WATERBORNE DISEASE-RELATED RISK PERCEPTIONS IN THE SONORA RIVER BASIN, MEXICO

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ABSTRACT

Waterborne disease is estimated to cause about ten percent of all diseases worldwide [1]. Its causes include poor hygiene practices and water contamination. However, related risk perceptions are not well understood, particularly in the developing world where waterborne disease is an enormous problem. Fortunately, many of these disease problems could be solved through improved hygiene, water treatment, and wastewater management. Local communities and households can exert a great deal of control over these solutions, but frequently don't. We focus on understanding risk perceptions related to these issues in one region within Northern Mexico. Our findings show how these problems and their solutions are understood in eight small communities along a highly contaminated river system. We found major differences in risk perceptions between health professionals, government officials, and lay citizens. Health professionals believed that a high level of human waste-related risk existed within the region. Few officials and lay citizens shared this belief. In addition, few officials and lay citizens were aware of poor wastewater management-related disease outbreaks and water contamination. Finally, aside from health professionals, few interviewees understood the importance of basic hygiene and water treatment measures that could help to prevent disease. Our results add to the literature on environmentally-related risk perceptions in the developing world. We discuss recommendations for improving future human wastewater-related risk communication within the region.