

## **IMPORTANCE OF ADHERENCE TO TREATMENT IN CARDIO-VASCULAR PATHOLOGIES AND INTERVENTIONS FOR ITS IMPROVEMENT**

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Non-Communicable Diseases (NCD) are major international health priority. Worldwide, NCDs are responsible for 38 million deaths, with cardiovascular disease, cancers, respiratory diseases and diabetes accounting for 82% of all NCD deaths. The situation in Italy mirrors the global trend. CVD cause 224,482 deaths i.e. 38.8% total deaths, followed by cancers (168,000 cancers 30% of deaths) and increasing prevalence of diabetes mellitus. NCDs require chronic treatments, the adherence to the treatment being a crucial factor for the effectiveness of the therapies. In 2005 33 to 69% of medication-related hospital admission in the US were due to poor adherence to the therapy; since then the situation has not improved as in 2016 it was estimated that 50% of the patients do not take their medications as prescribed. Hypertension, Diabetes Mellitus and Hypercholesterolemia are three major NCDs in which the adherence to the treatment is crucial. Factors influencing the adherence to the treatment include co-morbidity, lack of awareness of the patients, complex posology schemes. The authors review the interventions studied to tackle the issue: use of fixed combinations; information and support programmes; technologies to improve the adherence to the treatments. All these interventions resulted in the improvement of compliance; the use of dose-reminder devices resulted in improved adherence and motivation of patients. The authors describe the functions of last generation devices developed to improve compliance and provide additional services to patients. The co-ordinated use of simpler posology, education and specific devices is the most effective way to improve long-term adherence.

Ref.

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