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Editorial

Parasitic Infections in Nursing Homes: a Permanent Threat for Elderly Health

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As the WHO has claimed one of the most important threat for public health in whole the world and especially in developing countries is parasitic infection and that until the end of the twentieth century, intestinal helminths like Ancylostoma duodenale, Ascaris lumbricoides and Human whipworm infect almost 3.7 billion of people in whole the world. On the other hand the protozoan parasites like as Cryptosporidium parvum and Entamoeba histolytica have a high prevalence too (1, 2). Immunosuppressed patients, children and elderly people are the main victim of this parasite infection. These infections are so common in elderly people especially those who are kept in nursing homes with low hygiene and population density.

The physical problems and also low efficient self-care in old people lead to lacking of sanitary practice and deficient personal hygiene that make old people more prone to parasites infections. This susceptibility can be result from various factors containing age-related immune system malfunction, such as decrease in colonic motility, changes in intestinal flora and also achlorhydria (3). Several parasitic infections such as a helminths infection by Enterobius vermicularis or an ectoparasites infestation such as pediculosis, pthiriasis and Scabies, or even a protozoan water-borne infection like cryptosporidiosis and giardiasis has been found in nursing homes. Another prevalent parasitic infections; ascariasis or intestinal amoebiasis cause by E. histolytica repeatedly is also seen in this elderly homes too because of their direct life cycle and easily oral-fecal transmission of their eggs and cysts.

Placing of an old person in a nursing home notably increases risk of parasitic transmission from common source, such as water-borne cryptosporidiosis or direct transmission (person to person) E. vermicularis. In a nursing home, for example, the prevalence of cryptosporidiosis and giardiasis as a common intestinal protozoan parasite is affected by crowdedness of elderly people along with unhygienic conditions. Usually less parasitic infections report more from private nursing homes than governmental nursing homes because of better supervised quality hygiene and lower population density which is an important risk factor for parasite transmission (4).
Therefore, such the multiple reports from nursing homes express inadequate observation of basic principles of hygiene (5). Poor hygiene of nursing home's equipment is one the most important source of parasitic infections. Kitchen, bathroom and showers and toilets hygiene is very important issue for preventing of parasite infections especially intestinal forms.

Apart from buildings and their equipment, staff have an important role in transmission or prevention of parasitic infections. They are not only by disregarding the old people hygiene, but also by low personal hygiene, could transmit the eggs or cyst of parasites from outside to nursing home and present to their old residents. So hygiene of nursing home's staff should not be ignored at all.

At the end, it should be noted that the rate of parasitic infection reported from community was very closer to governmental and charity elderly home. That point reflected the relatively low level of hygiene in old people life in the rural area and even in the suburbs. So by applying the basic principles of hygiene, we must protect of the elderly people health from common parasitic infections.

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