



GLOBAL SKIN HEALTH

GLOBAL BURDEN OF DISEASE: A SYSTEMATIC LITERATURE REVIEW ON DISABILITY WEIGHTS METHODOLOGY WITH REFLECTION ON SKIN DISEASES

N Suthakharan⁽¹⁾ - S Gupta⁽¹⁾ - C Griffiths⁽²⁾ - D Ashcroft⁽³⁾ - M Augustin⁽¹⁾

University Medical Center Hamburg-ependorf (uke), Institute For Health Services Research In Dermatology And Nursing (ivdp), Hamburg, Germany⁽¹⁾ - University Of Manchester, The Dermatology Centre, Manchester, United Kingdom⁽²⁾ - University Of Manchester, Faculty Of Biology, Medicine And Health, Manchester, United Kingdom⁽³⁾

Introduction: Skin diseases account for one of the most common human illnesses globally but in the recent Global Burden of Disease (GBD) study, psoriasis, for example, ranked 144 out of 174 conditions in the DALY rankings. Two components of DALY calculation are prevalence of the disease and disability weight (DW) factor. The derivation of DW factor depends on many factors which can lead to wide range of results. GBD methodology can significantly underestimate the skin disease burden.

Objective: To understand in-depth the DW methodology in the DALY system. Furthermore, what are the merits and demerits of each approach used in the methodology. In addition, how do the findings reflect upon skin disease DWs.

Material and Methods: A systematic literature review was performed to answer the research questions. Comprehensive search of eligible scientific and grey publication in English, from 2007 to 2017, were conducted in PubMed, EMBASE (Ovid) and Google Scholar. 24 relevant studies were included and have been elaborated in the review. The health state descriptions, panel composition, and valuation methods used to derive DWs in these studies is discussed in detail.

Results: 22 out of 24 studies used an alternative approach to estimate new DWs for different diseases. Based on the respective diseases under consideration the choice of panel member, health state description, valuation methods and time presentation varied across the studies. There was scarce literature available for skin diseases in particular. The inclusion of certain skin conditions under other medical specialties can be a major factor leading to underestimation of overall skin disease burden.

Conclusion: No consensus on standard methodology for DW derivation could be reached. There is a need to standardize the methodologies and categorization of skin conditions in





future GBD studies. Further research is relevant to achieve universality and to overcome contextual differences in deriving DWs.

