

Medical benefits

Health, Innovation and the Economy

Tuesday afternoon, 3 June 2008

Moderator: **Iain Gillespie**, Head, Biotechnology, OECD

Cristina Garmendia, Minister of Science and Innovation, Spain

John P. Hearn, Deputy Vice-Chancellor (International), University of Sydney, Australia

John Rother, Group Executive Officer, Policy and Strategy, AARP, United States

Michel Vounatsos, President, MSD-France

Elaine M. Wolfson, Founding President, Global Alliance for Women's Health

Globalisation was helping to spur innovation, panellists said in this debate, but it brought divisions as well, in areas like biotechnology, stem cell research, and intellectual property rights protection. How to strike a balance in IPR protection to protect medical breakthroughs while spreading knowledge and products remains a concern.

Moderator **Iain Gillespie** kicked off the session by giving a brief definition of innovation and then applied it specifically to healthcare. He focused on one of the main purposes of the OECD, i.e. maintaining the sustainability of innovation in the healthcare sector. This has become an issue of increasing importance due to the rising costs of healthcare innovation which, in turn, dramatically impacts the delivery of healthcare services.

Cristina Garmendia, Spanish Minister of Science and Innovation, presented her country's health innovation policies. This involves a sharp increase of research expenditures to accelerate research and development, particularly by fostering public-private partnerships, investing in infrastructure and human capital and developing international co-operation. The main objective of this is to place Spain at the top of the bio-science industry.

Unpredictability is a major characteristic of bio-medical research, according to **John P. Hearn**, especially the pace of innovation. This is most evident in the relatively young field of stem cell research. As he stressed the fundamental changes in healthcare potentially offered by stem cell research, he also pointed out the ethical issues pertaining to the usage of embryonic, adult or the newly developed induced stem cells. Taking into account that this new technology is expensive, he drew up the issue of equity in healthcare. This naturally leads to the issue of regulations that might guarantee minority opinion as well as preventing the misuse of this controversial technology.

John Rother, Group Executive Officer of AARP, said that people should retain their independence as they get older, as this would be beneficial not only for individuals, but for society as a whole. He highlighted that health care system should cover everyone. Moreover, Rother also stressed that the importance of health care reform, including better ways to coordinate chronic care. The US is looking towards comprehensive healthcare systems implemented in Western Europe. Such initiatives involve the "medical home",

which caters for chronic patients, and innovative technologies such as electronic health records. This is all in order to achieve 100% coverage while increasing efficiency.

Michel Vounatsos began by emphasizing the strong correlation between good health and economic prosperity. Productivity, employment, investment attractiveness and income are all functions of a population's health. But ironically, wealth entails health problems of its own. Due to a predominantly sedentary work and a sharp fall in the cost of nutrition, obesity and related diseases have become rampant in many countries. Since this represents an extremely high cost for both patients and their families, he proposed both behavioural changes and more medical innovation to address this issue.

Women's health has been chronically underserved, **Elaine Wolfson** pointed out. This is largely coherent with the disregard towards unpaid women's labour. Women seem to be especially susceptible to diabetes, with seventy-three million female patients worldwide compared to the males' sixty-two million. Diabetes is not strictly a rich-person disease; malnourishment also has a big impact on diabetes. Thirty percent of pregnant Indian women contracted type-II diabetes. This is especially problematic since it can be transmitted to a foetus during pregnancy. The phenomenon necessitates a careful assessment of current research in diabetes.

Mr Gillespie asked the panel how they would balance new concerns and benefits of medical research. J.P. Hearn responded by citing statistics indicating that less than one percent of initial research items become final products. But he also added that there were new fields to venture into such as stem cells, eastern medicine and nano-biology. Michel Vounatsos underlined the R&D productivity challenge and agreed with J. P. Hearn on the issue of hardships in releasing new products in the market.

In response to Cristina Garmendia's inquiry concerning R&D strategies, MSD representative Mr Vounatsos mentioned the shift of focus from an all-internal process to multilateral alliances and public-private collaborations in creating new products.

A student from the US brought up the issue of the equitable diffusion of high-tech healthcare innovations including stem-cell research to poorer countries. This was answered by Mr Hearn who emphasised the stem-cell "product" as opposed to "therapy", the former being more accessible than the latter. But he also reminded us of the importance of low-tech solutions to healthcare problems. Both low-technology solutions and big pharmaceuticals were both important in improving healthcare standards.

The Gates Foundation and Warren Buffet's contribution were cited as examples of new funding methods for healthcare innovation following an inquiry from a representative of the Global Forum for Health Research. Mr Rother added to this by commenting on the importance of focusing on public health service rather than trying to implement expensive Western systems.

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