

Burden of childhood arthritis: Work productivity loss and activity impairment of parents and caregivers



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INTRODUCTION

Juvenile idiopathic arthritis (JIA):

- Is the most common rheumatic disease for children^{1,2};
- Is associated with lifelong joint pain and disability risks^{1,2};
- Has substantial impacts on parent's quality of life, employment and daily activities³.

OBJECTIVE

To measure changes to work commitment, absenteeism, presenteeism, and daily activities of parents of children with JIA.

METHODS

- **UCAN CAN-DU study:** Prospective, multicentre, longitudinal Canada-Netherlands Personalized Medicine Network in Childhood Arthritis and Rheumatic Diseases.
- **Data:** Clinical and patient-reported measures collected between 2019-06-17 and 2024-04-04.
- **Standardized validated instrument:** Work Productivity and Activity Impairment questionnaire (WPAI).
- **Analysis:** Generalized estimating equations to model productivity loss, activity impairment, and wages lost.

RESULTS

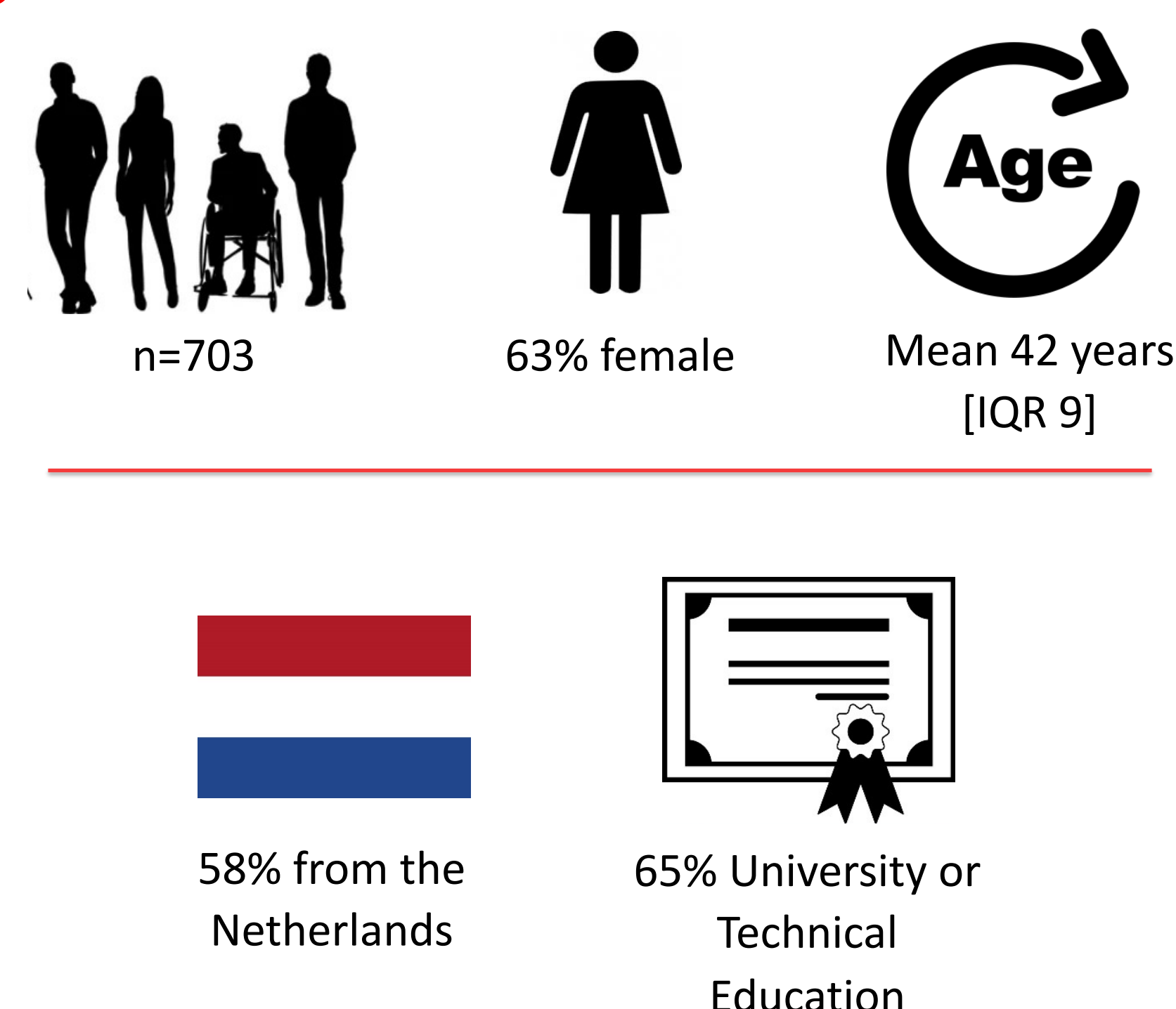


Table 1 – Disease activity distribution and average annual absenteeism cost by disease activity level

Disease activity level	N (%)	Annual absenteeism cost - € Mean (95% CI)
High + Moderate	390 (59.8)	4,483 [3011, 6065]
Minimal	127 (19.5)	3,995 [1768, 6593]
Inactive	135 (20.7)	2,809 [1076, 1076]

* Disease activity was classified using clinical assessments.

