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The use of the concept of vulnerability in public health

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A TOOL FOR ETHICAL REFLECTION

Québec

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FOREWORD

The mission of the Comité d'éthique de santé publique (CESP) is to provide public health authorities and professional staff with an external perspective on the ethical aspects of their actions, with the aim of fostering the explicit integration of the ethical dimension into their practice. The Committee is a reference point for ethical issues in public health, and it helps to raise awareness of these issues. It exercises its mandate in the public interest, with a view to supporting and improving public health practice.

To this end, the Institut national de santé publique's ethics advisory team, which supports the committee, publishes discussion papers and tools to support and improve the way ethical issues are considered in public health action. The themes selected for these publications may emerge from the CESP's deliberations or from the needs expressed by public health actors. They are not linked to specific CESP mandates and are not submitted to its members for approval

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KEY MESSAGES

- Vulnerability is a concept widely used by public health actors to designate the groups or individuals affected by a measure or intervention. However, this concept is broad and can have several meanings.
- Designating a vulnerable group within a population with the aim of protecting it from one or more dangers runs the risk of assigning its members an identity or situation that does not always correspond to their experience. This can have negative consequences for these groups, especially in terms of stigmatization and even discrimination.
- The definition of vulnerability varies and depends on how it is used.
- An exploration of the plurality of definitions and uses of the concept reveals that vulnerability is a complex assembly of context-specific dispositions. It leads to a deconstruction of what lies beneath the label "vulnerable," thus avoiding the potential instrumentalization of the term.
- The use of the concept of vulnerability in the context of the COVID-19 pandemic is an example of how to explore the range of experiences it covers. Faced with the need to control outbreaks, the public health measures put in place to protect the most vulnerable sometimes struggled to achieve their intended objectives. They may have even amplified certain inequities or contributed to the emergence of new ones.
- When planning a public health measure, it is advisable to reflect on the definition of vulnerability in the precise context of its use. For the actors involved, this means taking a concrete look at its various facets, to determine what "being vulnerable" means for this group, in this context. This also means highlighting the values on which public health intervention is based, and how these match those of the groups concerned.
- To help guide this reflection, a practical tool based on an accelerated ethical review process is proposed. It is based on a four-part analysis, each comprising questions to guide reflection and deliberation with the various parties involved in a decision or intervention.

CONTEXT

Vulnerability is a concept that remains poorly defined and widely debated. Its many applications in different contexts and disciplines are constantly transforming its contours and redefining its form. Thus, vulnerability can be seen as immanent to all forms of life, or it can be reduced to a potential risk of being injured or affected in a well-defined context (e.g., the risk of suffering from a respiratory disease in a context of repeated exposure to air pollution). The term *vulnerability* is also used when a person's freedom and autonomy are hampered by a particular living or health condition, or when a person belongs to a segment of the population that is itself considered vulnerable (e.g., minors). In recent years, it has become more common to associate vulnerability with a situation rather than an individual, making it an extrinsic and temporary characteristic rather than an intrinsic and permanent one.

Orientation and objectives of the document

Although several public health tools already exist to assess the vulnerability of groups or populations, they are mainly used to better target social inequalities in health (SIH) or to promote equity in public policies. They don't always take the time to define the concept and identify the potential ethical issues associated with its use.

This document builds on work previously carried out by the ethics advisory team of the Institut national de santé publique du Québec (INSPQ) and several years of discussion and reflection within the Comité d'éthique de santé publique (CESP). It is not intended as an assessment grid or list of criteria for determining the vulnerability of a group or population. Like the tool for reflection "Ethical dimension of stigmatization in public health" (Désy, 2018), this document proposes concrete bases for ethical reflection and dialogue around possible definitions of the notion of vulnerability in public health. Thus, the very use of the word "vulnerability" (or "vulnerable population") in this text is intended to clarify its meaning. Although this term may have been criticized and replaced by others (e.g., "marginalized" or "underserved populations"), it will be used here to question what underlies its definition and the actions that flow from it.

This document has three objectives:

- To bring out the many meanings of the word *vulnerability* in the context of public health action.
- To understand how a reflection on vulnerability and its use in public health fits into a broader ethical reflection on the values mobilized in public health interventions, as well as the prioritization and justification of such interventions.
- To propose a self-supporting ethical analysis tool that can be used and adapted for the development and implementation of a public health intervention.

