Results
We analyzed blood group antigens; with age range from 19–65 years, mean donors age 38.4±8 years. Nationalities among donors varied considerably, the highest frequency donations were Qatari 89 (17.4%), Syrians 89 (17.4%) and Egyptians 77 (15%). When compared among Arabs 365 (72.1%) and non-Arabs 132 (25.8%), majority of blood donors are from Arab countries. Rh antigens frequency shown from our analysis is, D 88.08%, C 70.11%, E 33.59%, c 75.39%, e 88.47% and K 10.4%. The Rh antigens among Qatari were D 92.13%, E 39.32%, c 86.5%, K 13.8%.

Conclusions
Our data shows the blood donors in state of Qatar are multinational and demonstrates variations in frequency of Rh and Kell RBC antigens. These variations may be a challenge to find antigen negative blood, needs for multiple transfused alloimmunized patients such as thalassemics and sickle cell patients. It is important to establish the incidences of various RBC antigens amid blood donors, when dealing with patients who have developed multiple antibodies. The current clinical practice in blood banks is randomly cross match the available blood units in the stock. This study will help to provide data regarding the frequency of Rh and Kell blood group clinically significant antigens. As we have mentioned very limited information are available, about blood group prevalence among Qatari population accept some data about the association of blood groups among diabetes mellitus patients in Qatar. Our study shows though there is large number of expatriates in Qatar, among them Arabs are the highest frequent blood donors including Qatari. While Indians resident community is the largest, among expatriates here in state of Qatar number of blood donation is less compare to other residents. Our data shows Qatari and Syrians 17.4% are the most regular blood donors in Qatar. The age groups highest frequent blood donors were 25–34 years in Qatar, but according to WHO facts blood donation, among high income countries most regular blood donation is in the age group 45–64 years, while low and middle income countries the age group donates most regularly are 18–25 years.