use of health care resources. Use of PPPM is categorized into predictive and preventive medicine and personalized treatment optimization. The latter refers to pharmacogenomics which aims to match the best available drug or dose to an individual’s genomic profile. Pharmacogenomics can help to inform a tailored dosage regimen allowing for an improved drug response, while managing the risk adverse reactions.

Genomic and proteomic information can be used to tailor prevention and treatment to that individual as well as to make informed choices relating to lifestyle, reproductive matters, screening and preventive treatments. The strategy of the latter of, for instance, chronic autoimmune diseases should contain two critical steps: (i) arrest of autoagression; and, (ii) restoration of structure and functions of the tissue affected. The strategy mentioned can be accomplished by: (i) gene therapy, or (ii) stem cells technologies.

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.

PPPM consists of a wide variety of tests and tools. The decision to utilize them or not is made at the micro level - depending on the type of intervention it could be ordered by administration of hospitals and infirmaries, laboratories or clinics, by doctors, and sometimes directly by individuals/patients! Each decision-maker values the impact of their decision to use PPPM on their own budget and well-being, which may not necessarily be optimal for society as a whole.

For instance, individuals decide to order genomic or proteomic tests, or to ask their physicians to order testing for them. Individuals’ decisions to order tests or not depends on individuals’ awareness of their options, their attitudes to risks and information, and their perceived gains from information!

So, a lack of medical guidelines has been identified by the majority of responders as the predominant barrier for adoption, indicating a need for the development of best practices and guidelines to support the implementation of PPPM! Sharing best practices as well as pharmacoeconomic information across provincial healthcare systems is also likely necessary to support efficient and cost-effective national implementation of PPPM!

In addition to the promise of improved patient care and disease prevention, there is potential for PPPM to impact on the cost of health care. Health care costs may be lowered by individual genetic test results and/or by analysis of an individual’s full genome sequence (whole genome sequencing) allowing for screening and the tailoring of drugs and treatments to improve outcomes. These functions all play a role in ensuring more targeted and cost-effective health-care into the future. Let me just comment that equally important is a PPPM-related test’s clinical utility, both in terms of its health and economic implications, when compared to standard healthcare.

What is a realistic timeline for the incorporation of PPPM into the practice? Patients and their relatives want interventions that work right now! But this 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.

The reason is predicting the future is not a new calling neither even a new challenge to ask merely for the God’s help! So, no needs for soaring in the heaven! Well, indeed, PPPM offers great and real promise for the future, and next generations will speak about the XXI century as a time, when healthcare services became predictive and preventive, and its outcomes - secured and guaranteed!

Biography

Sergey S Suchkov was born in 11.01.1957, a researcher-immunologist, 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 Faculty Professor of I.M. Sechenov First Moscow State Medical University and of A.I. Evdokimov Moscow State Medical & Dental University. From 2007, he is the First Vice-President and Dean of the School of PPPM Politics and Management of the University of World Politics and Law.

In 1991-1995, 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. In 1995-2005, he was a Director of the Russian-American Program in Immunology of the Eye Diseases. He is a member of EPMA (European Association of Predictive, Preventive and Personalized Medicine, Brussels-Bonn), a member of the NY Academy of Sciences, a member of the Editorial Boards for Open Journal of Immunology and others. He is known as an author of the Concept of post-infectious clinical and immunological syndrome, co-author of a concept of abzymes and their impact into the pathogenesis of autimmune conditions, and as one of the pioneers in promoting the Concept of PPPM into a practical branch of health services.