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Commentary Article

Cancer Information Avoidance and Stigma: A Hidden Barrier to Cancer Prevention and Early Detection

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Abstract

Cancer stigma represents a significant barrier to cancer prevention and early detection. One of the less-examined mechanisms through which stigma operates is its influence on health information avoidance. This study explores how cancer stigma may lead individuals to avoid cancer-related information through mechanisms such as identity threat, anticipated stigma, and internalized stigma. Avoidance of health information can contribute to delays in seeking medical care, reduced participation in screening programs, and diagnosis at more advanced stages of disease. Evidence suggests that these processes are shaped by cultural beliefs, social norms, and structural inequalities, and may be intensified among vulnerable populations. In addition, social capital—including trust, supportive networks, and shared social norms—may play an important role in moderating or amplifying the effects of stigma on health information avoidance. Therefore, addressing cancer stigma should be considered a central component of cancer control strategies and requires multi-level interventions at individual, social, and structural levels to promote health information seeking, increase participation in screening, and improve early detection.

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Introduction

Cancer remains a leading cause of morbidity and mortality worldwide. Recent epidemiological data indicate that global cancer incidence and mortality reached 20 million new cases and 9.7 million deaths in 2022, with the global burden projected to rise to 35.3 million annual diagnoses by 2050 (1). Despite substantial advances in screening, early detection, and treatment, considerable disparities persist in cancer outcomes. These disparities are not solely the result of biological or structural factors;

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psychosocial factors also play an essential role in shaping risk perceptions, engagement with health information, and patterns of healthcare-seeking behavior. Within this context, cancer stigma has emerged as a relatively underexplored yet influential barrier across the cancer control continuum (2, 3).

Cancer stigma, as a social process, encompasses a set of negative beliefs, attitudes, and stereotypes toward individuals diagnosed with cancer, which can lead to discrimination, social exclusion, and diminished social status (4). This process typically begins with labeling human differences as undesirable, followed by associating these differences with negative stereotypes, and ultimately results in discrimination against those labeled (4). Cancer stigma may manifest in various forms, including fatalistic beliefs about the disease, blaming individuals for their illness, social avoidance or isolation of people with cancer, and discrimination in domains such as employment, health care, and interpersonal relationships (4, 5). Within the Iranian context, qualitative evidence suggests that limited public awareness, insufficient access to comprehensive information, and inadequate support systems can exacerbate cancer stigma and transform it into a significant barrier to cancer screening and control (6, 7). This stigma is rooted in cultural beliefs, religious interpretations, and media representations, and it carries wide-ranging social, psychological, and health-related consequences (4).

From a theoretical perspective, cancer stigma becomes particularly salient when the disease is attributed to personal responsibility or individual behavior; under such circumstances, individuals diagnosed with cancer may encounter blame, social distancing, and moral judgment (4). According to the identity threat framework proposed by Knapp et al., cancer stigma operates through a process in which personal attributions, disease characteristics, and situational threats undermine an individual's identity and reduce patients' engagement with the healthcare system (8). When internalized, stigmatizing attitudes may evolve into self-stigma, a condition characterized by feelings of shame, concealment, withdrawal from social interactions, and avoidance of health services (9).

One important consequence of this process is the avoidance of cancer-related information. Information avoidance is a deliberate decision to avoid available information to reduce psychological distress, and evidence suggests this behavior is relatively common in the health domain (10). Afifi et al. reported that approximately one-third of individuals avoid cancer-related information, a behavior largely associated with fear of unfavorable outcomes, perceived inability to cope with the information, and anticipation of emotional distress (11). Although these findings highlight the importance of cognitive and emotional mechanisms in information avoidance, the predominant focus of research on individual-level factors has resulted in comparatively limited attention to the role of social processes, including stigma.

This gap is particularly important because emerging evidence suggests that fear of judgment, blame, and social devaluation can serve as powerful motivations for avoiding information—specifically in contexts such as Iran, where cancer may be associated with beliefs such as fatalism, moral failure, or disease contagion (5-7, 12). Under such circumstances, individuals may avoid seeking or processing cancer-related information not only because of fear of the disease itself, but also because of the potential social consequences of knowing, being diagnosed, or being labeled. Such avoidance may initiate a chain of negative outcomes, including delayed healthcare seeking, diagnosis at more advanced stages, and reduced survival (13). Moreover, stigma-driven information avoidance may disproportionately affect socially and economically vulnerable populations, thereby exacerbating existing inequalities in cancer prevention, detection, and care.

Understanding the relationship between cancer stigma and information avoidance is essential for strengthening strategies aimed at prevention and early detection. When stigma discourages individuals from seeking, accepting, or processing cancer-related information, a chain of adverse consequences may emerge, including delays in seeking care, diagnosis at more advanced stages, and lower survival rates.

