

## Overuse of Diagnostic Tests in Canada: A Critical Perspective

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### Article abstract

In this commentary we describe the interplay between 1) contemporary popular and professional understandings of “risk” and “normality” in health and healthcare, and 2) the promotion by state and market forces of individual self-regulation of health. We draw upon the work of critical theorists who have described the relationship between risk, fear, and the notion of “normal” in health discourse to argue that these factors act, primarily via the popular media, to shape the discourse on, and overuse of, diagnostic tests in Canada.



## COMMENTAIRE CRITIQUE / CRITICAL COMMENTARY (ÉVALUÉ PAR LES PAIRS / PEER-REVIEWED)

# Overuse of Diagnostic Tests in Canada: A Critical Perspective

Julia Borges<sup>1</sup>, Tiffany Lee<sup>1</sup>, Abdullah Saif<sup>1</sup>, Amit Sundly<sup>1</sup>, Fern Brunger<sup>1</sup>**Résumé**

Dans ce commentaire, nous décrivons l'interaction entre 1) les conceptions populaires et professionnelles contemporaines du « risque » et de la « normalité » en santé et en soins de santé, et 2) la promotion par l'État et par les forces du marché de l'autorégulation individuelle de la santé. Nous nous appuyons sur les travaux de théoriciens critiques qui ont décrit la relation entre le risque, la peur et la notion de « normalité » dans le discours sur la santé afin de soutenir que ces facteurs agissent principalement par l'entremise des médias populaires, en vue de façonner le discours sur les tests diagnostiques et leur utilisation excessive au Canada.

**Mots-clés**

normalité, risque, tests diagnostiques, professions de la santé, soins aux patients

**Abstract**

In this commentary we describe the interplay between 1) contemporary popular and professional understandings of “risk” and “normality” in health and healthcare, and 2) the promotion by state and market forces of individual self-regulation of health. We draw upon the work of critical theorists who have described the relationship between risk, fear, and the notion of “normal” in health discourse to argue that these factors act, primarily via the popular media, to shape the discourse on, and overuse of, diagnostic tests in Canada.

**Keywords**

normality, risk, diagnostic tests, health professions, patient care

## Introduction

The overuse of diagnostic tests has received a great deal of attention in Canada over the last five years, particularly in relation to costs to the healthcare system. It has been estimated that up to 30 percent of the care received by Canadians is unnecessary [1]. *Choosing Wisely Canada*, a campaign established to facilitate conversation between patients and clinicians regarding unnecessary care, has shaped our current understanding of the overuse of diagnostic tests [1]. The culture of overuse<sup>1</sup> has been attributed to clinician factors such as “access to resources, training, and peer influences” and “patient expectations and preferences” [1, p.10]; patients and practitioners alike are encouraged to “choose wisely” [1] in order to reduce unnecessary care in Canada. However, there are several other factors not part of the *Choosing Wisely* discourse that interact to contribute to the trend of unnecessary care.

In this commentary we describe the interplay between 1) contemporary popular and professional understandings of “risk” and “normality” in health and healthcare, and 2) the promotion by state and market forces of individual self-regulation of health. We draw upon the work of critical theorists who have described the relationship between risk, fear, and the notion of “normal” in health discourse to argue that these factors act, primarily via the popular media, to shape the discourse on, and overuse of, diagnostic tests in Canada in ways that are far subtler and more persuasive than the *Choosing Wisely* campaign would have us imagine.

## Self-Regulation and Monitoring of Health

The overuse of diagnostic tests in Canada is fundamentally shaped by, and in turn perpetuates, deeply culturally rooted ideas about normality, deviance, and risk. In the last few decades, it has been emphasized that individuals have a duty to take proactive measures to improve and gain more control over their own health [2-5]. This emphasis stems from the idea that self-controlled individuals have fewer health complications, resulting in healthcare cost savings. The recent trend of the overuse of diagnostic tests is an outcome of such self-surveillance. In order to have more control over health through proactive measures, both physicians and patients are relying more on diagnostic tests. As a result, campaigns such as *Choosing Wisely* emerge with an aim to reduce any potential adverse health impacts and unnecessary medical costs.

Further, it is part of the contemporary “habitus” [6] for individuals to compare their health status to what epidemiological data portrays as the *normal* healthy body. Bourdieu's concept of habitus refers to “systems of durable, transposable dispositions” [6, p.72]. Bourdieu describes habitus as a character or persona that informs all of an individual's behaviours, and which results in particular behaviours that in fact reinforce the social conditions producing that character. These internalized dispositions mediate between social structures and practical activity. Habitus is accessed and reproduced not only through words, but also in imitation, repetition, and in day-to-day actions by the repetitious engraving of practices and dispositions into the body. The social conditions that produce the habitus are reproduced by the very behaviours and beliefs that result from the habitus. The habitus of needing and valuing diagnostic tests, then, emerges from, and in turn reinforces, a cluster of interconnected and interdependent assumptions and behaviours. Clinical decisions and communication about the need for and use of diagnostic tests, and patient understandings of the need for and use of diagnostic tests are mutually reinforcing. In turn, the need for and use of diagnostic tests are shaped by, and perpetuate, broader social assumptions about risk, normality, and health.

