© JLS 2011 J Life Science, 3(2): 147-156 (2011)
PRINT: ISSN 0975-1270 ONLINE: ISSN 2456-6306 DOI: 10.31901/24566306.2011/03.02.13

Risk Factors Associated with Morbidity Pattern of Working Children

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KEYWORDS Child Worker. Morbidity. Logistic Regression. Socio-economic and Demographic Variables

ABSTRACT Children of poor families are often forced to take up low paid jobs to assist their parents. But entry into labor market at an early age of life brings greater risk to the health. In this paper, we have investigated the morbidity pattern of the child workers of Ramna Etbar Nagar, a remote village in West Bengal, India. All the child workers in the village are engaged in production of 'Gamchha', a traditional napkin, with the help of traditional handloom. It is seen that the child workers in this area suffer more from cough and cold, abdominal pain, chest pain and fever. It is presumed that the unusually high frequency of chest pain is due to working in the "gamchha" producing industry at an early age. To see the impact of socio-economic and demographic variables on morbidity, we have first prepared the bivariate tables taking dummy variable of an illness on one side and a socio-economic or demographic variable on the other side and performed chi-square test of significance. We have, thus, short-listed 20 such variables which seem to affect the morbidity of the working children. For each illness we have tried to find the best set of explanatory variables keeping in mind the significance of the coefficients and the multicollinearity of the set of regressors. We have started with a large number of explanatory variables on the basis of significance of the chi-square values of the contingency tables and carried out the logistic regression taking the illness as the dummy dependent variable and then eliminated the least significant variables one by one. Sometimes we have again added an explanatory variable. The main aim was to reduce number of explanatory variables without reducing the goodness of fit much. It is seen from the regression results that children of higher castes are more vulnerable to most of the diseases. It is also strange to note that the children of higher educated heads are more prone to suffer from fever but are not likely to suffer from abdominal or chest pain. It is seen that the variables, "total number of children under 14", "rest time for children" and "expenditure on education" do not have much significant influence on any of the diseases. However, "total number of children under 14" appears in the most of the regressions with positive influence on the diseases in most cases. i.e., higher the number of children in the family, higher is the risk. Other factors have pronounced effect only on a few of the diseases. An in-depth study of each of these diseases is necessary to arrive at some meaningful conclusion.