Reducing cancer stigma demands more than

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increasing public awareness; it necessitates structural interventions within health communication systems, specialized training for healthcare providers, and policy initiatives that recognize stigma as a primary driver of inequalities in cancer care. Synthesizing current evidence, this commentary proposes a conceptual framework that redefines cancer stigma as a structural driver of information avoidance, rather than merely an individual psychological experience. By interpreting this interplay, this study argue that addressing stigma as a systemic barrier (rather than an isolated personal issue) is essential for reforming cancer control policies to ensure equitable access to prevention and early detection.

How Does Cancer Stigma Lead to Cancer Information Avoidance?

Cancer stigma represents a powerful psychosocial barrier that can discourage individuals from constructively engaging with health information. Within the identity threat framework, Knapp et al. explain how negative attributions about cancer can threaten an individual's social and personal identity. In this process, the disease becomes linked to negative judgments that undermine self-concept and social standing. The consequences extend beyond overt discrimination and include the psychological burden of perceived or anticipated devaluation (8).

The National Cancer Institute (NCI) defines cancer-related social stigma as a process involving negative beliefs, stereotypes, discrimination, and social exclusion that can manifest as blame, marginalization, and isolation across the cancer care continuum (4). Such social dynamics create an environment in which individuals fear not only others' judgment but also self-evaluation through the lens of stigmatizing beliefs. As a result, some individuals may avoid information that could reveal, confirm, or reinforce a stigmatized identity. Cotoc demonstrated that stigma can influence information-seeking behaviors among breast cancer patients at different stages of treatment and across demographic groups, indicating that stigma functions as a key mechanism shaping engagement with cancer information (9).

Several psychological mechanisms help explain how stigma contributes to cancer information avoidance.

Anticipated stigma refers to the expectation of judgment, blame, or social rejection. This expectation can trigger defensive coping responses in which individuals avoid situations, discussions, or information that might confirm a stigmatized identity. For example, a patient concerned about being labeled a "smoker" after a lung cancer diagnosis may avoid asking questions about their condition. In contrast, an individual who fears the stigma associated with colorectal cancer may ignore reminders for colonoscopy screening (2).

Self-stigma, or internalized stigma, occurs when individuals adopt and internalize negative societal beliefs about illness. Internalization often generates feelings of shame and inadequacy, leading to secrecy, social withdrawal, and avoidance of information sources related to the stigmatized condition. For instance, individuals who perceive cancer as a sign of personal failure or weakness may avoid educational materials, patient support groups, or other informational resources due to embarrassment about the disease or treatment-related changes in appearance (14).

Fatalistic beliefs represent another mechanism through which stigma may discourage engagement with cancer information. In many cultural contexts, cancer is perceived as an inevitable death sentence, a moral punishment, or a condition beyond personal control or determined by divine will. Such beliefs diminish perceived personal agency and reduce motivation to seek or process information that implies the possibility of prevention, early detection, or effective treatment. For example, individuals who believe that illness is predetermined may see little value in learning about modifiable risk factors or participating in screening programs such as mammography (3, 6).

Importantly, these mechanisms often interact and reinforce one another. Anticipated stigma may intensify internalized stigma, while fatalistic beliefs may further justify avoidance of health information. This dynamic can create a self-reinforcing cycle in which stigma-related fears discourage information seeking, thereby limiting opportunities for early

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detection and timely care. Evidence suggests that individuals who delay seeking medical advice because of fear, embarrassment, or fatalistic attitudes are more likely to receive diagnoses at later stages of disease. This pattern is particularly concerning for cancers with established screening opportunities, such as breast, cervical, and colorectal cancers (13).

Moreover, stigma-driven information avoidance may disproportionately affect socially vulnerable populations. The phenomenon is especially evident in cancers that carry a heavier stigma burden, such as lung cancer—often associated with smoking—and human papillomavirus (HPV)–related cancers, which may be linked to sexual stigma. In these contexts, stigma not only complicates acceptance of the disease but also directly influences information-seeking behaviors, participation in screening, and ultimately clinical outcomes (2, 3, 14). Consequently, effective stigma-reduction strategies should address these interconnected psychological and social mechanisms to break the cycle of information avoidance and improve engagement with cancer prevention and early detection efforts.

Demographic and Behavioral Consequences of Cancer Stigma: Beyond Individual Psychology

Cancer stigma operates at the individual level through several psychological mechanisms. Identity threat, anticipated stigma, internalized stigma, and fatalistic beliefs can evoke fear, shame, and concerns about social judgment. These psychological experiences often reduce individuals' willingness to seek, accept, and process cancer-related information, thereby contributing to cancer-related health information avoidance (11, 12, 15).

