

SOCIETAL AND ECONOMIC BURDEN OF OBESITY IN BULGARIA

V. Todorova ¹, Z. Vlaeva ¹, G. Slavchev ¹,
A. Dacheva ¹, S. Djambazov ¹

¹HTA Ltd, Sofia, Bulgaria

INTRODUCTION

Obesity is a significant global health challenge, recognized as a major public health epidemic. Despite its increasing prevalence, it is often underdiagnosed and undertreated in Bulgaria. The most recent estimates show obesity affects 16.38% of the adult population (~875,000 people).

Of those, only 40% have an official diagnosis, and just 1.3% of the diagnosed patients receive pharmacological treatment (paid out of pocket). As a result, obesity-related complications lead to substantial direct medical costs and reduced workforce productivity.



OBESITY AFFECTS 16.38%
of adults in Bulgaria
~875,000 people



40%
have an official diagnosis
(~350,000 people)



ONLY 1.3%
of the diagnosed patients
~4,500 people

receive pharmacological treatment

PAID OUT OF POCKET

METHODOLOGY

We estimated all direct healthcare costs (for diagnosis, monitoring, treatment and complication/comorbidity control) and indirect costs due to productivity loss (absenteeism and presenteeism). National prevalence data, treatment rates, and productivity metrics were used. Health loss was quantified using disability-adjusted life years (DALYs). Economic values were based on 2023 Bulgarian GDP data and healthcare cost estimates.



RESULTS

The total annual economic burden of obesity was estimated at BGN 6,484,447,995 or 3.5% of the national GDP for 2023.

Direct healthcare costs amounted to BGN 668,918,648 of which 88% (BGN 589,694,645) were due to complications and comorbidities—costs potentially reducible with timely intervention. Indirect costs represented over 89% of the total burden, driven by substantial productivity loss (presenteeism: 17% impaired productivity and absenteeism: 10 workdays lost per patient annually). The resulting GDP loss from reduced productivity was BGN 5,815,519,352 per year. Additionally, annual health loss was quantified at 67,723 DALYs.



**TOTAL ECONOMIC BURDEN
BGN 6.48 BILLION**

PRODUCTIVITY LOSS

17% IMPAIRED PRODUCTIVITY DUE TO PRESENTEEISM,
10 WORKDAYS LOST DUE TO ABSENTEEISM PER PATIENT ANNUALLY

89% INDIRECT COSTS

11%

DIRECT COSTS

88% OF THE DIRECT COSTS ARE DUE TO COMPLICATIONS/
COMORBIDITIES

CONCLUSION

Our findings demonstrate that investment in early diagnosis, multidisciplinary care, and innovative treatment options could yield substantial health and economic benefits. The results should inform policy decisions aimed at improving access to obesity treatment in Bulgaria. Recognizing obesity as a strategic health and economic priority is essential for mitigating its long-term societal impact.

