GRELL

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INTERNATIONAL VARIATION IN CHILD HEALTH SURVEILLANCE AND ACUTE CARE PRACTICES: A MIXED METHODS ANALYSIS

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Introduction

Variation in childhood cancer (CC) survival rates observed across countries might be partly explained by differences in pathways to medical attention and timely diagnosis for symptomatic children.

This study aims to assess current evidence in child health surveillance and acute care practices and to perform a descriptive comparative analysis of child health practices in countries participating in the International Benchmarking of Childhood Cancer Survival by Stage also called **BENCHISTA Project**.

Methods

A mixed methods approach comprising the development of:

1. A **literature review** with systematic approach of articles published in the last 10 years from five academic and referential databases and conducted according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).

   Terms including *paediatrics/child, diagnosis, cancer, population surveillance*, among others were used to create the search strategy.
   Two independent reviewers screened abstracts for full text selection and data extraction; a third reviewer (paediatric oncology expert) resolved conflicts.

2. A **Semi-structured questionnaire** to collect standardised data on child health practices within each country participating in the BENCHISTA Project.

   Focused in routine surveillance check-ups (frequency and type of practitioner) and routes to medical attention for acute symptoms.

   Addressed to one general practitioner and one general paediatrician to provide relevant information about country's national health policies and practices.

Results

2,788 studies imported for screening — 213 duplicates removed
↓
2,575 studies screened — 2,477 not relevant
↓
98 full-text screened for eligibility — 68 excluded
↓
30 studies included

Three **main topics** were identified:

1. Pathways to diagnosis
2. Alarm signs/symptoms of childhood cancer
3. Factors affecting the timely diagnosis of childhood illnesses.

- The questionnaire was piloted, and vocabulary refined.
- Out of the 25 countries included, **GRELL countries** (n=6) showed higher intensity regarding the number of universally offered check-ups with physical examination for children <5yrs (median: 11.5, range: 9-15) in comparison to non-GRELL countries (median: 8, range 2-24).
- Validation against national published guidance required.

Country	No. universally offered national checks <5y	Intensity♱ of Child surveillance	Initial Medical Assessment
Switzerland	9	Medium	Paediatrician
Spain	10	High	Paediatrician
Romania	11	High	General Practitioner
Brazil§	12	High	General Practitioner
Portugal§	14	High	General Practitioner
Italy	15	High	Paediatrician

♱ Low <4, medium 5-9, high >=10
§ Alarm signs/symptoms reported as routinely provided.

Conclusions

Overall variation in child health surveillance and acute care practices was found across countries. However, the GRELL countries showed consistency in terms of surveillance intensity and available programmes/training focused on child healthcare.

The results will help to categorise countries for interpretation of variation in stage at diagnosis in the BENCHISTA Project.

Next steps

Closing steps for manuscript preparation.
Publication in plans.
Dissemination of results in further scientific conferences.

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