Empirical evidence supports this association. For example, a meta-analysis by Offer et al. found that approximately 33% of individuals avoid health information. The primary reasons included fear of experiencing negative emotions, low self-efficacy, and a perceived inability to take effective action. These findings are consistent with stigma-related psychological processes—such as fear of social judgment and anticipated shame—and illustrate how such mechanisms may trap individuals in a cycle of passivity and avoidance in health behaviors (11).

However, the consequences of cancer stigma extend beyond individual psychology and are also reflected in population-level health behaviors. In a study by Vrinten et al., individuals who held stronger stigmatizing attitudes toward cancer were significantly less likely to participate in screening programs for colorectal, breast, and cervical cancers, even after controlling for sociodemographic factors and levels of awareness. These findings suggest that cancer stigma can function as an independent barrier to prevention, beyond limitations in knowledge or access to care (5).

Qualitative studies further illustrate how these dynamics manifest in real-world contexts. For instance, Nyblade et al., in a study conducted in rural India, found that pervasive cancer stigma—rooted in cultural beliefs about contagion, divine punishment, and moral failure—contributed to concealment of diagnosis, avoidance of care-seeking, and delays in treatment due to fear of social rejection. This pattern was particularly pronounced among women with gynecological cancers, who also faced stigma related to reproductive health and sexuality (3).

Research conducted in Iran demonstrates similar patterns. Hasan Shiri et al. reported that women eligible for cervical cancer screening often perceived cancer as a "death sentence" and avoided screening because of fears of social rejection, burdening their families, or jeopardizing marital prospects. These beliefs, reinforced by fatalistic cultural narratives, diminish perceived personal agency and undermine motivation to seek health information or engage in preventive behaviors (6).

Taken together, this evidence suggests that although cancer stigma is experienced at the individual psychological level, its emergence and persistence are deeply embedded in broader social and cultural contexts. Therefore, a comprehensive understanding of the relationship between cancer stigma and health information avoidance requires attention to contextual and social determinants, including factors such as social capital.

Social Capital: A Contextual Factor in the Stigma–Information Avoidance Cycle

As the preceding discussion suggests, cancer

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stigma is not solely the product of individual beliefs but is shaped and reproduced within broader social contexts. One useful framework for understanding this context is the concept of social capital. Social capital refers to the networks, norms of reciprocity, and levels of trust that facilitate cooperation and collective action within a society (16, 17). These social resources can influence how individuals access information, interpret health risks, and engage with health systems.

Social capital may mitigate the negative effects of stigma by facilitating the exchange of health information and providing emotional and practical support. In communities with higher levels of social capital, supportive social networks can encourage individuals to seek health information, discuss health concerns, and participate in preventive behaviors such as cancer screening. In contrast, in contexts characterized by low social trust, weak social ties, or limited support networks, fear of social judgment and uncertainty may intensify information avoidance and delay care-seeking.

Empirical evidence supports the relevance of this relationship. For instance, a study conducted in the United States found that higher levels of community level social capital were associated with increased mammography uptake among older women (18). Similarly, a recent review of social capital–based interventions in cervical cancer prevention reported that strengthening social networks and community trust can improve participation in HPV vaccination and cervical screening among vulnerable populations (19).

Taken together, these findings suggest that social capital functions as an important contextual factor in the relationship between cancer stigma and health information avoidance. From this perspective, cancer stigma and social capital interact dynamically: low levels of social capital may reinforce cycles of stigma and information avoidance, whereas strong, trust based social networks can help disrupt these cycles by promoting open communication, support, and engagement with preventive health services. Consequently, stigma reduction strategies are likely to be more effective when implemented alongside efforts to strengthen social capital at the community level.

Beyond Awareness: Interventions and Policy to Overcome Cancer Stigma

Many current cancer control efforts focus primarily on increasing awareness and improving knowledge. This approach is based on the assumption that lack of information is a major barrier to screening and early diagnosis. However, evidence suggests that although awareness is necessary, it is not sufficient on its own and may have limited effectiveness—or even unintended consequences—when cancer stigma remains unaddressed.

Providing information alone, without addressing fear, shame, and anticipated judgment, is unlikely to overcome the psychological and social barriers that drive information avoidance. Moreover, some awareness campaigns that emphasize behavioral risk factors, such as smoking or sexual behavior, may inadvertently reinforce stigma. Such messages can contribute to self blame, moral judgment, and the reinforcement of culpability based narratives about cancer (2). The NCI similarly emphasizes the importance of community based and participatory approaches that involve affected populations in the design, implementation, and evaluation of stigma reduction programs (4).

