

## How Social and Economic Conditions Shape Cancer Care

A cancer diagnosis is often spoken about as a medical event. In reality, it quickly becomes something much larger for many individuals and families.

The ability to reach a screening center, take time away from work, afford treatment, or navigate a complex healthcare system can shape the course of the illness just as much as the biology of the disease itself.

Across the world, researchers increasingly show that social and economic conditions strongly shape cancer outcomes. Two individuals diagnosed with the same type of cancer can experience very different journeys depending on where they live, what resources they have, and how healthcare systems are structured around them. In some regions, screening programs detect cancer early, and treatment begins quickly. In other words, the experience of cancer is shaped not only by medicine but by the conditions in which people live.

Global cancer epidemiology research led by experts such as *Freddie Bray and colleagues* has shown that countries with lower levels of socioeconomic development often experience higher cancer mortality relative to incidence. This pattern shows something important. Cancer occurs everywhere, but people do not have equal access to early detection, treatment infrastructure, or supportive care.

As cancer incidence continues to rise worldwide, understanding these socioeconomic influences has become increasingly important. Improving cancer care will depend not only on medical innovation but also on how effectively health systems address the social conditions that shape access to care.

Even before questions of access and affordability arise, another layer that shapes the cancer journey is awareness. For many individuals, especially in underserved communities, the earliest barrier is not the healthcare system but a lack of information. Symptoms are often overlooked, misunderstood, or attributed to less serious conditions. In some cases, people may not fully understand what cancer is, how it develops, or when it requires medical attention. This gap in awareness delays the decision to seek care, allowing the disease to progress before it is ever brought into a clinical setting. In this way, the experience of cancer is shaped not only by access to services but also by what people know, recognize, and act upon in their everyday lives.

### Early Detection and Unequal Access to Screening

One of the most visible socioeconomic disparities in cancer care appears at the earliest stage of the disease pathway: detection. Screening programs for cancers such as cervical, breast, and colorectal cancer remain among the most effective strategies for improving survival. Detecting cancer early expands treatment options and greatly improves the chances of better outcomes.

Yet participation in screening programs varies considerably across socioeconomic groups. A study examining cervical cancer screening in Vietnam, led by *Thi Bich-Van Nguyen*, found that only about 28 percent of eligible women reported being screened within three years. Women with higher education and greater household income were much more likely to take part in screening than women from lower socioeconomic backgrounds.

Several factors help explain this gap. Limited awareness of screening programs, difficulty traveling to healthcare facilities, and competing financial priorities can all discourage participation. Even when screening services exist, they may remain underused if individuals face practical barriers to accessing them.

Researchers have seen the same pattern even in high-income healthcare systems. The study on a colorectal cancer screening program in Spain's Basque Country, led by *Jose Luis Hurtado*, found that participation differed across socioeconomic groups despite universal health coverage. The research shows that social conditions, education, and health literacy all shape whether people participate in preventive screening.

Efforts to address these disparities increasingly focus on community-based strategies. Mobile screening units, targeted public health campaigns, and partnerships with primary care providers have helped improve participation in several regions. When health systems design screening programs around real social circumstances, these programs become more than clinical services. They become public health strategies capable of reaching communities that might otherwise remain outside the healthcare system.

### **The Financial Burden of Cancer Care**

For many families, the economic consequences of cancer extend well beyond hospital bills. Cancer treatment usually involves multiple diagnostic tests, surgery, chemotherapy, radiation therapy, and long periods of follow-up care. Alongside these direct medical costs, patients frequently face indirect expenses such as travel, accommodation near treatment centers, and lost income during recovery.

The concept of "*financial toxicity*," introduced in oncology research, describes the economic strain that patients experience during cancer treatment. Their research found that financial stress often shapes how patients approach treatment and whether they can continue care, especially when they must pay high medical costs out of pocket.