Methodology

The methodology used in this publication is a narrative, non-exhaustive review of the scientific and grey literature in public health ethics concerning vulnerability. Various concepts have been identified: vulnerability, ethics, public health. These terms were used to explore various scientific databases hosted on the EBSCOHost Research Platform. Articles in English and French were considered, with no restrictions on publication dates. In addition, documents were identified using the Google Scholar search engine.

Structure of the document

The first part of the text provides an overview of the concept's evolution, with a view to defining it for use in public health. The second part of the text is devoted to refining this definition, using the context of the COVID-19 pandemic to highlight specific examples of populations identified as vulnerable by public health authorities.

Finally, a four-part tool for ethical reflection is proposed. The aim of the first two sections is to identify and define the specific conditions of vulnerability of the population targeted by the public health measure or intervention, and to assess the degree of impact of the proposed measure or intervention on these vulnerabilities. The third section will help us continue our reflection and identify the key values in this situation. These values will be used to justify the intervention, as well as to take into account ways of addressing or reducing the potentially negative impact it could have. These aspects are addressed in the fourth section.

1 VULNERABILITY: A MULTIFACETED CONCEPT

This section looks at the definition and evolution of the concept of vulnerability, so as to assess as accurately as possible its relevance, uses, and limitations in the field of public health. It is intended as a rapid theoretical introduction, drawing on philosophy and sociology to slowly define its practical use in relation to the public health mission.

1.1 Defining the concept of vulnerability

The term "vulnerable" is generally defined as "able to be physically or emotionally hurt," or "liable to damage or harm, [especially] from aggression or attack," or again, "exposed or susceptible to a destructive agent or influence etc." (Canadian Oxford Dictionary, 2004). Vulnerability therefore encompasses two elements: an exposure or a deprivation associated with a risk of harm or potential danger. While this individual disposition is common to all humans, it is not equally distributed among them. Thus, vulnerability will vary according to context and individual factors, such as age, illness, or physical or intellectual disability. Vulnerability also depends on sensitivity to adverse events, as well as the way in which each person adapts and rebounds (resilience) in the face of adversity.

1.1.1 In philosophy

The concept of vulnerability has been addressed in various ways in the field of philosophy. It has taken on a prominent role in health philosophy, especially through bioethics. Bioethics aims to clarify or resolve issues raised by the application of scientific advances to human beings. The thinking that follows may be based on principalism, a current that hinges on four major principles: respect for autonomy, beneficence, non-maleficence, and justice. These principles were formulated in the Belmont Report, published in 1979. From this perspective, a human subject becomes vulnerable when his or her autonomy is impeded. Thus, a person qualified as "vulnerable" has lost or is reduced in his or her capacity for free choice. He or she must, therefore, be the object of special consideration and receive, when deemed necessary, adequate protection against abuse, harm, or neglect. Much criticism has been levelled at the idea of the very existence of an autonomous, free, and sovereign being, and the opposition between autonomy and vulnerability on which this principle is based. These reservations have given rise to alternative currents of thought in which vulnerability can be considered apart from this dichotomy.

This includes the ethics of solicitude (or care). According to this theory, vulnerability is based on the idea of a linked being, rather than an autonomous one. Our thinking then turns to the interdependence of individuals in relation to others, and the inequalities this implies. This view of situations of vulnerability emphasizes the moral sense, i.e., the responsibility incumbent on all of us towards others. At the heart of this perspective is the value of social justice, which holds

that a society conceived as an association of perfectly autonomous and equal individuals masks the inevitable relationships of dependence between individuals. From the perspective of the ethics of solicitude, vulnerability is seen as an anthropological concept that redefines human subjectivity, including the call to responsibility that philosopher Frédéric Worms (2012) describes as a constitutive task of humanity. Such a task translates into a twofold concern: that people should support one another, and that the vital needs of the most vulnerable among them should be met through the actions of others.

