

# PHARMACISTS RECOMMENDED MEDICINES FOR PAEDIATRIC PATIENTS

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## INTRODUCTION

There are limitations in the availability of medications for use in paediatric patients. It is essential that paediatric medicines are formulated to best suit a child's age, size and treatment requirements. Different routes of administration, dosage forms and strengths may be required. Many existing formulations are not suitable for children, which often leads to the unlicensed use of adult medicines.<sup>1</sup>

## AIMS

- To identify products available for paediatrics which are pharmacist recommended on the local market
- To assess scientific evidence on safety and efficacy of pharmacist's recommended medications which can be used in paediatric patients

## METHOD

### Data Collection

- Scenario analysis of pharmacist-recommended products available on the market for paediatric patients was undertaken

### Data Analysis

- Scientific evidence of the **safety** of paediatric products is undertaken through assessment of the side-effect profile, contra-indications and cautions
- Scientific evidence of the **efficacy** of paediatric products is undertaken, through evaluation of the pharmacokinetic and pharmacodynamic relationship

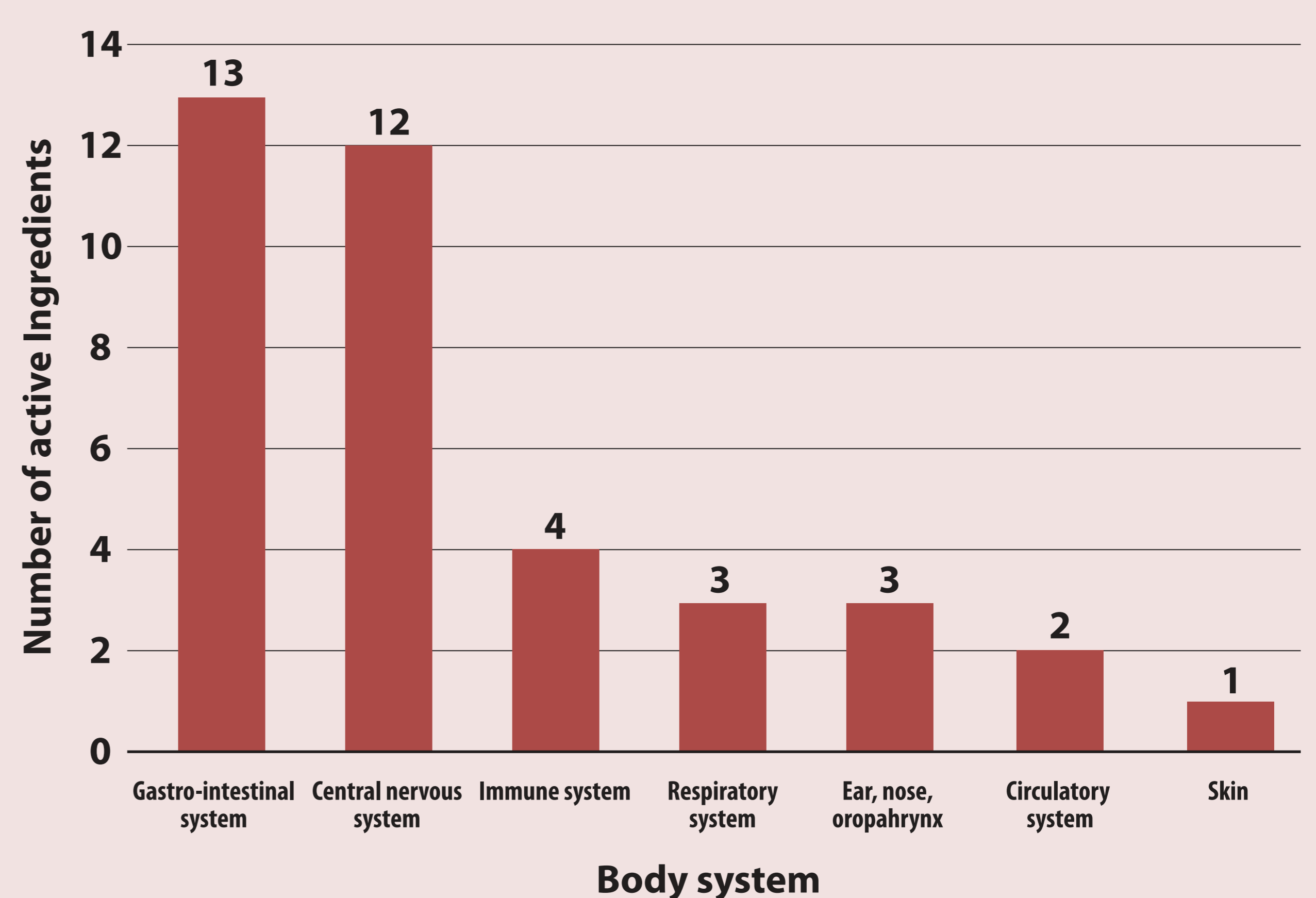
### Documentation

- Data is compiled on a documentation sheet using Excel and a statistical model to capture safety and efficacy of these products is developed using SPSS

## RESULTS

- 34 products which can be used for paediatrics in Malta have been identified and evaluated. The most common pharmaceutical forms are liquid formulations (n=14) and semi-solid topicals (n=11).
- Ten out of these 34 products have no pharmacokinetic or pharmacodynamic data available on the Summary of product characteristics (SPCs). The plasma half-life is the most common efficacy data available on SPCs (n=10) and varies between 1 hour up to 30 hours.
- The most common side effects occurring from the 34 products are those affecting the gastro intestinal system (n=13) where nausea is the most common side-effect observed (n=4) (figure 1).

Fig 1: Comparison of the most common side-effects observed (N=34)



## CONCLUSION

Availability of medications that may be recommended by pharmacists when responding to minor ailments in paediatric patients were identified. Recommendations on efficacy and safety aspects of the products will be evaluated and compared to medicinal products intended for the same use which are currently classified as prescription medicines.

## REFERENCE

- 1) Ivanovska V, Rademaker CMA, van Dijk L, Mantel-Teeuwisse AK. Paediatric Drug Formulations: A Review of Challenges and Progress. Paediatrics 2014; 134(2):361-372.