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Study of Bacterial Pollution of Drinking Waters in the Taleghan Region in Iran

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Introduction & Objectives: Based on opinion of the WHO, polluted water is one of the most common means of bacterial pollution transmission in human societies particularly in villages, decision was made to study of bacterial pollution of drinking water in the villages of Taleghan (with high prevalence of infectious diseases) to take another step forward to increase the level of hygienes local people.

Methods: kind of study in this research is of descriptive type. In this research according to the approved standards of WHO, WPCF and Iranian national standard, 114 water sample from different sources, wells and rivers from 81 village in Taleghan regions were taken and then by using multiple tube (M.T) method to determine most probable number (MPN) of E.coli and performing presumptive, confirmed and completed test, these samples were examined.

Results: The frequency distribution table and diagrams (by applying computer programs) were used to describe and analyze the data. The drinking water from 16 villages from the WHO standards points of view is bacterial polluted and not drinkable, in addition water in 7 rivers in the Taleghan region also has bacterial pollution which is caused by entering of manures into the river and also local tourists lack of attention to the hygiene.

Discussion & Conclusion: The percentage of bacterial pollution present in the total drinking water in Taleghan region is 19% which of course is not a high figure according to Iranian standards but swift action must be taken to solve this problem. It is recommended in order to decrease the amount of bacteria pollution of the wells in this region; correct excavation, well protection, contamination monitoring and periodical bacterial tests should be carried out.

Key Words: Bacterial Pollution, Drinking Water, Villages of Taleghan