1.1.2 In sociology

This relational approach to vulnerability offers a critical perspective on certain social policies that aim to remedy vulnerability, but sometimes unwittingly contribute to reinforcing or exacerbating it. In line with the idea of responsibility, the concept of vulnerability can become an indispensable tool for analyzing social and political issues, helping us to better understand how inequalities are rooted in the community. Vulnerability is thus conceived not as a common form of existence, or an immutable precondition of the human being, but rather as a social fact that highlights the effects of social structure on individuals. From a sociological point of view, vulnerability translates into multiple, diverse, and contextualized conditions of existence, inscribed in specific cultural and historical configurations. While it can be based on criteria such as age, gender, social class, or income level, it can never ignore the complexity of the social structures and processes that define these criteria. Assessing this requires an in-depth understanding of the interactions between social groups, and between groups and their environments.

In addition to exposure to risk, social vulnerability also involves dependence on someone other than oneself to eliminate, attenuate, or, on the contrary, realize the risk of being affected. Take the example of a young, educated, healthy man who is forced to leave his country and claim refugee status. Without a full command of the language and customs of the host country, he runs the risk of not being able to communicate adequately with others. Outside of this particular situation, this individual does not belong to a category considered vulnerable (young and male). However, the situation in which he finds himself momentarily redefines his status. Situational vulnerability establishes a dependence on what may or may not be encountered along the way, and on the society that welcomes him, which can either reduce or increase his vulnerability. This dependency thus goes beyond the level of the relationship, but is based on a previously established social configuration.

This definition of vulnerability, which depends on the sociopolitical context and the relationships we have with each other, enables us to better understand, define, and analyze the use of this concept in public health interventions based on the social determinants of health.[1] Above all, it resituates health in its close relationship with the social sphere, since it is on the basis of this crucial link that the notion of vulnerability takes on a predominant role in public health. In recent years, the intersectional approach has been particularly effective in demonstrating how structural factors shape our relationships. By focusing on the way in which multiple identities and inequalities are articulated in terms of the power derived from social interactions, this approach sheds light on the stigmatization and discrimination instituted against certain groups. This perspective pushes us to reflect on the very danger of defining groups for the purpose of intervention. In the same vein, ethical reflection can lead actors to rethink certain interventions and propose new ones that take existing disparities into account, in an attempt to reduce rather than increase the burden of socially or politically "imposed" vulnerabilities.[2]

1.1.3 In public health

In public health, the concept of "vulnerability" is still used to identify populations deemed to be more "at risk" so as to intervene with them in a targeted way or to avoid their stigmatization by certain interventions. This narrow definition is primarily intended to better delineate the responsibility of public health authorities. The use of the concept of vulnerability is then limited to defining people or groups of people who need to be given special attention when planning, devising, and implementing interventions.

Three elements specific to this type of practice dictate this approach:

- Populational responsibility

  Populational responsibility involves maintaining and improving the health and well-being of the population by providing access to a range of health and social services that respond optimally to the needs of the population with regard to each of the social determinants of health.

- Preventive action

  Knowing that healthcare system's resources are limited and that the population's needs for services are growing, public health actors are looking to implement actions upstream of health problems.

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1 The health determinants approach is based on individual, social, economic, and environmental factors that can be linked to a particular health problem or to an overall health status. Online: https://publications.msss.gouv.qc.ca/msss/fichiers/2011/11-202-06.pdf

2 Intersectionality makes it possible to situate systems of domination and power relations at the heart of inequalities. It is grounded in three principles: 1) different oppressions are experienced simultaneously, and cannot be dissociated from one another; 2) systems of oppression feed on and construct one another, while remaining autonomous; and 3) these systems of oppression must be fought simultaneously, and not hierarchically.

- Social justice

  A core value of public health interventions, social justice represents an ideal of equal opportunity. As social inequalities in health limit the achievement of this objective, public health interventions will seek to act on conditions beyond the control of individuals alone, such as environments and structures (informal, legal, social, etc.).

