behaviour (KAB) regarding hematopoietic stem cell (HSC) donation and unrelated HSC donor registry among voluntary blood donors in Chennai.

MATERIALS AND METHODS

422 voluntary blood donors over a period of one year (July 2015 - June 2016) were interviewed individually as per study questionnaire. Level of knowledge was categorized as “desirable” and “below desirable” based on response to 6 questions. Attitude was assessed based on willingness for HSC donation, prior to and after providing information on HSC donation and unrelated HSC donor registry. Behaviour was assessed by registration status at an unrelated HSC donor registry. Data analysis was done using SPSS software. Categorical data was expressed in frequency and percentage. Chi-square test was used to find association between donor-related factors and willingness for unrelated HSC donation.

RESULTS

Among 422 voluntary blood donors, 417 donors had “below desirable” level of knowledge. Majority (224 donors) were not sure of their decision about HSC donation, initially. After providing information, 151 donors
expressed willingness for unrelated HSC donation. Major reason among those who did not have a positive attitude about HSC donation was concern about adverse events after HSC donation. 139 donors responded that others’ opinion would influence their attitude towards HSC donation, of which, 79.9% of them considered the opinion of family members as important. 3 donors had already registered at an unrelated HSC donor registry.

Level of knowledge was significantly associated (p = 0.028) with willingness for unrelated HSC donation. Factors which were not significantly associated with willingness for unrelated HSC donation were age, gender, marital status, education, number of units of blood donated, prior plateletpheresis donation and having a known person who needed HSCs as treatment.

**CONCLUSION**

Awareness programmes and recruitment drives have to be intensified among voluntary blood donors in order to enrol them as volunteers for unrelated HSC donation. Involving persons who have already donated HSCs and key persons like family members of potential volunteers, may be useful strategies for motivation regarding unrelated HSC donation.

**Keywords**

Knowledge, attitude, willingness, behaviour, hematopoietic stem cells (HSCs), donation, registry, unrelated, voluntary blood donor