

# **CONFERENCE ABSTRACT**

# The problem of non-initiation of treatments in the paediatric population

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Cristina Carbonell Duacastella<sup>1</sup>

1: Fundació Sant Joan De Déu, Sant Boi de Llobregat, CataloniaSpain

### Introduction

Non-initiation is defined as the refusal to start a medication prescribed for the first time to the patient. In the adult population, the non-initiation prevalence ranges between 6% and 28%, and it is associated with higher costs for the public system and worsen health outcomes. To the best of our knowledge, there is no evidence on the prevalence of non-initiation in the paediatric population. The study seeked to estimate the prevalence of paediatric non-initiation of the most prescribed pharmacotherapeutic groups and to determine its explanatory factors.

## Methods

This was a cross-sectional study based on real word data in Catalonia. Data on the paediatric patients was obtained from the PADRIS dataset (2011-2018); which uses data from the electronic medical record of public providers that cover the entire population in Catalonia. Data was collected from all paediatric patients who were prescribed a new medicine (a previous drug-free period of at least 3 months was established).

Non-initiation was estimated crossing data from prescription and dispensing databases. Prescriptions that were not filled after 1 month of the prescription date were considered not initiated. Sensitivity analyses allowed for 2 and 3 months. To determinate explanatory factors, a multivariate multilevel logistic regression was performed. Factors related to the patient (sociodemographic and clinical), the medication, the prescriber and the primary care centres were explored.

# Results

The prevalence of paediatric non-initiation in Catalonia was 20.1%. Non-initiation of treatments for pain-related disorders was around 28% and around 20% for antihistaminic treatments and corticosteroids. On treatments for severe mental disorders, such as depression and schizophrenia, non-initiation was about 14%. In diabetes, non-initiation ranged from 18% (insulins) to 23% (oral antidiabetics). Non-initiation of treatments for infectious diseases depended on the pharmaceutical form, being higher in topical ( $\approx$ 15%) than oral ( $\approx$ 7%) forms.

Some medication, patient and physician-related factors explained non-initiation, such as the prescription of a generic brand medication, the patient's socioeconomical status and the specialty of the prescriber.

## Conclusion / Discussion

Paediatric non-initiation is highly prevalent and could be affecting the effectiveness of treatments and clinical outcomes. In this study, a series of explanatory factors were identified that should be taken into account by paediatricians and decision-makers to design interventions to improve paediatric initiation.

### Limitations

Patients who withdrawn the medication might have not started the treatment. On the other hand, some patients who did not withdraw the medication prescribed may have taken the treatment if they had oversupplies from previous prescriptions at home.

Current databases in Catalonia do not link children to their relatives. The impact on non-initiation of factors related to fathers, mothers and/or caregivers could not be assessed.

# Suggestions For Future Research

In the future, the impact on clinical outcomes and costs of non-initiation should be assessed in the paediatric population. In order to fully understand the decision-making process, qualitative studies should be conducted to explore the motivations of carers and patients and factors that determine the decision not to initiate the pharmacological treatments prescribed to minors. The information gathered in these studies would enhance the development support strategies.