Evaluating the economic burden associated with problem joints, across moderate and severe haemophilia A, in children and adults: CHESS Paediatrics and CHESS II

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Acknowledgements
The authors would like to thank the study participants and their families, study investigators, coordinators, and site personnel. The CHESS II study was supported by research funding from F. Hoffmann-La Roche Ltd.

The wider CHESS II study was supported by unrestricted research grants from Sanofi, BioMarin, and Takeda. The CHESS II study was approved by the University of Chester Ethics Committee and was conducted in collaboration with the Haemophilia Society (UK) and governed by a steering committee chaired by Prof. Brian O’Mahony, Chief Executive of the Irish Haemophilia Society.

Disclosures

Key takeaways
• There is a paucity of data on the relative economic costs associated with chronic joint morbidity (i.e. problem joints) in adults and children, as across moderate haemophilia A and severe haemophilia A
• Healthcare system burden correlated with number of problem joints, and persisted across severity level and age cohorts

Accepted as a Poster Presentation at EAHAD 2021 Virtual Congress, 3–5 Feb
Economic costs among people with haemophilia A in Europe in the CHESS Paeds and CHESS II studies

Background
• Joint morbidity in people with moderate haemophilia A (MHA) and severe haemophilia A (SHA) is associated with clinical and humanistic burden; however, the data on the economic burden are currently limited
  – In this context, the holistic definition of ‘problem joints’, a measure of joint morbidity recently developed with therapy area experts, may provide a more patient-relevant outcome than haemorrhagic measures, such as ‘target joints’
  – A problem joint (PJ) is defined as having chronic joint pain and/or limited range of movement due to compromised joint integrity (i.e. chronic synovitis and/or haemophilic arthropathy)

Objectives: To describe the relative economic burden associated with problem joints (PJ), among people with MHA and SHA in Europe, from a healthcare system and societal perspective.

Methods
• Data on direct medical costs (DMC) were available in N=468 in CHESS II and N=703 in CHESS Paeds; Direct non-medical (DNC); and indirect (IC) cost data were available in N=206 in CHESS II and N=176 in CHESS Paeds
• We report 12-months’ retrospective data, stratified by number of PJ (no PJs, 1 PJ, 2+ PJs)

Excluded from this analysis are people with an active inhibitor to factor VIII replacement therapy and adults aged 18-19 in CHESS II (to account for overlap).

Direct medical costs include all costs involved in the delivery of health care; direct non-medical costs are incurred in connection with health care, such as transportation to the site of care; indirect costs include productivity loss and early/forced retirement / ceasing of work.

PJ, problem joints; MHA, moderate haemophilia A; SHA, severe haemophilia A; DMC, direct medical cost; DNC, direct non-medical cost; IC, indirect cost.
The relationship between healthcare system and societal costs and number of problem joints ($PJ$)

DMC, direct medical cost; DNC, direct non-medical cost; IC, indirect cost (IC); MHA, moderate haemophilia A; PJ, problem joint; SHA, severe haemophilia A.
Conclusions

Real-world data on children and adults with MHA and SHA were drawn from the ‘Cost of Haemophilia in Europe: a Socioeconomic Survey’ (CHESS) Paeds (2018) and CHESS II (2019-2020) studies.

The association between healthcare system burden (DMC) and patient burden (number of problem joints) persisted across both severity level and age.

This analysis of CHESS Paeds and CHESS II was undertaken to illustrate the extent of economic burden associated with problem joints, in people with MHA and SHA.

Cross-sectional data limited the scope of the analysis, highlighting the need for comprehensive studies that provide longitudinal data on the economic burden of MHA and SHA.

DMC, direct medical cost; MHA, moderate haemophilia A; SHA, severe haemophilia A.