A Comparison of Direct Technique and Formalin-Ether Method in Determining Parasitic Infection among Health-Card Applicants in Shahroud City

Amiri, A. (PhD)

Assistant Professor of Health Service Management, School of Public Health, Shahroud University of Medical Sciences, Shahroud, Iran

Nazemi, S. (MSc)

MSc of Environmental Health Engineering, School of Public Health, Shahroud University of Medical Sciences, Shahroud, Iran

Raei, M. (MSc)

MSc of Biostatistics, School of Medicine, Qom University of Medical Sciences, Qom, Iran

Chaman, R. (PhD)

Associate Professor of Epidemiology, School of Medicine, Shahroud University of Medical Sciences, Shahroud, Iran

Norouzi, P. (BSc)

Msc Student of Developmental Biology, Islamic Azad University, Damghan, Iran

Corresponding author: Nazemi,

S.

Email: nazemi@shmu.ac.ir

Received: 12 Aug 2012 Revised: 6 Apr 2013 Accepted: 22 Apr 2013

Abstract

Background and Objective: Parasitic infection is one of the major health problems in the world. This study aimed at comparing the accuracy of two methods of direct examination and Formalin-Ether to detect the presence of parasitic infection among health-card applicants in Shahroud city, 2011.

Material and Methods: This cross-sectional study was conducted on 801 patients seeking health-card. From each patient, three consecutive stool samples were taken and investigated, using direct examination and formalin-ether method.

Results: The use of formalin-ether method in recognizing the parasitic infection specially giardia lamblia and entamobea coli is more than the direct method.

Conclusion: The formalin-ether method is a more sensitive method than the direct method. But in circumstances that is urgency to respond or aims to see the shape of trophozoite, the use of direct method is recommended.

Keywords: Parasitic Infections; Health Card; Direct Method; Formalin-Ether