

Early life plan: A new strategic model for clinical research resource of cohort studies

Weiye Charles Wang
Xinhua Hospital, China

Biobanking is still a young discipline in China. The development of biobanks has experienced several stages with gradual realization of the important factors hallmarked with quality, associated data and utilization of banked samples. Modern medicine relies on two facets, patients presenting clinical manifestations of disease, while biological samples presenting activity of disease occurrence, development and specialization. ELP (Early Life Plan) is such a longitudinal initiative by Xinhua Hospital, to explore the early life programming and developmental disease susceptibility for diagnosis, genetic counseling and clinical decision-making and to improve the quality of birth population. It is the first 1000 days of early life, from fertilization to 2 years of age and this is a critical phase in which any adverse factor exposure may affect fetal and infant developmental plasticity, ultimately to increase risk of disease in childhood or adult. One of the major components in ELP is to establish a population of clinical data with biological repository designated to ELP initiative. ELP resource is characterized by tracing back to the originating samples, analyzing disease-related factors such as environmental effects and potential epigenetic changes when clinical phenomena arises during childhood growth. ELP encourages researchers and clinicians with different expertise from different disciplines but sharing a research focus, to explore the same groups of population. Therefore, the interdisciplinary research results can create a holistic view for researchers to give more comprehensive analysis. ELP resource strategy is characterized by moving to a new stage of biobanking from resource to research, instead to build resources required by specific project; minimal impact on routine clinical practice; and developing a strategy to complement data collection above existing data from clinical data registry. In general, it is essential to harmonize operational mode, workflow and management strategy for data and sample collection and management in alignment with the alliance member hospitals. This would increase interoperability and reduce heterogeneity of collection across the hospitals.

wcwangw13@163.com