

Assessment of Some Environmental Conditions and Their Relation to Health Status in El-Zohra Village, Behera Governorate

Wafaa El-Shal*, Mamdouh H. Mahmoud* & Mona Hassan†

Abstract: Environmental sanitation in rural areas should fulfill the same human requirements as in non-rural areas, so as to sustain the inhabitants' health status in good condition. Housing sanitation, adequacy of water supplies, and sanitary drainage facilities do not guarantee complete health protection unless accompanied by raising and developing other social and economic aspects. An ecological perspective on environment reveals multiple levels of influence that support or do not support access to rural health care. This work aims to assess some environmental conditions and their relation to health status in El-Zohra village, Behera Governorate. The study was conducted through house to house survey in all houses of the village [365 house]. The different environmental conditions were investigated and analyzed through a proposed scoring system [$< 50\%$ poor, $50-75\%$ fair, and $>75\%$ good]. The results of most of housing characteristics are classified as good to fair [private dwelling and brick construction 87.2% for each, Dar dwelling type 65.4%]. However, animal waste disposal, lighting, ventilation, wastewater disposal, and water supply were in good condition as indicated by their percentages [99.6% , 90.1% , 86.4% , 76.4% , and 72.6% respectively], on the contrary, solid waste disposal was in a bad sanitary condition [6% only given to collector]. Nevertheless, the average score of the different environmental items could be specified as a fair score level [median score =26, maximum possible score=35] which could be attributed to the moderate socio-economic level of the studied village. A statistically significant relation was found between housing and respiratory diseases, solid waste disposal and respiratory and skin diseases, animal waste handling and parasites, and finally total environmental score and parasites. Also, the statistical analysis results indicate that none of the environmental factors was significant predictor of the occurrence of diarrhea. Again, fair and poor environmental conditions were associated with more skin diseases and parasites [13.7% and 6.9% +ve for fair and poor environmental conditions as compared with 7.9% and zero % in good environmental conditions respectively], and this was found to be statistically significant. Consequently, the study recommends the introduction of more sanitary environmental services and health education programs in rural areas. This could be secured by the frequent legal supervision and inspection of these services. On the other hand, the adoption of more specialized medical care services for children and adults are needed to upgrade the health and well-being of individuals in rural areas.

* Environmental Health Dept., High Institute of Public Health, Alexandria University
† Biostatistics Dept., High Institute of Public Health, Alexandria University