These three pillars of public health justify the need to define the populations to which public health actors have obligations and responsibilities. However, acting equitably means more than simply identifying "vulnerable populations" or "group(s) at risk of stigmatization" in relation to public health interventions or policies. To intervene in an ethically sensitive way, it is essential to understand what is meant by the term "vulnerable," which follows a number of other terms that have fallen into disuse because they have been deemed pejorative, such as "disadvantaged" or "underprivileged" populations. It also raises the question of whether, and on what condition(s), defining vulnerable people or groups on the basis of specific criteria (economic or other) enables us to intervene more effectively with them. Once a risk or hazard has been identified, it makes sense to try to mitigate or eliminate it. This means that simply designating a group is not enough, and should always be accompanied by consequent reflections or actions concerning intervention with this group or these groups.

1.2 From theory to practice

Broadly speaking, if we attempt to define it, the "vulnerable group" category can include people who, because of a situation, a personal characteristic, or their age, cannot fully protect their interests (including their health) themselves, and run the risk of being exposed or affected more than others (e.g., children, the chronically or severely ill, people with cognitive or mental health problems, pregnant women, immigrants, people of low socioeconomic status, and many other groups). This definition is based on the idea of vulnerability as a deviation from what we consider to be the situation of a "normal individual." However, as raised by the ethics of solicitude, this individual exists in a shifting social reality that is difficult to categorize without leading to stereotyping. So, how do we target a priority group or population while avoiding the pitfalls of labelling? How can we take responsibility for what falls to the health authorities, while avoiding the potentially stigmatizing effects that can result?

1.2.1 Breaking free from categorization

These questions remind us that the use of the notion of vulnerability is not only complex, but also risky. Thus, when we attempt to recognize one or more vulnerabilities within a population with the aim of preventing or protecting people from one or more dangers, we may lock the designated groups into an identity or situation that does not correspond to their experience (Numans et al., 2021). In addition to the abusive generalization it represents, this way of doing things can also lead to paternalistic policy responses claiming to remedy this condition

(Butler, 2016; Garrau, 2018). Thus, as Soulet (2005) suggests, the definition of vulnerabilities presents:

> "a sustained interest provided that its use is not limited to universes of material deprivation or non-access to goods or services, that the analysis is not confined to a particular status of proven fragility, or to an essentialization of exposure to risk, thus not making it one of the essential properties of the individual or group in question and not making it an intermediate state between integration and exclusion." [Unofficial translation]

To move away from inescapable, fixed labels, Luna (2014) proposes a conception of vulnerability as being made up of several different layers, which can be acquired and removed, one by one. These layers also interact. This way of perceiving vulnerability leads to a contextualization that can encompass several definitions within itself, and does not force the selection of a single one. Luna suggests analyzing any situation of vulnerability on three levels: the various dispositions to be exposed, injured, or exploited; the conditions that exacerbate these dispositions; and the dispositions or conditions that have a domino or cascading effect. This makes it possible to better understand the full complexity of a situation and its potential vulnerabilities, and to prioritize actions that can reduce risks at the source. This approach is of particular interest when it comes to public health intervention. For example, rather than defining a vulnerable group solely in terms of its economic capacity, the social support offered within the community (e.g., via community organizations or other bodies) will also be explored in order to specify for whom and how the targeted intervention may be beneficial. Luna's approach is also conducive to deeper ethical reflection and analysis, in order to assess more concretely the risk of stigmatization associated with the intervention.

1.2.2 Integrating all the dimensions of a problem

By defining each of the layers of vulnerability acquired, their origin, and the context in which they arose, from the point of view of the different groups, it becomes possible to understand the complex dynamics at play in the apprehension of a problem, avoid aggravating the situation, and perhaps even see emerging courses of action to reduce or eliminate the underlying conditions that may exacerbate the vulnerability of some. What's more, this way of "deconstructing" vulnerability restores people's ability to act by highlighting its potentially temporary or avoidable nature. In a way, it broadens the view of the determining factors, both favourable and unfavourable, to see where the balance is tipped. Lastly, it encourages thinking of vulnerability as multicausal and multidimensional, which will make it possible to build a bridge between the social and health dimensions of a given problem, and it serves as a reminder that being in a precarious social situation creates health fragilities, and vice versa.

This broad understanding of social vulnerability and how it affects people's health can, in turn, lead to greater responsibility on the part of the parties involved. The challenge then becomes not only to identify the contours, evolution, and mechanisms of these vulnerabilities, but also to intervene with public policies that act on them—mitigating them, or at least not amplifying them. Focusing on vulnerability therefore also means looking at the possibility of changing certain living conditions or environments when they are shown to be unfavourable to health.