Economic pressure can quietly alter how patients engage with care. Some individuals delay treatments, postpone follow-up visits, or avoid recommended therapies because of financial concerns. Over time, these pressures may contribute to differences in outcomes across socioeconomic groups.

Health systems are increasingly exploring ways to address this issue. Financial counseling programs within oncology centers, expanded insurance coverage, and policies designed to limit catastrophic medical expenses have begun to emerge in several countries. While these

efforts are still evolving, they reflect a growing recognition that cancer care cannot be separated from its economic realities.

### **Navigating Complex Healthcare Systems**

A cancer diagnosis does not begin as a logistical challenge. It often begins as an emotional one. For many individuals and families, the moment of diagnosis is marked by shock, disbelief, and, at times, denial. Processing the reality of the illness can take time, and in this period, decisions around treatment are not always immediate or straightforward. Emotional distress can shape how individuals respond to medical advice, whether they seek second opinions, or even whether they engage with the healthcare system at all. This emotional phase, though less visible in health system design, plays a critical role in shaping what happens next.

Even when treatment is available, navigating the healthcare system can present significant challenges. Cancer care often requires coordination between multiple specialists, diagnostic services, and treatment centers. For many patients, managing appointments, referrals, and treatment schedules becomes a complex task.

Using data from the China Health and Retirement Longitudinal Study, researcher *Huiru Zhang* showed that cancer patients from wealthier backgrounds were more likely to use both outpatient and inpatient healthcare services. Individuals with higher socioeconomic status were significantly more likely to access both outpatient and inpatient medical services.

These differences often reflect practical barriers rather than formal restrictions. Practical barriers often shape how often patients see their doctors. Transportation problems, difficulty understanding medical information, and the need to balance work with medical visits can all make regular care harder.

Patient navigation programs have emerged as one response to these challenges. Research led by *Pascal Jean-Pierre* demonstrates how trained navigators can assist patients in coordinating appointments, understanding treatment pathways, and accessing supportive services. By helping individuals move through complex healthcare systems more effectively, these programs have shown promising results in reducing delays in treatment and improving continuity of care.

### **Global Gaps in Cancer Care Infrastructure**

Socioeconomic disparities in cancer care are also visible at a broader global level. Delivering comprehensive cancer treatment requires specialized infrastructure, including diagnostic imaging, pathology services, surgical facilities, radiation therapy equipment, and trained oncology professionals. In many regions, these resources remain limited.

Research examining cancer care systems in low- and middle-income countries by *D. Cristina Stefan and Shenglan Tang* highlights the growing cancer burden in countries where oncology infrastructure is still developing. As life expectancy increases and populations age, cancer

incidence continues to rise in regions where access to specialized treatment services remains uneven.

The consequences of these gaps can be significant. In many low-resource settings, diagnostic delays and limited access to treatment contribute to higher mortality rates even when cancers are potentially treatable.

Strengthening cancer infrastructure requires sustained investment in training programs, diagnostic capacity, and regional cancer treatment centers. International collaborations and research partnerships have begun supporting these efforts, but long-term progress will depend on national policy commitments and strategic health system planning.

### **Gaps in Current Systems**

Despite growing awareness of socioeconomic disparities in cancer care, several gaps remain in both research and policy responses. Many countries still lack detailed data on how income, education, and geographic location influence cancer outcomes. Without reliable data, designing targeted interventions becomes significantly more difficult.

Research also tends to focus more heavily on diagnosis and treatment than on survivorship and long-term quality of life. The social and economic challenges that patients face after completing treatment are often less well documented.

Another important gap involves representation in research. Many clinical studies still overlook rural communities, low-income populations, and people living in regions where healthcare infrastructure remains limited. Expanding research participation across diverse populations will be essential for developing policies that reflect real-world experiences.

### **Policy Implications**

The evidence linking socioeconomic conditions to cancer outcomes carries important implications for health policy. Expanding access to screening programs remains one of the most effective ways to improve early detection and reduce cancer mortality. Ensuring that these programs reach underserved communities will require coordinated efforts between public health agencies, community organizations, and primary care providers.

