

1st International Conference on Health and Environment (ICHE)

“Go Green Get Healthy”

March 21 – 22, 2018

Department of Environmental Design, Health and Nutritional Sciences successfully organized the 1st International Conference on Health and Environment (ICHE). The two days' conference was held on March 21 – 22, 2018 at Allama Iqbal Open University, Islamabad. The Conference Theme “Health and Environment: Go Green Get Healthy” is in recognition of the importance of urban planning and community development – where communities live, work and learn experiencing the healthy environments. The Conference brought together researchers, academicians, professionals from selected disciplines including health, nutrition and environment with cross disciplinary and interdisciplinary interests to bridge the knowledge gap and promote research.

The key objective was to provide an opportunity to share the research based current knowledge in the field of **Built Environment** and **Preventive Health** to evolve strategies for engaging professionals from both interrelated domains and securing policy-makers support for the creation of socially inclusive healthy communities. Dr. Sania Nishter, Director General, WHO graced the event as Chief Guest and much appreciated the cross disciplinary approach rather than working in isolation. Prof. Dr. Shahid Siddiqui, Vice Chancellor, AIOU presided the event and appreciated the conference theme for professional and community uplift. Conference chair, Prof. Dr. Nomana Anjum shared that the supportive role of the built environment for human health is a fast growing area of interdisciplinary research and policy development. She added, there is consensus among researchers that the healthy buildings promote physical and psychological well-being and enhance the creativity and productivity in work environments.

Around 350 registered participants from 35 different institutions and organizations including government officials, environment and health experts, professionals and academicians participated in the conference. Over 70 papers were delivered in an opening, 3 plenary and 19 interactive concurrent sessions under the main themes of Built Environment and Preventive Health. All the conference sessions kept alive the interest of participants who attended the plenary sessions in main hall and concurrent sessions set out in the side rooms.

Each session of the conference generated discussions on the conference themes and sub-themes. The experts from home and abroad enlightened the audience with their impressive dialogues on the selected topics. The keynote and invited foreign and national speakers were from China, United Kingdom and United Arab Emirates along with the local representation from Shifa' International Hospital, Islamabad; UNICEF – Pakistan; Nutrition Cell, Planning Division; CDA, NASPAK, NASCOM, COMSATS, Islamabad; NCA, Lahore; NED-UET, Karachi; RMU, Rawalpindi; BZU, Multan; NUST, Islamabad; University of Agriculture, Faisalabad; UET, University of Agriculture, Peshawar and practicing consultants and professionals in the field of Design, Architecture, Planning, Health and Nutrition.

Over the two days, the experts underlined the need of early diagnosis of disease and reversing the disease dilemma having balance between natural and built environment, maintaining healthy life style, healthy food choice, weight management and outdoor physical activity. In the first plenary session, the experts identified that multi-sectoral reforms and programs focusing on SDGs are needed with collaborative approach. Experts emphasized opting for policies promoting healthy life styles would be the best solution to the improved health of community and the society at large; prevention of cardiovascular diseases and cancer were the focus of discussion. In the second plenary session, speakers linked the quality of indoor environment with disease control. In this context, sick building syndrome phenomenon was shared contributing to various types of building related illness. Unplanned/uncontrolled urbanization was a major concern that leads to numerous environmental issues in mega cities. Air, water and noise pollution is on

rise in dense settlements causing physical and psychological health problems. The session concluded with suggestions to create sustainable cities that provide affordable housing, work opportunities, sustainable food production, energy and water conservation as well as self-reliance for its residents in an ecologically aware and sensitive way.

The third plenary session stressed on the complex relationship between antenatal nutritional status and birth outcomes and emphasized on the need for consistent and thorough assessments of mothers' diet throughout pregnancy. Maternal dietary pattern during pregnancy is a modifiable factor that has an impact on birth outcomes as well as growth rate. On built environment side the use of sustainable building materials was the focus of discussion. Building materials such as steel, cement, glass, aluminum, plastics, bricks, etc. drain the energy resources and adversely affect the environment. In terms of design, it was emphasized that the traditional wisdom with modern techniques should be applied in architecture to minimize the environmental burden and to attain healthy buildings. Integrating heritage and urban design which results in healthy, holistic and integrated environment benefitting the historic buildings in terms of its re-qualification for better upkeep was also deliberated in this session.