2 THE COVID-19 PANDEMIC: A COLLECTIVE EXPERIENCE OF VULNERABILITY

> "When you're in the middle of a crisis, like we are now with the coronavirus, it really does … ultimately shine a very bright light on some of the real weaknesses and foibles in our society." (Dr. Anthony Fauci, Director, National Institute of Allergy and Infectious Diseases, White House Coronavirus Task Force [press conference, April 7, 2020]).

The COVID-19 pandemic offers a particularly instructive example of the potential ethical issues involved in using the concept of vulnerability—and especially precise criteria such as age—to establish it. In the context of the pandemic, so-called vulnerable groups were targeted on the basis of a greater risk of morbidity or mortality from the disease, and this definition was accompanied by more restrictive preventive measures, which themselves had negative consequences, such as confining people who were already socially isolated. Although infringements on freedom of movement and autonomy were motivated by the need to protect the health of the groups concerned, they are not justified in all contexts or situations.

2.1 The impact of the health crisis: are we all equal when dealing with a pandemic?

Faced with the constraints imposed by the pandemic, social, environmental, physical, and psychological protective factors such as resilience are unevenly distributed. When the crisis arose, the various social groups within the community were not all equipped in the same way or did not all have the same conditions for exercising their autonomy to be able to comply with the measures put in place. For example, staying at home in a healthy environment is not the same challenge as when the environment is toxic (threatening or restrictive). Boris Cyrulnik speaks of post-pandemic inequalities as going hand in hand with the pre-pandemic distribution of vulnerability and protection factors:

> "Those who, before the crisis, had acquired factors of vulnerability: family abuse, social precarity, poor schooling, a bad job, inadequate housing, all combined… These are the ones who are going to suffer now […] And when the confinement is over, they will be more traumatized than before. So, there's a social inequality that existed before the trauma, which will be further exacerbated." (France Culture, April 9, 2020) [Unofficial translation]

How do these factors play out at the population level? How important will factors such as material insecurity or age be, and above all their cumulative effects and interactions? Studies that have looked at the distribution of cases of infection based on the Material and Social Deprivation Index, for example, show that precarious living conditions in neighbourhoods considered less advantaged are conducive to the spread of the virus (Dasgupta et al., 2020). The various public

health measures (at the provincial or city level, in neighbourhoods, households, etc.) that were implemented across the board have had varying effects over the longer or shorter term. Generally speaking, for people who had previously accumulated several vulnerability factors, the pandemic accentuated the social inequalities they were already facing (Gaynor and Wilson, 2020; Gray et al., 2020, Kim and Bostwick, 2020). Moreover, due to the nature of their jobs or the inferior quality of their housing, compliance with public health measures imposed an additional hardship on some people, often forcing them to circumvent government directives. Finding solutions tailored to the realities of the populations affected by these inequalities is, of course, an essential part of collective crisis management (Comité en prévention et promotion – santé mentale, 2020). However, caution is called for when identifying potential vulnerabilities for certain groups in such a context.

2.2 The risks of categorizing

During the COVID-19 pandemic, a definition of vulnerability based on the criterion of mortality/morbidity risk as a function of age or other risk factors was imposed, and some of the pitfalls previously mentioned could not be avoided, particularly with regard to stigmatization and paternalism. For example, the identification of higher rates of COVID-19 infection for certain groups, particularly according to age, led to generalizations that had an impact on the social life and psychological health of the people concerned. These stigmatizing effects can be just as deleterious as the consequences of the disease itself. The following are a few examples of how the inclusion of a category can entail ethical risks.

2.2.1 Populations aged 70 and over

In Quebec, the aging population is often perceived and presented as an economic, political, and social burden (Makita et al., 2021). In 2020, the awareness generated by the crisis in residential and long-term care centres (CHSLDs) was striking (CSBE, 2022). It adds to the ethical issues that have long been documented in research with people losing their autonomy (e.g., dignity) (Clément et al., 2008).

