The medicine is undergoing a paradigm shift to strive from the diagnosis and treatment for prediction and prevention. And, for sure, any innovations in healthcare services are an important driver to move the new trend forward. A ISPM, Tokyo, Japan new systems approach to disease to pay its crucial attention on the trend would result in a new branch in the healthcare services, namely, predictive, preventive and personalized medicine (PPPM). The latter is defined as: “...the capacity to predict the development of disorder-related signs and influence decisions about lifestyle choices or to tailor medical practice to an individual”. All chronic disorders develop gradually over a period of time to take years for a process to reach a level where it could be diagnosed definitively and treatment initiated properly and in time before changes are irreversible! And, for example, Parkinson's costs society $27 billion per year in medical bills and lost wages; worldwide, projected cases of Parkinson's will more than double by 2030! To achieve the practical implementation of PPPM concept, it is necessary to create a fundamentally new strategy based upon the subclinical recognition of biopredictors of hidden abnormalities long before the disease clinically manifests itself. This strategy would give a real opportunity to secure preventive measures whose personalization could have a significant influence on demographics! Two key objectives of PPPM are: (i) detection of subclinical abnormalities based on the biomarkers validated with a selection of suitable targets for the next step of PPPM protocol, i.e. drug-based prevention; (ii) drug-based correction of the abnormalities detected under the heading of preventive measures. PPPM is thus a medical model being tailored to the individual and dictates a construction of PPPM algorithms to diagnose, to predict, and to prevent in time! Pharmacogenomics can help to inform a tailored dosage regimen allowing for an improved drug response, while managing the risk adverse reactions. Implementation of PPPM requires a lot before the current model “physician patient” could be gradually displaced by a new model “medical advisor healthy men at risk”. This is the reason for developing global scientific, clinical, social, and educational projects in the area of PPPM to elicit the content of the new branch. What is a realistic timeline for the incorporation of PPPM into the practice? The idea raises many critical questions that must be answered before data from basic research can be routinely incorporated into the daily healthcare delivery. So, coordinated measures to optimize the progress should be well-focused on solving the accumulating problems in healthcare and the concomitant economic burden that societies across the globe are facing more and more.

Biography

Sergey Suchkov is a Researcher-Immunologist and a Clinician graduated from Astrakhan State Medical University, Russia in 1980. He has been trained at the Institute for Medical Enzymology, The USSR Academy of Medical Sciences, National Center for Immunology, Russia, NIH, Bethesda, USA and British Society for Immunology to cover 4 British University facilities. Since 2005, he has been working as a Faculty Professor of I.M. Sechenov First Moscow State Medical University and of A.I. Evdokimov Moscow State Medical & Dental University. He is the First Vice President and Dean of the School of PPPM Politics and Management of the University of World Politics and Law. He was a Scientific Secretary-in-Chief of the Editorial Board of the International Journal “Biomedical Science” (Russian Academy of Sciences and Royal Society of Chemistry, UK) and The International Publishing Bureau at the Presidium of the Russian Academy of Sciences. He was the Director of the Russian-American Program in Immunology of the Eye Diseases. He is a Member of EPMA, NY Academy of Sciences and an Editorial Board Member for Open Journal of Immunology and others.

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