Abstract: P282

Cardiac rehabilitation provision in Portugal: comparative results from the global survey of programs

Authors:
P Morais¹, M Supervia², K Turk-Adawi³, J Ruivo¹, F Lopez-Jimenez⁴, A Abreu¹, S Grace⁵, ¹University Hospital De Santa Maria - Lisbon - Portugal, ²University Hospital Gregorio Maranon - Madrid - Spain, ³Qatar University - Doha - Qatar, ⁴Mayo Clinic - Rochester - United States of America, ⁵Norfolk and Norwich University Hospital - Norwich - United Kingdom of Great Britain & Northern Ireland,

Topic(s):
Cardiovascular Rehabilitation

Citation:
Aims: To update our understanding of cardiac rehabilitation (CR) provision in Portugal from our 2013-2014 survey, and how it compares to Europe and Southern European subregion.

Methods and Results: A first-ever survey of CR programs worldwide was conducted online from February 2016 to July 2017. National cardiac associations and local champions facilitated CR programme identification. The main provision measures considered were CR availability, programme volume (number of patients served annually), national capacity (median number of patients a program could serve annually by number of programs in a country), density (national capacity per annual national incidence of ischemic heart disease (IHD)), and financial structuring. To compute density, the 2017 reports from the "European Cardiovascular Disease Statistics" and from "Programa Nacional para as Doencas Ce`rebro-Cardiovasculares" were used for IHD incidence estimation in Portugal.

Overall, 21 (91%) of 23 Portuguese programs participated in the survey. It was determined that CR was available in 39 (89%) of European countries; data were collected in 37 (95%). Results from Portuguese surveys were compared to the 455 (30%) of 1538 responding programs from those countries. In the Southern European subregion, which included 10 (90.9%) responding countries out of 11 with CR programs, there were 152 (44%) participating centres out of 346.

Programme volumes averaged 109.1 patients per year in Portugal, compared to 307.9 in the Southern Europe nations, and 531.3 across Europe. Density-wise, there was 1 CR spot for every 4.35 IHD patients in Europe, per 6.46 IHD patients in Southern Europe and per 11.30 IHD patients in Portugal, with an estimated unmet need of 23,699 CR spots in Portugal per year.

Most programs were state-funded: 75% across Europe, 76% in Southern Europe, and only 52% in Portugal. The average program cost per patient was 1846.56€ across Europe, 2163.73€ in Southern Europe and 491.33€ in Portugal.

Assuming a stable proportion of diagnoses/indications for CR in the Portuguese centres since the 2013-2014 national survey (51.8% of CR spots were occupied by post-myocardial infarction patients), we estimate that, in 2016-17, 10.3% of myocardial infarction patients could participate in CR programs, which signifies a 2.3% growth in the 4-year period. However, even if the maximum national CR capacity was used exclusively for myocardial infarction patients, only 20% of those patients would be rehabilitated.

Conclusion: Portuguese CR provision is steadily growing but still limited, behind European mean standards, even when compared with the socioeconomically similar Southern European countries.