Financial protection policies are another critical priority. Reducing out-of-pocket expenses for cancer treatment can help prevent long-term economic hardship and ensure that patients are able to complete recommended therapies. Strengthening insurance coverage and social protection systems can therefore play an important role in improving treatment continuity.

Investment in healthcare workforce development is equally important. Expanding training opportunities for oncologists, nurses, and allied health professionals can strengthen the capacity of health systems to deliver comprehensive cancer care. In regions where specialist availability remains limited, targeted workforce strategies may significantly improve access to treatment.

## **Ethical and Human Impact**

Beyond statistics and policy frameworks, socioeconomic disparities in cancer care raise fundamental ethical questions about fairness and responsibility within healthcare systems. When income, geography, or education determine whether someone can receive a diagnosis or treatment, the consequences reach far beyond medical outcomes.

A cancer diagnosis is already one of the most difficult experiences individuals and families may face. Financial strain and limited access to healthcare can deepen the emotional and psychological weight that already comes with a cancer diagnosis.

Addressing these inequalities, therefore, represents not only a public health priority but also a commitment to dignity and equity in healthcare. Ensuring that individuals receive timely and appropriate cancer care regardless of their socioeconomic circumstances reflects a broader vision of health systems that place human well-being at the center of policy decisions.

## **Sanjeevani: Strengthening Access and Support in Cancer Care**

While health systems continue to address gaps in infrastructure and access, community-based models are increasingly playing a role in responding to the everyday realities that shape how patients experience cancer care.

Sanjeevani...Life Beyond Cancer works at this intersection, supporting patients not only through treatment but also through the social and economic challenges that often determine whether care can be accessed and sustained.

One of the earliest points at which these challenges emerge is financial. For many patients, uncertainty around the cost of treatment begins at the moment of diagnosis and can influence decisions about whether and how to proceed with care. In response, Sanjeevani integrates financial guidance directly at the point of entry into the healthcare system. Its in-house resource team works with patients to identify and access central and state government schemes wherever possible. When patients are not covered under these schemes, the team connects them with individual donors to bridge funding gaps.

This form of early financial navigation plays an important role in reducing treatment interruptions. By addressing cost-related uncertainty at the outset, patients are better able to begin and continue recommended therapies without delays that are often linked to financial strain.

The CanSahogi program further strengthens support within hospital settings by focusing on the day-to-day realities of navigating care. Individuals in these roles are often cancer survivors or caregivers themselves, bringing lived experience into patient support. They help patients manage practical aspects of treatment, including appointments, processes, and

communication, while also offering a level of understanding that is difficult to replicate through clinical care alone.

At the same time, the program creates economic opportunities for those who take on these roles. For many survivors and caregivers, cancer has already had a financial impact on their households. By training and placing them within care settings, the program contributes to income generation while strengthening patient support systems. In this way, it addresses both sides of the care experience, reducing the burden on current patients while supporting the financial recovery of those who have already gone through treatment journeys.

Experiences within hospital settings have also highlighted another consistent pattern: a significant number of patients arrive for treatment at advanced stages of the disease. This reflects challenges that begin well before diagnosis, particularly in settings where awareness, early recognition of symptoms, and clarity on where to seek care remain limited.

Sanjeevani's Community Cancer Leadership (CCL) initiative responds to this earlier stage in the care pathway by extending support into communities. The approach focuses on building local capacity so that information, early guidance, and support are available closer to where people live, rather than only at the point of hospital entry.

The model draws on a diverse group of individuals, including cancer survivors, caregivers, ASHA and Anganwadi workers, and students from fields such as psychology, social work, and sociology. Many of these participants are already embedded within their communities or connected to health systems in informal ways. Through structured training and field-based engagement, they initiate conversations around early symptoms, prevention, and when to seek care.