The report by the Commissaire à la santé et au bien-être (CSBE) entitled *Le devoir de faire autrement* (CSBE, 2022) states that the pandemic revealed and amplified four categories of vulnerability in the ecosystem of care and services for the elderly. First, Quebec was ill-prepared to deal with a pandemic from the point of view of managing the healthcare system in a crisis context. Compounding this was the prior state of the care and services system for the elderly, which was affected by a shortage of personnel, insufficient staff supervision, and a lack of expertise in infection prevention and control. The report also highlights the poor governance of care and services for the elderly and the overall governance of the health and social services system. The impact of the first wave of the pandemic in residential settings could undoubtedly have been different if more attention had been paid to the quality of care and services for the

elderly and to the availability of complete and reliable information concerning this care and services (CSBE, 2021).

A report by the World Health Organization (WHO) reveals, furthermore, that ageism "seeps into many institutions and sectors of society including those providing health and social care, in the workplace, media and the legal system" (WHO, 2021). Ageism can be expressed as the arbitrary rationing of healthcare on the basis of age alone (Lowey, 2021), affecting not only the most elderly, but also affecting, in some cases, younger people. The stereotypes associated with ageism are closely linked to the labelling of older people as a "vulnerable group." During the pandemic, the elderly were portrayed in the media as a homogeneous vulnerable group (Bravo-Segal and Villar, 2020). In a way, categorization promotes these stereotypes, which can lead to increased ageism in general, and also within the healthcare and care system (Langman, 2022).

Furthermore, this kind of amalgam can generate confusion, anxiety, and mistrust among the groups concerned. A Spanish study of seniors aged 60 to 80 showed that when risk was associated with the elderly, negative emotions (e.g., feelings of loneliness and isolation) set in and could be linked to a certain number of deaths (Eiguren et al., 2021). Pre-pandemic studies have also shown that the designation of at-risk groups, in this case seniors, can induce fear or a sense of being a burden on society in people who identify with these groups (Clément et al., 2008). In addition, in the context of a crisis, focusing on the criterion of age creates, for people who do not identify with this group (e.g., young people), a feeling of distance likely to engender a false sense of security and hinder an effective response to the health emergency.

2.2.2 Racialized or migrant populations

The situation faced by racialized or migrant populations is another example that illustrates how it is not enough to name a vulnerability in order to intervene efficiently (usefully and effectively) with targeted populations, but rather to understand the underlying mechanisms. Generally speaking, as with the elderly, racialized or migrant people are more likely to be identified as a "vulnerable group" because of their precarious status or particular background. Here again, the recognition of additional vulnerability for these groups needs to be contextualized and deconstructed to support an intervention or measure adapted to the situation.

A portrait published in August 2020 by the Direction de santé publique (DSP) for the Montreal region speaks volumes about the impact of the COVID-19 pandemic on racialized populations. It shows that there were more cases of COVID-19 in areas of the island with a higher proportion of visible minorities, but also that racialized people were also more likely to suffer the negative socioeconomic effects of the pandemic (DSP-Montréal, 2020). Subsequent analysis of the various factors that explain the higher prevalence of cases and complications has enabled us to understand the underlying socioeconomic roots, including generally poorer living conditions (e.g., overcrowded housing), jobs that increase exposure to the virus or that do not allow people

to take time off from work or work from home, and barriers to accessing services. Several other studies elsewhere in the world have reached similar conclusions (Daras et al., 2021; Islam et al., 2021; Nayak et al., 2020).

However, despite these findings in 2020, by June 2021, the rate of people with COVID-19 (excluding closed living environments) remained approximately 1.6 times higher in the sectors of the island with the highest proportion of people designated as visible minorities (1,145 cases per 100,000 inhabitants), compared with the sectors with the lowest (713 cases per 100,000 inhabitants) (DSP-Montréal, 2021). A major study conducted in 2022 by Statistics Canada also showed that the mortality rate attributable to COVID-19 is highest among black people—more than twice that of non-racialized Canadians (Gupta and Aitken, 2022). For the Canadian population as a whole, these same age-standardized mortality rates were 1.6 times higher for men than for women. Among the male population, black men had the highest mortality rate attributable to COVID-19 (62 deaths per 100,000 population). The results of this study also showed that low-income status increased the risk of mortality attributable to COVID-19 for these populations.

