

PD33

Daily symptoms, nocturnal symptoms, activity limitations and reliever therapies during the three steps of IOEASMA programme: a comparison

Guarnaccia, Sebastiano; Vitale, Luigi; Pluda, Ada; D'Agata, Emanuele; Colombo, Denise; Felici, Stefano; Gretter, Valeria; Facchetti, Susanna; Pecorelli, Gaia; Quecchia, Cristina

Centro "Io e l'Asma", Spedali Civili, Brescia, Italy

Introduction: Asthma is a major cause of chronic morbidity and mortality throughout the world in terms of access to emergency services, number of hospitalization days, school absence.

IOEASMA program used an integrative care model, implemented international asthma guidelines, to address pediatric asthma with a multidisciplinary approach.

Methods: Since 2007 the center "Io e l'Asma" implemented the programme as follows:

- 2007-2009, Path Diagnostic Therapeutic (PDT): 3 visits every 4/6 weeks, with follow-up after 6 months. During the protocol, skin prick tests and spirometry were administered. The family physician and/or the patient's parents communicated to specialists any symptoms and treatments used.
- 2010-2011: Path Diagnostic Therapeutic Educational (PDTE): 3 visits every 8 weeks, followed by semiannual or annual visit. After the first visit, children and parents undertook an individual therapeutic education course, conducted by the health personnel, about: environmental prevention, asthma attacks management, daily therapy use, proper use of devices, self-management disease control.
- 2012-2013, Path Diagnostic Therapeutic Educational (PDTE) reissued as ECCM, extended to lifestyles above 6 years of age. The ECCM, after the first visit, addressed the following health adversity: social interaction, diet, physical activity, smoking.

Results: A percentage decrease ($\Delta\%$), in "activity limitations": -37,5% (PDT); -39,4% (PDTE); - 40,4% (PTDE+ECCM). "Nocturnal symptoms": -32,1% (PDT); -33,8% (PDTE); -34,3% (PTDE+ECCM); reaching the highest value in the (PDTE + ECCM). A significant percentage decrease of "daily symptoms" in each group (Δ - 37,5%); -31,7 (PDTE); -23,7% (PTDE+ECCM). The "relievers therapies" decreased in each group with a more significant percentage change in the first period (Δ -17,3%) compared to PDTE (Δ -9%) and to PDTE+ECCM (Δ - 14%); initial number of patients were really different in the three groups at the beginning, so the gap is explained.

Conclusions: An integrated and structured diagnostic and therapeutic pathway can significantly reduce the impact of asthma and its comorbidities and improve children quality of life.