A key aspect of the initiative lies in its emphasis on familiarity and trust. Community cancer leaders operate within the same social environments as the individuals they engage with, which allows conversations around cancer to take place in more accessible and less intimidating ways. This is particularly important in contexts where stigma, fear, or lack of clarity often delay care-seeking.

The program also integrates with existing public health touchpoints. By involving frontline workers such as ASHA and Anganwadi teams, cancer awareness becomes part of ongoing health interactions rather than a separate intervention. This helps embed early recognition and guidance into everyday community life.

Another important dimension is the inclusion of families. In many settings, decisions around seeking care are made collectively. By engaging caregivers alongside individuals, the initiative supports more informed and timely decision-making at the household level.

While still evolving across regions, early observations suggest a gradual shift in how communities respond. Individuals are beginning to come forward with symptoms with greater clarity, conversations around cancer are becoming more open, and initial points of contact with the healthcare system are occurring with less delay.

In this way, the initiative addresses a critical but often less visible stage of cancer care, the point at which symptoms are first noticed but not yet acted upon. Reducing uncertainty and strengthening local support systems helps bridge the gap between early signs and timely medical attention.

## **Conclusion**

Advances in cancer research have transformed the possibilities of treatment in recent decades. New therapies, improved diagnostic technologies, and expanding knowledge of cancer biology continue to shape the future of oncology. Yet these advances do not automatically reach all populations equally.

Socioeconomic conditions continue to shape how people detect cancer, receive treatment, and live through the experience of the disease. Access to screening, affordability of treatment, healthcare infrastructure, and the ability to navigate complex medical systems all play a role in determining outcomes.

Addressing these challenges requires a broader understanding of cancer care that extends beyond clinical innovation alone. Strengthening health systems, improving financial protection, expanding preventive services, and investing in equitable access to treatment will remain essential components of progress.

Reducing disparities in cancer care will require sustained collaboration between researchers, clinicians, policymakers, and communities. Scientific advances matter greatly, but they can only change lives when healthcare systems ensure that every person who needs care can truly reach it.

## **➤ References:**

- Bray, F., Fidler, M. M., & Soerjomataram, I. (2018). The global cancer burden and human development: A review. *Scandinavian Journal of Public Health*.
- Fidler, M. M., Bray, F., & Vaccarella, S. (2018). Global cancer inequalities. *Frontiers in Oncology*.
- Lortet-Tieulent, J., Bray, F., & Vaccarella, S. (2020). Profiling global cancer incidence and mortality by socioeconomic development. *International Journal of Cancer*.
- Nguyen, T. B. V. Socioeconomic factors associated with cervical cancer screening participation in Vietnam. *BMC Public Health*.
- Hurtado, J. L. Socioeconomic inequalities in participation in colorectal cancer screening in the Basque Country. *European Journal of Public Health / Preventive Medicine research on screening uptake*.
- Zafar, S. Y., & Abernethy, A. P. (2013). Financial toxicity, Part I: A new name for a growing problem. *Oncology (Williston Park)*.
- Zafar, S. Y., et al. (2013). The financial toxicity of cancer treatment: A pilot study assessing out-of-pocket expenses and patient burden. *The Oncologist*.

- Zhang, H. Socioeconomic inequality in healthcare utilization among cancer patients: Evidence from the China Health and Retirement Longitudinal Study. *Health Economics*.
- Jean-Pierre, P., et al. (2011). Patient navigation research program: Methods, protocol, and measures. *Cancer*.
- Stefan, D. C., & Tang, S. Cancer care in low- and middle-income countries: Challenges and opportunities. *The Lancet Oncology*.
- Merletti, F., Galassi, C., & Spadea, T. (2011). The socioeconomic determinants of cancer. *Environmental Health*.
- International Agency for Research on Cancer. (2020). *World Cancer Report: Cancer Research for Cancer Prevention*. Lyon: International Agency for Research on Cancer.