

Approximately 49% of respondents mentioned that these allergies and diseases occurred repetitively to them. However the maximum reoccurrence of diseases / allergies were found to be in paper mill area followed by thermal and sugar mill area. Due to this pollution respondents in paper mill (42%), sugar mill (20%) and thermal power plant (16%) mentioned that they have to visit the doctor frequently. Besides general allergic problems; headache, fever, malaria, asthma and cold were noticed more in the middle age group respondents in all industrial zones; however in old age respondents the problems of digestion, respiratory, and asthma were found to be more prominent.

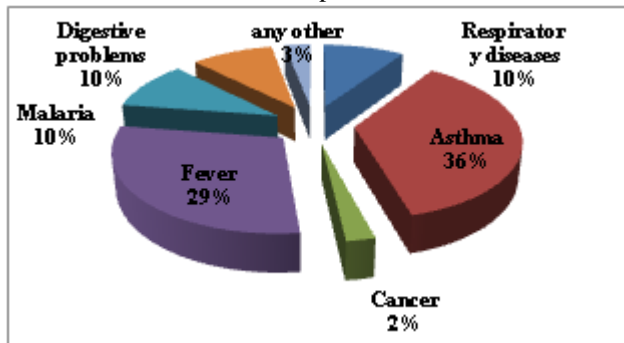


Figure 1.9: Prevalence of different diseases in industrial zone

The most prevalent diseases in whole community according to respondents were water borne diseases mainly malaria (38%) and fever (34%), followed by diarrhea (18%), typhoid (6%) and cholera (2%) (Fig.1.10). Similar kind of diseases from industrial area was also reported by Reddy and Behera (2005); Sujatha et al., (2013). Though people do not drink the polluted water directly, they get exposed to the toxic chemical water while working in the industry, taking bath, washing clothes and also through food chain etc. These water borne diseases spread through mosquitoes and bacterial infection from stagnant water bodies mainly present in vicinity of sugar and paper mill area in this study. Many community members believe that these problems are a result of an increase in the number of industrial units in the area. It is their opinion that effluent entering the surface water bodies in the area, is reducing the quality of water and as a result they are unable to use it for the purposes for which it was used in the past, such as bathing and washing cattle etc. Most of the respondents from all industrial area mentioned that the main cause of these diseases to them was due to shifting to this area or living in this area (Fig. 4.11).

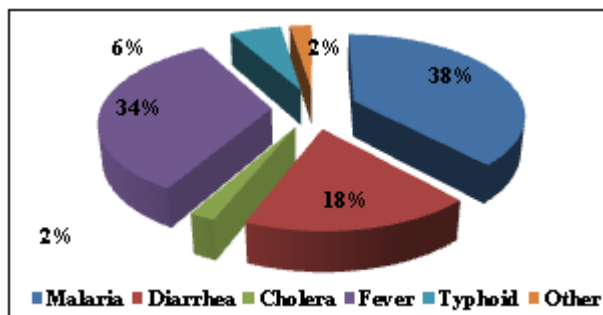


Figure 1.10: Common illness in the community near industrial zones

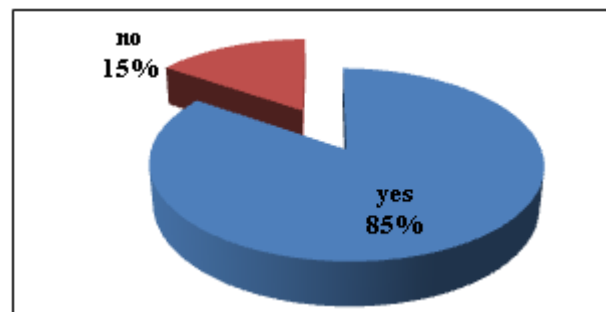


Figure 1.11: Cause of diseases due to shifting / living in industrial zone

4. Conclusion

Results revealed that the three different areas had different health and environmental problems. As general respiratory problems were found to be more prevalent in paper mill zone; and asthma and fever were found to be in higher extent in thermal power plant and sugar mill zone respectively. Air pollution problems were found to be more in thermal power plant however; water problems were more prevalent in sugar and paper mill zones (Table 1.2). The present study is expected to reveal the status of pollution-associated health problems but also form a baseline data for further detailed investigation on health impact assessment. This study will also be helpful for extrapolation of the scenario and for formulation of mitigation strategies.

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