

2.1. Health Promotion and Disease Prevention

Health promotion is the process of empowering people to increase control over their health and its determinants through health literacy efforts and multi-sectoral action to increase healthy behaviors. Much of the determinants for the burden of communicable diseases are attributed to the environment where people live. Apart from factors related to water, sanitation and hygiene, diseases of animal origins contribute a significant amount of burden on the impact of communicable diseases in human population. Health Care Workers (HCWs) involved in patient care are facing special occupational hazard because of exposure to human blood and body fluids. People involved in managing wastes (such as healthcare wastes) are also exposed to Sharp Injury (SI) and Blood and Body Fluid (BBF) as a result of poor awareness, lack of protective device, lack of basic trainings, low attention given by the authorities, etc. Expansion of industries and other work places not only gave work opportunities for citizens but also becomes a cause for diseases, accidents and injuries for people who are working in and around these sectors. Even if the importance of physical activity is ample, the majority of our society follows a sedentary lifestyle which is more deadly than smoking; contributing a lot for emergence of non-communicable diseases (such as heart disease, diabetes and certain kinds of cancer).

However, research on work place hygiene, particularly the impact of hazardous wastes, occupational hazards and diseases, effect of substandard housing and safety, effects of buildings, indoor pollutants and health effect, satisfaction of fundamental physiological and psychological needs, protection against vector and rodent infestation, and the concept of the importance of physical exercise are lacking. As a result, the community especially the most vulnerable populations are under the risk of communicable and non-communicable diseases (double burden) that affects quality of human life. Therefore, the Health Promotion and Disease Prevention Research Sub-theme, identified the following research priority areas to study intervention strategies to prevent and control of communicable and non-communicable diseases

- Effects of housing, air pollution and LRTI (Pneumonia, TB);
- Vector and rodent infestation (Vector born disease) in residential and institutional environment;
- Investigation of disease burden, waste water irrigation in agriculture and nematode infections;
- Food-borne zoonotic diseases (zoonotic gastrointestinal disease);
- Water and health (water borne diseases);
- Water supply, Sanitation and Hygiene (WASH);
- Infection prevention (Healthcare Workers, waste handlers, patients);
- Developing waste management technologies (including wastewater treatment);
- Investigate health effects of waste (Hazardous wastes, waste and pollution);
- Work place risk factors and hazards (Occupational risk management);
- Work place health promotion (training, workplace guidelines & capacity building, good occupational practice);
- Gender and occupational health;
- HIV/AIDS in the work place;
- Physical activity and wellbeing (Weight control, rehabilitation from injury, stress management);
- Physical exercise as a mechanism to reduce risks and disease prevention for non-communicable diseases (Diabetes, hypertension, asthma);
- Physical exercise for special people (Obese, handicapped, pregnant)