Our present understanding of normality was adopted in the 1820s; today in medicine, as in lay discourse, the word connotes both “average” and an ultimate perfection toward which we should strive [7]. As social scientists have long argued, the act of transposing the concept of risk from the probabilities of epidemiology into clinical practice means that risk is interpreted as something from which the patient suffers; being at risk in itself comes to mean being diseased [8]. Patients seek advice from

<sup>1</sup> We acknowledge that the characterization of diagnostic tests as “overused” in Canada or elsewhere would itself benefit from a critical inquiry; however, that is not the purpose of this particular commentary.

medical practitioners, wanting tangible proof of their own normality or deviance in the form of diagnostic test results. Physicians seek to acquire quantifiable data on the body through various diagnostic tests so that they can compare the patient's body with the epidemiological norm. In this way, individuals find motivation for self-regulation and seek diagnostic tests as an instrument for self-monitoring.

This individual motivation also emerges from broader collectivizing interests, where the state continuously invests in regulating the population to self-monitor, as the onus for maintaining "normal" health is seen as the responsibility of the individual [9]. For example, the increasing availability of at-home diagnostic tests, such as pap smears and colorectal screening, demonstrate how individuals have been influenced by the state to self-regulate their health. Patients' expectations about their health care and the resultant pressure they may place on clinicians have been shaped by the public health movement of the twenty-first century, where intense value has been placed on health education and health promotion. A culture of "active citizenship" has been around since at least the 1970s, with individuals being encouraged by health experts and governments to take a more active role in their health and well-being [10]. As a result, patients seek health information – increasingly from online sources – to further their understanding of disease, risk, and potential treatment and prevention options. The Internet also serves to enhance patients' perceived control over disease through the act of gaining new knowledge [11].

Lupton, following Foucault, explains this phenomenon in terms of governmentality, an approach to regulation and control that is "directed at the autonomous, self-regulated individual" [7, p.118]. Health promotion messages are communicated to individuals as advice on how they should live and regulate their bodies. For example, Canada's Food Guide [12] aims to help people follow a healthy diet by providing recommendations as to what and how much people should eat. While the intent may be to empower individuals to take control of their health and lifestyle behaviours, other less-acknowledged consequences can ensue, such as fear and anxiety about one's current and future health. This can result in patients demanding access to diagnostic tests as an attempt to relieve anxieties and concerns.

## Corporations, Media and the Construction of Risk

Organizations engaged in manufacturing new technologies also influence medical standards, clinical guidelines, policies and practices, and scientific knowledge production [13-15]. A large body of research suggests that medical associations, government agencies, and public awareness movements are lobbied by pharmaceutical corporations to gain buy-in for new drugs [16]. Public campaigns, such as the "Pink ribbon campaign" or "Shave for the brave," influence the discourse of risk and may propagate fear and anxiety. The individuals experiencing and accessing the discourse of risk through the media then start perceiving themselves as at risk. When promoted by health professionals and pharmaceutical companies, and supported by the mass media, these assumptions are perpetuated, establishing moral imperatives regarding health behavior [5,17].

Market forces have been shaped by, and have capitalized on this popular and professional health consciousness [5,18,19]. Corporations influence the trend of overuse of diagnostic tests through the identification and creation of a need and subsequent marketing of a new drug or technology to meet that need [20-22]. The abundant supply of biomedical technologies to evaluate and manage risk engages individuals with technological choices and options, which are publicized through the media. These technologies are promoted and marketed as part of the package of health behaviours that individuals must undertake in order to take charge of their own health and prevent disease [5]. This influences the culture and discourse of risk in society and contributes to the overuse of diagnostic tests. Overall, corporations are incentivized to identify and create a need in the population, create public awareness about that need, and further fulfill this need with new technologies.

## Conclusion

The *Choosing Wisely* campaign is meant to spur conversation about what is appropriate and necessary treatment, in order for clinicians and patients to work together to determine an appropriate treatment plan [1]. This campaign is certainly a positive movement in Canada; however, it is important to recognize that what leads us as a society to the culture of overuse is quite complex and not merely the result of physician and patient decisions. Recommendations for specific tests fail to account for the broader social, political, and economic contexts shaping health beliefs, values and behaviours on the part of both patients and providers. Here we have discussed how the state, health campaigns, media, and corporations, in addition to physicians and patients, all contribute to the discourse of risk that perpetuates self-regulation and monitoring of individual health. This discourse has manifested itself in increasing demand for diagnostic tests, which has contributed to the trend of unnecessary healthcare use in Canada.

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### Conflits d'intérêts

Aucun à déclarer

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### Conflicts of Interest

None to declare

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