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The Critical Role of Systematic Reviews in Identifying Common Risk Factors for Gastrointestinal Cancers

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Dear Editor-in-Chief

Gastrointestinal (GI) cancers, including colorectal, stomach, pancreatic, and esophageal malignancies, remain among the leading causes of global cancer morbidity and mortality (1). These cancers are highly prevalent worldwide, with colorectal cancer being the most common. Its incidence is rising across both developed and developing countries, underscoring the need for global attention (2). Likewise, cancer in the stomach remains a significant issue in East Asia, especially in Korea and Japan (3), while pancreatic cancer, with its high mortality rate and limited effective treatments, remains a daunting challenge (4). Esophageal cancer, showing significant geographic variation, presents higher rates in regions such as Eastern Europe and parts of Asia (5).

Despite major progress made in cancer studies and treatment, because GI cancers have a multi-factorial pathogenesis, holistic and systematic strategies are required to confront common risk factors. The complexity of GI cancers, coupled with their diverse risk factors, emphasizes the importance of systematic reviews in identifying common risk factors. These reviews offer a comprehensive view of the interconnected common factors that contribute to the development of these malignancies.

Risk factors for GI cancers span modifiable behaviors such as smoking, alcohol consumption, and unhealthy dietary patterns; environmental exposures like air pollution and chemical toxins; and non-modifiable elements, including genetic predisposition (6, 7). Through synthesizing current studies, systematic reviews not only quantify the magnitude of these risks but also identify key areas where intervention and prevention can be targeted.

A major advantage of systematic reviews lies in how they are able to synthesize disparate evidence from a multitude of studies, revealing trends that can inform clinical practice and public health policies (8). For instance, combining findings related to the impact of dietary fibers, antioxidants, and omega-3 fatty acids with behavioral risk data can help develop more personalized and effective prevention strategies. Furthermore, addressing disparities in healthcare access is essential for reducing the burden of GI cancers, particularly in low-resource settings where early detection and treatment may be less accessible (9, 10).

While global rates of GI cancers are increasing, most notably in transition economies (11), the role of systematic reviews becomes even more critical. These reviews bridge research gaps by identifying actionable insights and helping to inform evidence-based policies. By prioritizing the most significant

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interventions, systematic reviews empower stakeholders to create targeted strategies that can reduce the burden of these devastating diseases (12).

In conclusion, I commend the efforts to consolidate knowledge on this critical issue and urge researchers, clinicians, and policymakers to continue leveraging systematic reviews to drive progress in GI cancer prevention and management. By doing so, we can enhance our collective ability to tackle the growing challenge of GI cancers on a global scale.

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