

WATER SUPPLY TO HOUSING OWNED BY FAMILIES OF SOME PUPILS FROM TWO TOWNS IN BOTOSANI COUNTY

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Keywords: drinking water, wells, sewer. **Introduction.** Water quality is essential for maintaining the population health, especially in young people. It ensures the hygienic condition necessary to maintain a normal growth/development of the pupils. Unfortunately, in Romania there are still many problems related to the supply of drinking water to homes, especially due to its high price. There are many families in urban and rural areas, who meet their water needs by using water wells and who do not have an adequate sewerage system. Under these conditions, a possible intoxication might occur, as well as trigger several infections due to the consumption of contaminated water.

Material and methods. The study was conducted on a group of 213 families of pupils from M. Ciuca high school in Saveni city (105 families) and pupils from the high school with Sports program in Botosani city (108 families). A questionnaire was applied including questions on the type of home (block, house), water supply (central, own installation, wells) and presence of a sewerage system (yes/no). The results were processed using the Pearson test.

Results. Among the pupils in the study group, the house-type residence predominates (69.01%), the highest percentage being in the city of Saveni. The calculated differences are statistically significant (p<0.05). The house-type residence is rarely connected to both the central water supply system and to the sewer system. In Botosani city, the situation is a bit better, especially in the central area. The water supply of the houses is provided mainly by water from wells (46.47%) even in those from Botosani city, which is the county capital. The calculated differences are statistically significant (p<0.05) and draw attention to the houses in Savani city where the use of well water is dominant. The water supplied by a centralized system is present only in 36.15% of families, an aspect that is not an encouraging one. The central water supply system is used by 27.6% of families in Saveni and by 44.44% of families in Botosani. There are also 17.37% of families that use their own water supply system, however the water source is uncertain, thus the issue of population health is still concerning.

The presence of drinking water at homes is associated with the appearance of liquid residues that require an adequate drainage system. Unfortunately, only 51.17% of the assessed dwellings were connected to the sewer system. The calculated differences are statistically significant (p<0.01) and also draw attention to the housing in the city of Saveni. The percentage of the houses connected to the sewerage system in the city of Saveni makes up 40.0% compared to 62.03% in the city of Botosani.

Conclusions. There are still many problems related to the quality of water supplied to the population of the two studied cities. The solution of this issue is still challenging, since it requires major investments associated with convincing the population to connect to the central drinking water supply systems.