

## Blood donation practices and awareness of blood types among adults in the united arab emirates: a cross-sectional community-based study

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### Background:

Blood donation is crucial to ensure the availability of life saving therapies in clinical settings. To date, no studies have assessed the knowledge of blood donors regarding blood types, and blood donation practices within the United Arab Emirates (UAE) population.

### Aim:

The present study's primary objective is to assess knowledge regarding blood types and blood donation practices among adult blood donors in the UAE. The aim is to evaluate the effectiveness of existing initiatives and propose strategies for donor recruitment and retention.

### Methods:

This cross-sectional community-based study involved 259 participants selected through convenience sampling. Interviews were conducted at blood donation sites, and blood type data for each participant was collected from the blood bank following their donation. Statistical analysis was conducted using SPSS Statistics version 25, and p-values of <0.05 were considered and reported as statistically significant.

### Results:

Blood type distribution showed a prevalence of O+ (41.7%), A+ (22.4%), and B+ (19.7%). Notably, the rarest blood types observed were O- (2.3%) and AB- (0.4%). First-time blood donors comprised 29.7%, while the rest had previously donated blood. 72.2% of participants identified their blood type correctly, but knowledge about blood compatibility was limited. Emirati nationality, higher education level, and a history of previous blood donations were significantly associated with blood type awareness. Perceived accessibility to blood donation was generally high. The most reported motivational drives for blood donation included awareness of blood donation significance, a sense of ethical duty, and religious beliefs.

### Conclusion:

Most participants correctly identified their blood type; awareness was associated with Emirati nationality, higher educational achievement, and a history of previous blood donation. The high perceived accessibility of blood donation, coupled with the observed prevalence of previous blood donations among participants, offers valuable feedback on the current initiatives in the UAE for blood donation. Our study identifies target demographics and motivational triggers, offering valuable insights for optimizing blood donation initiatives in the UAE. These findings provide a strategic foundation for enhancing awareness and participation in this vital healthcare domain.

### Keywords:

united arab emirates, blood donation, public health, blood transfusion, blood types