# Seroepidemiology of *Toxoplasma* infection in blood donors in Jahrom District, Southern Iran

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# Abstract

### Objective

To identify the anti-*Toxoplasma* antibodies from blood donors who referred to blood transfusion bases of Jahrom County, using ELISA method.

#### Methods

Based on the prevalence and characteristics method, 400 serum samples were collected from blood donors referred to Jahrom blood transfusion bases, Southern Iran, during 2010–2011, designed at testing by ELISA. IgM and IgG antibodies against *Toxoplasma gondii* were tested using ELISA kits (Dia-Pro) on serums. The data were analysed by SPSS 19 software.

#### Results

Review of 400 cases, 54 of them were IgG positive for parasites (13.5%) and 346 of those with negative IgG (86.5%). In IgM examination, 1.75% of them have been positive IgM (7 cases) and 98.25% of them were IgM negative (393 cases). By comparing the different group ages, 40–50 year age group had the highest prevalence of IgG positive (17.9%) and the age group of 30–40 years had the highest incidence of IgM negative (2.5%).

# Conclusions

Due to the serological infection rate of toxoplasmosis obtained from this study, toxoplasmosis should be considered as a significant transfusion risk factor in Jahrom and also in any region with similar situations.

# Keywords

• Toxoplasma; Blood donors; ELISA; Iran