Therefore, effective interventions should move beyond awareness raising and directly address cancer stigma across multiple levels:

- **Individual-Level Interventions**

At the individual level, reducing self-stigma, strengthening trust in the health system, and enhancing self-efficacy are essential for enabling individuals to engage with cancer-related information and pursue appropriate care. Evidence suggests that trust in oncology professionals can serve as an important mediator of information-seeking behavior, particularly among groups that experience or anticipate stigma (9). From this perspective, training healthcare providers to communicate with empathy, use nonjudgmental language, and deliver culturally sensitive care may reduce anticipated stigma, increase patients' sense of psychological safety, and promote their active engagement in information seeking, decision-making, and cancer care.

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- **Community-Level Interventions**

Although individual-level interventions are important, cancer stigma is fundamentally a social phenomenon and cannot be addressed solely at the individual level. Community-based interventions should challenge stigmatizing beliefs, normalize conversations about cancer, and reframe screening and care-seeking as legitimate, accessible, and socially supported behaviors. The NCI similarly emphasizes community-based and participatory approaches that involve affected populations in the design, implementation, and evaluation of stigma-reduction programs (4).

Peer education, narrative and storytelling interventions, support groups, and campaigns portraying diverse cancer survivors can help reduce silence, shame, and secrecy surrounding cancer, particularly when they emphasize shared humanity, hope, and social support rather than individual blame (3). Furthermore, because social capital can moderate the effects of stigma, community-based interventions should also aim to strengthen supportive networks, mutual trust, and norms of empathy (16). Local dialogues in mosques, schools, and community centers, with the participation of religious leaders, teachers, community health workers, and local advocates, can disseminate nonjudgmental health messages and thereby increase information seeking, screening participation, and timely referral.

- **Structural and Policy-Level Interventions**

Addressing cancer stigma also requires structural and policy-level changes targeting the institutional and social conditions that reproduce stigma. Such changes include ensuring equitable and nondiscriminatory access to screening and treatment services, strengthening protections against workplace and insurance discrimination, and integrating stigma-reduction strategies into clinical guidelines and quality-of-care indicators. Health systems should also address implicit biases among healthcare providers and stigmatizing institutional practices, including judgmental language in medical documentation, insufficient time for effective patient communication, and inadequate provision of culturally appropriate care (3).

Overall, reducing cancer stigma requires a multi-level approach that simultaneously targets individual psychological factors, social norms, and institutional structures. Only through an approach that strengthens trust, social support, and equitable access to health information and services can the cycle of stigma, information avoidance, and delayed care-seeking be disrupted, thereby advancing more effective cancer prevention and early detection.

Conclusion

As demonstrated in this article, cancer stigma is not merely an undesirable social label but a systemic and multi-faceted barrier that can substantially affect cancer prevention, screening, and early diagnosis. The evidence shows that stigma may lead individuals to avoid health information through mechanisms such as identity threat, anticipated stigma, internalized stigma, and fear of social judgment. Avoiding cancer information may lead to delays in seeking medical care and missed opportunities for timely screening and early diagnosis.

Existing evidence further indicates that cancer stigma is not a purely individual phenomenon; rather, it is a social process embedded in cultural beliefs, interactions within healthcare systems, and structural inequalities. Accordingly, effective responses to cancer stigma require approaches that extend beyond traditional awareness campaigns. Interventions should be designed and implemented at multiple levels: at the individual level, to reduce internalized stigma and strengthen trust in the health system; at the community level, to challenge stigmatizing beliefs and normalize open conversations about cancer; and at the structural level, to promote nonjudgmental, culturally sensitive, and responsive care within healthcare systems. Within this framework, addressing cancer stigma should be regarded as a core component of comprehensive cancer control strategies.

Finally, future research and policy should pay greater attention to the role of social capital as a key contextual factor shaping experiences of stigma and cancer-related information behaviors. Understanding how trust, support networks, and

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social norms may mitigate or intensify stigma and information avoidance can inform the design of more effective interventions. Strengthening social capital, alongside reducing stigma, may help create a more supportive environment for information seeking, access to preventive services, and timely care, ultimately contributing to reduced inequalities and a lower global burden of cancer.

Declaration

Acknowledgment

None

Conflict of Interest

The authors declare that they have no conflict of interest.

Ethical Statement

This article is a commentary based on published literature and the authors' professional perspectives. No human participants, animals, or confidential data were involved in the preparation of this manuscript. Accordingly, ethical approval was not required. The authors confirm that all ethical principles of scholarly publishing have been observed.

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Authors' Contribution

Fatemeh Faraji conducted all parts of this study and is responsible for the integrity and accuracy of all issues in this commentary.

Use of Artificial Intelligence

The author wrote the first draft of the manuscript. ChatGPT was then used to assist with editing and improving the language's clarity. After using this tool, the author carefully reviewed and edited the content as needed and took full responsibility for the integrity and accuracy of the final manuscript. Generative AI tools were not used to generate content, conduct literature searches, or develop discussions.

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