Sub theme 2.1. Health Promotion and Disease Prevention

Health promotion is the process of empowering people to increase their control over their health and its determinants through health literacy efforts and multi-sectoral action that 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 is becoming to follow a sedentary lifestyle which is more deadly than smoking; contributing a lot for emergence of noncommunicable diseases (such as cardiovascular diseases, diabetes and several types 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 affect quality of human life. To this end, the health promotion and disease prevention as a subtheme included the following research priority areas that are identified for study intervention strategies to prevent and control communicable and non-communicable diseases:-

- Toxicological effects of pesticides and other chemical exposures
- Health impacts of environmental exposures
- Health effects of counterfeit or sub-standard drugs

- Health effects of solid wastes (e.g., hazardous wastes, waste and pollution, etc.)
- Disease burden related with waste water irrigation in agriculture and nematode infections
- Water supply, sanitation and hygiene (WASH)
- Physical activity and wellbeing
- Vector and rodent infestation
- Housing condition and health
- Zoonotic diseases
- Emerging/Re-emerging diseases
- Work place risk factors and hazards;
- Gender and health
- Health related knowledge transfer
- Prevention of non communicable disease
- Social norm and health behavior

Sub theme 2.2. Advances in Curative and Rehabilitative Health Services and Disease Management

A well-functioning health system is verified by improving the health status of individuals, families and communities. Ethiopia, like most developing countries is affected by double burdens of health problems as a result of health transition, which necessitates improved or advanced health services and health care delivery systems. However, the gaps of health service provision were identified as: poor quality of medical services; poor health seeking behavior of the community from public health facilities; low level of patient satisfaction; shortage and inappropriate use of drugs and medical supplies; poor attitude of health care providers; poor patient provider interaction; lack of appropriate diagnostic services or technologies; absence of prepayment plan to seek the service; gaps in care of patients; poor preparedness in addressing and responding to emerging or reemerging health concerns; limited intervention on mental health problems; poor investigation and response to injuries; and poor health service evaluation. Therefore, the advances in curative and rehabilitative health services and disease management as

a sub-theme has given emphasis on intervention strategies that can improve health care delivery system and disease management through the following research priority areas identified:-

- Biopharmaceutical and pharmacological aspects of herbal or traditional medicines
 Discovery or identification of appropriate diagnostic technology and drug-diagnostic co-development;
- Enhancement of quality and efficient pharmaceutical services
- Medical and nursing care quality
- Health service readiness and accessibility
- Health workers' ethics and development
- Health information management and utilization
- Health care financing
- Service delivering methods and approaches for emerging but neglected human health problems (e.g., mental health diseases, non-communicable diseases, etc.)
- Health benefits of probiotics

Subtheme 2.3. Dietetics and nutritional safety, security, and problems

Optimal nutrition is critical for human development, economic growth and as a stepping-stone for equity. Food and nutrition security continue to represent challenges for developing countries as maker and marker of development. This is true for Ethiopia, where malnutrition remains serious public health problem that costs the nation's annual Gross Domestic Product (GDP) up to 16.5% and 28% of all child. However, research on the impact of mothers' prenatal nutrition on their fetus and young children neurodevelopmental outcomes and postnatal health; nutrition beyond 1000 days: food hygiene and safety, diet therapy and nutrition sensitive interventions are lacking. As a result nutritional problems remain as a threat for future healthy generation as well as food safety and hygiene from environmental chemicals and microbial contamination and adulteration of foods has become an ever-increasing concern. Therefore, the dietetics and nutritional safety, security and problems and as a sub-theme has given emphasis to fill the evidence gaps and has identified the following priority research areas:-

- Prevention and management strategies for malnutrition
- Maternal, fetal & child health nutrition
- Effective nutritional intervention programs for Pre-school macro and micro nutrition and growth/development; school feeding program
- Nutrition interventional approaches for non-communicable diseases;
- Nutrition concerns in gerontology;
- Food and nutrition security Food hygiene, safety and quality issues

Subtheme 2.4. Reproductive, Maternal, Newborn, Child and Adolescent Health

Maternal, Newborn, Child and Adolescent Health is central to the agenda of Healthcare. Women and children's health remains a main concern of the Sustainable Development Goals (SGDs), as evidenced by the strong commitment to end preventable newborn, child and maternal deaths by 2030. Issues of sexual and reproductive healthcare services including family planning, information and education are unfinished. In sub-Saharan Africa countries including Ethiopia, maternal, newborn and under-five mortality are still the major concerns. In addition, concerns of sexual, reproductive and adolescents' health including HIV/AIDS continue to be health issues. Pregnancy during the period of adolescence is associated with an excess risk of poor outcomes, including low birth weight and prematurity. Adolescents are exposed to a range of risks and suffer from a variety of illnesses including HIV/AIDS and many health behaviors adopted during adolescence have lasting impacts on health throughout their lives. However, there is scarcity of information about these problems that calls for continued effort in generating up-to-date information for relevant intervention. Therefore, this sub-theme has given potential research priorities in the following areas:-

- Adolescent and HIV/AIDS
- Adolescent pregnancy and birth outcomes;
- Health care seeking behavior
- Infant and child feeding
- Childhood illnesses and disorders Neonatal health care
- Substance use, Adolescents Health and Technology

- Child abuse Unwanted pregnancy and abortion care;
- Sexual behavior and adolescents health
- Gender based violence
- Maternal health services