Iran Diabetes Research Roadmap (IDRR) Study: An Overview

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Currently, noncommunicable diseases (NCDs) with 38 million deaths annually are leading cause of death worldwide (approximately 70%) which about three quarters of these deaths occur in low and middle-income countries (1).

Four diseases including cardiovascular diseases, cancers, respiratory diseases, and diabetes are causes of 82% of all NCD deaths (1).

Prevalence of diabetes mellitus is increasing in our country as well as in our region and the world. The number of people with diabetes was 415 million in 2015 and it was estimated to rise to 642 million by 2040 (2). Among the countries in our region, Iran with more than 4.6 million adults with diabetes (prevalence of 8.5%) has the third place in terms of the highest number of people with diabetes (2).

Considering the increasing rate of diabetes and its complications and high cost that impose to the health system, it is required to have a clear strategy for research in diabetes to improve quality of life, reduce complications and decrease burden of disease as well as to prevent parallel works and waste of time and human and financial resources. For this purpose, EURODIA (Alliance for European Diabetes Research) developed and published a roadmap for diabetes research in the Europe (DIAMAP) in 2010 (3). As there was no comprehensive roadmap for diabetes research in our country, we planned to provide such map for our country.

To develop Iran diabetes research roadmap, Europe DIAMAP was reviewed and evaluated in details precisely (3) and in the first phase all previous Iranian diabetes studies were evaluated and analyzed as well (4).

Iranian studies related to diabetes were categorized based on WHO (to identify the conformity of research with health needs) and Australian National Health and Medical Research Council (NHMRC) classification that shows research area (basic or clinical), evidence pyramid (to identify the level of evidence) and subject area. The study protocol and details of search strategy has been described elsewhere (5).

These findings provide needs of policy makers and will be used for developing national diabetes guidelines and also will help to conduct new research along with other parts of the world.

Based on this study results, research gaps were identified in eleven fields related to diabetes including prevention, management (6), education (7), nutrition (8), physical activity (9), complications (10), comorbidity (11), psychology (12), genetics (13), basic sciences (14), and gestational diabetes mellitus (GDM) (15) separately and were used to develop Iran diabetes research roadmap.

It seems that in different research fields a clear research roadmap is required to move forward in the frontiers of knowledge and conduct population research to improve NCDs care.

The preset collection of diabetes article (6-15) is the opening for roadmap studies in NCDs that

will be revised and updated in the next years (each five years) considering new field of research and by fixing problems and adding expert opinion in each field in order to direct research in right way to reduce disease burden and improve care.

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