Nicaraguan Experiences in Vector Control and Interinstitutional Cooperation after Hurricane Mitch

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Health Impact and Risk Factors of Diarrheal Epidemics in the 1998 Bangladesh Floods

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In 1998, the worst flood disaster in Bangladesh ravaged about 60% of its land and affected over 30 million people. Diarrhea affected 400,000 people and resulted in >500 deaths. To assess its health impact and factors associated with diarrhea episodes, we interviewed 517 people in two of the affected districts in early October 1998.

Among respondents, 98.3% developed some kinds of health problems and perceived that their general health condition had become "extremely worse" (16.9%) or "worse" (64.3%). Prevalent episodes consisted of fever (63.6%), respiratory problems (47.0%), and/or diarrhea (44.3%). However, 22.3% of those with diarrheal episodes felt the problem was serious enough to require medical help. Although 50.1% needed medical help, only 26.5% actually sought it. Factors associated with developing or worsening diarrhea were: 1) large number of persons in the family ($p < 0.05$); 2) poor economic status ($p < 0.001$); 3) no distribution of water purification tablets ($p < 0.001$); 4) the type of water storage vessels ($p < 0.001$); 5) not putting a lid on the vessel ($p < 0.001$); 6) no latrine use ($p < 0.001$); 7) perceived change of drinking water ($p < 0.01$); food scarcity ($p < 0.01$); and 8) worry about future life ($p < 0.01$). Using logistic regression analysis, men (odds ratio [OR] = 3.10); poor economic status (OR = 2.40); no distribution of water purification tablets (OR = 0.37); and the type of water storage vessels (OR = 4.00) had a significant association with the development of diarrhea.

Further studies are needed to seek effective and applicable measures to reduce diarrheal outbreak in disasters.

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