Top health concerns in rural Honduras following the introduction of clay water filters

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Background: Access to clean water is a major health issue for many living in rural Honduras. In June 2008, clay water filters were distributed to individual homes in La Hicaca, a rural mountain community in the Yoro area of Honduras. In June 2009, a needs assessment survey was administered to residents in this area.

Methods: In June 2009, a needs assessment survey was administered in La Hicaca and other communities in the Yoro area that collected data on demographics, water source and principle health concerns. One question asked, "What are the three biggest health care problems that you worry about? (Check all that apply)" There were 15 options in the areas of water sanitation, nutrition, education, maternal/child health, access to doctors and medicine and specific disease concerns. Survey respondents in La Hicaca who used clay water filters and all other respondents were compared regarding their principle health concerns. Respondents were excluded if they filtered their water but did not live in La Hicaca or if they did not respond to the question regarding health concerns.

Results: Of 101 completed surveys, 12 survey respondents from La Hicaca used clay water filters and 70 respondents from the Yoro area did not. For the respondents who did not use filtered water, water sanitation (48.6%) and nutrition (42.9%) were the principle health concerns. For the La Hicaca residents who utilized water filters, access to healthcare in terms of distance (41.7%) and overall cost of healthcare (50%) were the principle concerns.

Conclusion: When comparing the primary health concerns of rural Hondurans in La Hicaca who utilize clay water filters to those who use a different water purification method, the principle health concerns differ. Water sanitation and nutrition were the principle concerns for those who do not use filtered water, and access to healthcare in terms of distance and cost were the concerns for those respondents who utilize water filters. As far as perceived health concerns are an indicator, the distribution of clay water filters in one rural Honduran community may have had a positive health impact.

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E.coli infectious complicated with HUS in Georgia

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Background: Infectious diarrhea with its morbidity is the main issue of Georgian population and at the same time it is the multifactor problem (climato-geographic, social-economic, etiological). Noticeable increasing rate of E.coli infectious, (including EHECEnterohemorrhagic E.coli, 0124, 0111, and et al.) has been revealed in etiological structure of infectious diarrheas in recent years. During this period some sporadic cases of hemorrhagic colitis have been registered, and among the patients of different ages they were complicated with HUS syndrome that indicates to possible circulation of E.coli. 0157.

Methods: Since 2009. 07- up to2009. 09 18 cases of E.coli complicated with HUS syndrome have been registered. Most patients were rural residents (14 - 78%), only 4 (22%) were urban. 8(44%) patients were children, 10 (55%) were adults. Among male and female patients HUS complication rate was equal. All the patients associated the onset of the disease with the ingesting of unwashed and raw fruits or vegetables. Hemorrhagic colitis dynamics in clinical estimation of cases revealed development of hemolytic anemia, thrombocytopenia, and renal failure which were confirmed by clinical-laboratory findings.

Results: The onset of disease was acute: low grade fever (37,5-37,8 (C), severe diffuse pain in abdomen accompanied with cramps, frequent bowel movement with loose, watery stool 5-6 times a day. On the 2-3rd days of disease condition was worsened by increasing of intoxication and frequent bowel movement with bloody stool about 10-15-20 times a day. Acute renal failure developed in 11(61%) patients, in spite of adequate treatment with infusion of cryoplasma and polyionic solutions 9(50%) patients required haemodialysis in specialized department. Severe Thrombohemorrhagic syndrome - 2(11%) patients, poliserositis - 6(33%), ileus -1(5%), encephalopathy - 2 (11%), psychosis - 1(5%) were revealed in various rates.

Conclusion: Outcome was lethal in 5(28%) cases due to delayed hospitalization and inadequate therapy.

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