As Director of the Department of Knowledge, Ethics and Research (KER) at the World Health Organization (WHO), could you briefly describe the Department’s remit?

KER, as part of the Health Systems and Innovation [HIS] Cluster, supports countries to improve the performance of their health systems through: managing, disseminating and ensuring the reliability of WHO’s information; translating evidence into policy, practice and products; creating ethical and evidence-based policies for research; promoting the implementation of the WHO strategy on research for health; examining and acting upon ethical issues raised by health-related activities; and developing, strengthening and promoting the use of information and communication technologies (ICT) in health and development. The Department is composed of the following units: WHO Press (WHP), eHealth (EHL), Global Health Ethics (GHE), Research and Knowledge Translation (RKT), and Library and Knowledge Networks for Health (LNK).

How has KER evolved since your appointment in 2013?

In November 2013, the name of the Department was changed from Knowledge Management and Sharing to its current name following the expansion of its mandate and the addition of new functions. This included the introduction of the RKT unit to fulfil some of WHO’s core functions, with specific reference to shaping the research agenda, stimulating the generation, translation and dissemination of valuable knowledge, and articulating ethical and evidence-based policy options. The RKT unit coordinates monitoring of the Global Strategy of Health Research; Global Observatory for Health Research and Development; Evidence for Policy Network (EVIPNet); Guideline Review Committee; Network of the WHO Collaborating Centres, Expert Panels and Committees; and WHO’s work on health research and public health ethics, which is coordinated by the GHE Unit. GHE houses the Secretariat of the Ethics Review Committee (ERC), and the Secretariat of the Global Summit of National Bioethics Advisory Bodies (NEC). It aims to advance WHO’s role in the field of public health and research ethics, and strengthen national and international capacity in addressing and ensuring the ethics of healthcare delivery, public health and biomedical science.

Can you give an introduction to eHealth and the GHE unit’s mandate?

eHealth is defined as the cost-effective and secure use of ICTs in support of health and health-related fields, including healthcare services, health surveillance, health literature, and health education, knowledge and research. KER’s eHealth unit is responsible for supporting all aspects of the Department’s mandate that rely on the use of electronic ICTs, and particularly their use in improving the delivery and quality of national health services. The unit provides leadership on eHealth governance issues at the global level and offers technical assistance to countries and implementing organisations on policy frameworks and guidance to ensure an open standards based approach and interoperable systems. An overarching theme is building the evidence base for this emerging field and the development of monitoring and evaluation models and methods to measure the impact of eHealth interventions and ensure their sustainable integration in health systems. The unit manages specific health services delivery projects including eLearning and capacity building.

Why does WHO place such importance on knowledge management and sharing? How does this contribute to more equitable health outcomes?

The constitution of WHO stipulates that ‘the extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health’, and ‘informed opinion and active cooperation on the parts of the public are of the utmost importance in the improvement of the health of the people’. WHO is a knowledge-based organisation as its core business is to collect, create, share and utilise health knowledge in
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epidemic preparedness and response, on research related issues and on trial design during epidemics (including for the Ebola epidemic).

Additionally, we have developed norms and standards for research ethics systems (applicable at the national level), guidance for researchers, research ethics committees and public health officials on ethical issues related to patient safety in research, the use of placebo in preventive trials [such as vaccine, trials, etc.]. We are currently developing guidelines for the ethical issues related to the implementation of public health programmes such as surveillance.

One major activity that the Department conducts is the Ethic Review Committee, which has the mandate to assess and clear all research proposals funded or conducted by WHO in member states for ethical aspects. Collaboration with UNESCO in bioethics has resulted in convening The Global Summit of National Ethics Committees, among other activities.

What ethical considerations have to be made when it comes to personalised health?

Ethical considerations that must be considered when dealing with personalised medicine include issues, such as affordability, which may result in a majority of people being unable to access medicines because of cost. The development of personalised medication from personalised health requires extensive data collection and research. This may result in one section of society being used as subjects for research and a source of data while being excluded from the benefit of the research. Health systems in many countries will not be at a level that would allow them to govern personalised health due to lack of financial and human resources, lack of infrastructure and inadequate understanding of public health concerns that affect personal health. The combined power of public and personal health through strong and resilient health systems may bring the maximum benefit to people. The use of innovative information technology plays a major role.

Are there any key developments in personalised health that excite you?

An exciting area is gene sequencing and mapping, which has enabled the identification of the genes that carry certain risks of a disease. This has given rise to genomics and personalised medicine to assist in the research and treatment of diseases such as cancer, allowing a patient to be treated with a specifically designed treatment rather than treating a group of the population with the same drug. The use of wearable devices that collect vital data from the person, store them for analysis in computers and then apply modelling techniques has enabled better understanding, diagnosis and treatment for individuals.