The concurrent sessions showcased diversity in research topics with integrated methodological approach under the sub themes of Community Nutrition, Food Safety, Hygiene and Health, Clinical and Therapeutic Nutrition and Nutrition through Life Cycle within the main theme of **Preventive Health** and Environmental Design, Environmental Health, Natural Resource Management and Occupational Health and Safety under the main theme of **Built Environment**. The presenters were not only the students of Community Health and Nutrition and Environmental Design at AIOU but representative of multiple national institutions and organizations. All presentations were research based, enlightening, informative and very well presented. Each presentation was followed by question & answer session. In the end shields and certificates were given to all presenters, the moderator and the reporters by the session chairs.

Another attractive part of the 1st ICHE was poster presentations and project display from students of Community Health and Nutrition and Environmental Design Programs which captured the response of visitors and participants. Students from AIOU, IIU, Islamabad and COMSATS, Islamabad also displayed their projects of different types of urban design installations for open spaces. The presenters got the audience engaged with informal discussions to explain the content of their posters.

The interactive sessions, discussions and presentations at the Conference resulted into consolidated recommendations and policies for the future that were presented by the Conference chair Prof. Dr. Nomana Anjum, in the closing session. The honorable speakers and guests commended the efforts to hold an International Conference on an important topic of Health and Environment. They congratulated the organizers and supporters for taking the initiative and expressed keen interest to participate in the next Conference in 2019. International speakers have shown interest to hold the joint conference next year. Option to sign an MOU for future collaborative student and faculty research with universities in China and UK was also explored. At the end, the presenters of best papers awardees from the concurrent sessions and from poster presentations received the certificates.

In order to make this mega event successful, various committees were formulated in which a Core Organizing Committee (COC) and several sub committees were constituted. These sub committees included the Program Committee, Abstract/Paper Review Committee, Reception Committee, Registration Committee, Finance/Sponsorship Committee, Public Relations and Publicity Committee, Refreshment Committee, Technical Support Committee, Transport and Accommodation Committees, Social Event Management Committee, Estate Management Committee, Security and Logistic Committee and Publication/Printing Committee. All committees played key role in developing a well-knitted program and superb design and display. Sponsors and stakeholders commended the conference organizers for the well thought out Conference Abstract Book.

The Conference was primarily focused on SDGs 2, 3 and 11 in local context i.e. to end hunger, achieve food security and improved nutrition and promote sustainable agriculture, to ensure healthy lives and promote well-being for all at all ages and to make cities and human settlements inclusive, safe, resilient and sustainable. The following recommendations were shared from the Conference chair in the Closing Session.

- i. Environmental Improvements for health should make important contributions towards achieving the SDGs vision 2030 of United Nations Organization.
- ii. Educational institutions must feel their responsibility to improve the community by deliberating on environmental health issues.
- iii. Cross disciplinary approach should be opted rather than working individually to achieve the balance in terms of economic, environmental and social dimensions of sustainable development.
- iv. Develop sector wide partnerships among the government, development sector partners, NGOs, private sector, academia and research organizations.
- v. Built environment professionals need to be sensitized on growing urban health challenges to shape the environments that are conducive to human health.
- vi. Advocacy for paradigm shift from unhealthy and energy hungry buildings to healthy and energy efficient buildings.
- vii. Healthcare providers and facilities need to be strengthened with adequate access to lifestyle experts, including dietitian, nutritionists, exercise specialists and stress management personnel to address lifestyle-associated CVDs and cancer risk in patients.
- viii. To combat different diseases, public awareness, effective screening programs, team work, life style modification is of utmost importance.
- ix. Incorporation of simple energy efficient measures in new buildings can reduce a significant amount of energy consumption in Pakistan. Building bye-laws needs to be reformed in accordance with quick guidelines for energy efficiency in buildings and there is a need to recast the design courses in learning schools of architecture in Pakistan.
- x. Creative/child friendly cities should be based on appropriate urban planning and management, centered on inclusiveness, competitive use of government resources and restraining from land manipulation.
- xi. Healthy life style, better food choice, food fortification, diet diversification, recreation and outdoor physical activity combined with eco-friendly and user friendly built and natural environments are the drivers recommended to address the health and environment challenges in the 21st century locally and globally.