Clinical profile and risk factors of H1N1 swine flu in Indian health care workers during the 2009 pandemic

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BACKGROUND: The Christian Medical College, Vellore was one of the first few centers in India that could perform RT-PCR for Influenza A H1N1 during the 2009 pandemic. The health care workers being a high risk group were screened and tested when they developed flu symptoms. Through the staff-students health service of the institution, the clinical profile and risk factors in this group were studied. AIM: To study the clinical profile and risk factors of swine flu in health care workers during the pandemic of 2009 and compare it with other acute febrile respiratory illnesses in the group during the same period. METHODS: Consecutive health care workers who presented with an acute febrile respiratory illness were screened and those who fulfilled a set of clinical criteria were included. Demographic and clinical data were obtained and a throat swab was taken for RT PCR for swine flu. All those who were positive were included as cases and those who were negative, as controls. The clinical profile and risk factors were compared between the two groups. RESULTS: A total of 158 patients were included. Of these 76 were cases and 82 were controls. Female sex, students, work involving minimal contact with patients, diarrhea and need for admission were more in the cases. There were more nurses and technicians in the control group. There was no difference in the co-morbidities, exposure to swine flu patients or use of protective measures between the two groups. CONCLUSION: The study has identified some risk factors for H1N1 swine flu in health care workers. This information may be helpful in setting up policies during subsequent epidemics. A larger study should be planned in the future.