

Cervical Cancer Prevention: Knowledge, Risk Factors, and Screening Barriers in a Bulgarian Female Population

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Abstract:

Cervical cancer remains a preventable malignancy, yet suboptimal screening uptake and limited HPV vaccination coverage persist in many countries, including Bulgaria. This study aimed to assess key determinants influencing cervical cancer prevention by examining women's knowledge, perceived barriers to screening, and relevant behavioral and clinical risk factors. A cross-sectional survey was administered to 220 Bulgarian women aged 18–65 years, incorporating validated measures of HPV and cervical cancer knowledge, a condensed CPC-28 scale capturing psychosocial and logistical barriers, and a structured risk factor block.

Overall knowledge was moderate, with participants demonstrating awareness of HPV as a causal factor but showing substantial gaps regarding asymptomatic disease progression and routes of transmission. Screening barriers were prominent: lack of time (48%), fear of abnormal findings (41%), low perceived need in the absence of symptoms (38%), embarrassment (33%), and limited information on where to access screening (29%). Risk factors were common, including a history of sexually transmitted infection (15%), immunosuppression (12%), smoking (50% ever; 25% current), multiple sexual partners (45% reporting ≥ 4 lifetime partners), and prolonged screening intervals exceeding five years (30%).

These findings highlight the need for integrated public health interventions that simultaneously address knowledge deficits, reduce psychosocial and structural barriers, and incorporate risk-informed outreach strategies to improve cervical cancer prevention in Bulgaria.

Keywords:

HPV, cervical cancer, screening barriers, women's health, risk factors, cervical cancer prevention, Pap test, HPV testing.