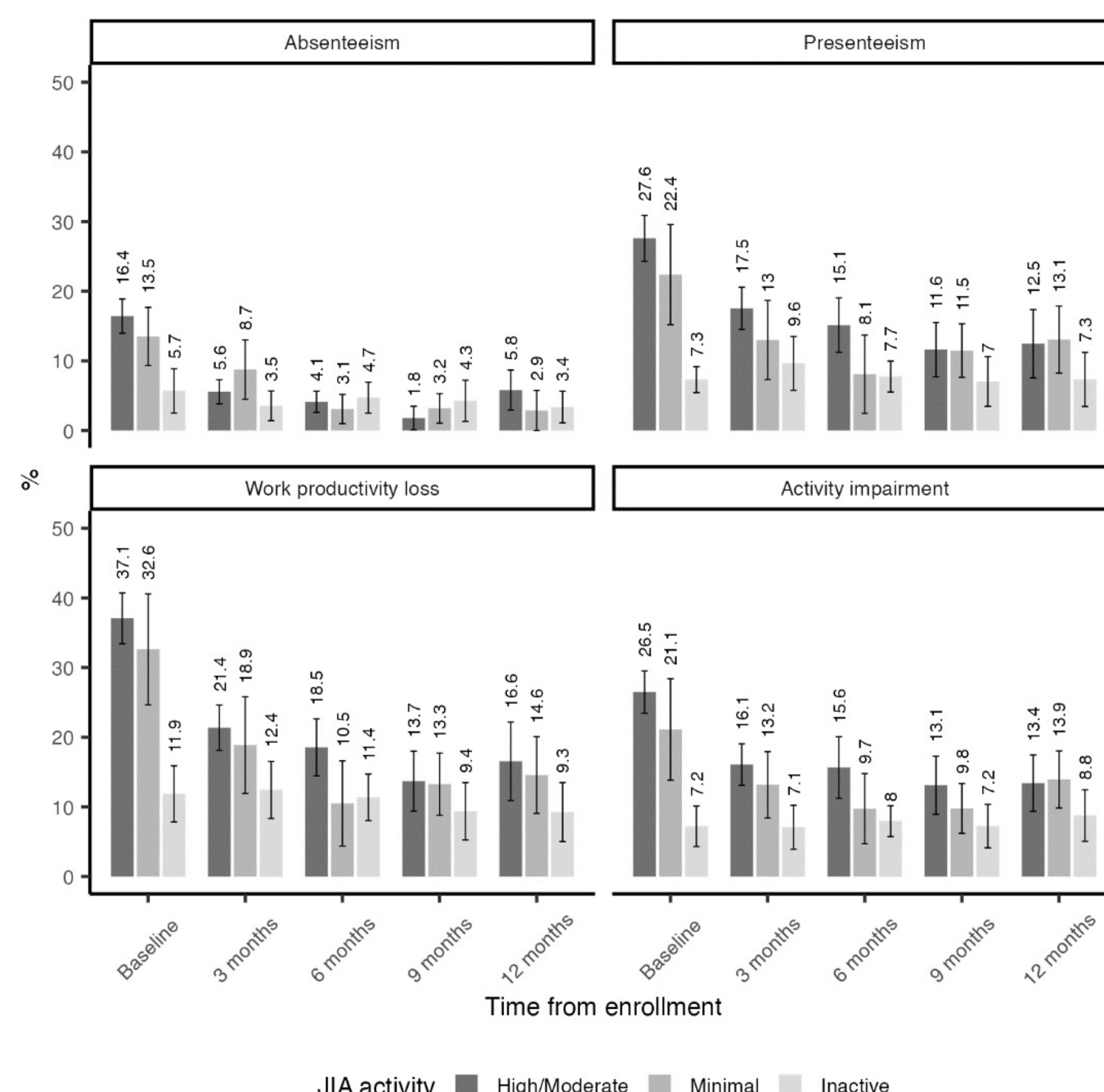


Figure 1 – Caregivers' Absenteeism, Presenteeism, Work productivity loss, Activity Impairment across time. Bars display adjusted means with robust 96% CI. Adjusted means were estimated with GEEs having JIA activity state, time from enrollment, age group, formal diagnosis, and patient age at diagnosis as independent variables

CONCLUSION

- This is the **first study** to capture work productivity loss and activity impairment of childhood arthritis parents in a **large multi-national cohort** across **all sub-types** of disease and across **disease activity**.
- Parents reported work productivity loss, activity impairment, and wage loss which varied across JIA activity levels.
- The key determinants of productivity loss, such as clinical features, need to be explored to better understand the impact on families and where extra support could ease family burden.

REFERENCES

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