As such, when we deconstruct attributed vulnerability, we find ways of intervening other than by targeting groups and reinforcing protective measures for them. The Canadian study suggests that the mortality rate observed for these populations cannot be levelled out solely by the use of infection control and public health measures targeting racialized populations. As mentioned by several authors, the social and economic factors at the root of disparities (e.g., lower socioeconomic status, less suitable housing, poorer access to healthcare and services) are those on which public health interventions or measures should focus (Williams, Priest, and Anderson, 2016; Khanijahani et al., 2021). What this entails is profound, long-term change, and therefore requires us to think beyond categorization and into the complexity of social realities and their undeniable impact on public health.

2.2.3 A double-edged label

Taking into account the underlying determinants of vulnerability is particularly complex in emergency situations. An exploratory study conducted in 2021 by Romane Pollet among care professionals assigned to the welcoming of migrants in France offers a parallel insight into the different uses made of vulnerability in such a context. Interviews with caregivers highlighted three types of use of vulnerability: an instrumental use to obtain a result (e.g., obtaining a service or funding for the migrant), a managerial use to meet administrative requirements (e.g., a box to tick, criteria to meet), and a "translational" use that enables the creation of a common language between healthcare professionals and social workers working in migrant-aid organizations. For the majority of professionals interviewed for this study, the designation of "vulnerable person" is purely administrative. They describe the use of this label as useful and necessary, since it opens the door to certain services, but is also easily manipulated. For them it is a double-edged sword,

since it can be used both to include the person by offering them a service, and to give them a label that is hard to bear, keeping them on the margins of the host society. Above all, this ambivalent use leads to a moral dilemma for caregivers, since, in their view, genuine consideration of vulnerability relies on the responsibility borne by the profession, a responsibility that is, however, perpetually constrained by the limited resources and expected efficiency of health interventions in times of crisis.

Even if they work on a population rather than an individual scale, public health practitioners can also feel this ethical tug-of-war when they have to design or implement interventions that take account of certain vulnerabilities within the populations concerned. The context of the COVID-19 pandemic demonstrated that, faced with the imperative of controlling outbreaks, the measures put in place with the aim of protecting the most vulnerable contributed to amplifying certain inequities or even adding new inequities to existing ones, significantly affecting people already weakened by other deleterious living conditions (Mondello, 2021). We thus need to understand the complexity behind identified vulnerability so that it becomes a lever for public health action rather than an additional risk factor to be managed.

2.3 Taking into account the prism of vulnerability

In an editorial in the periodical *Anthropology Today*, David Napier stresses the importance of governments properly assessing vulnerabilities before, during, and after a crisis:

> "(…) Because those on the edge of potential hardship can be identified and cared for if we know who they are in advance of destabilizing events; because understanding the actual experiences and local specificities of others often surprisingly made vulnerable during crises can help us allocate limited resources more equitably; and because the memory of the unexpected that social destabilization creates will live on for decades (…)" (Napier, 2020).

Taking into account the social determinants of health from the outset is an integral part of the health response. While risk zones can be determined geographically on the basis of high morbidity and mortality rates, these zones are from the outset shaped by social factors (e.g., housing, income, age, or ethnicity) that influence health status. Anthropologists Hannah Brown and Ann Kelly have demonstrated within the context of the Ebola virus epidemic that a broader understanding, particularly social and cultural, of "at-risk" spaces (hotspots), during and apart from the epidemic situation, makes it possible to go beyond views focused on disease prevalence and individual behaviour (Brown and Kelly, 2014). As mentioned earlier, studies conducted in the wake of the COVID-19 pandemic also seem to indicate that attention should not be focused solely on the number of cases and hospitalizations, but also on the economic fragility, political marginalization, food insecurity, and lack of services that prevail even before the increase in deaths. Such a perspective allows us to better understand vulnerability, so as to reduce the risk of certain groups being further penalized and social inequalities increasing.

Looking at specific populations or groups must be accompanied by reflection and multiple angles of analysis, notably ethical. Ultimately, public health interventions will be more likely to build trust and promote solidarity within society by recognizing and using local models and by integrating stakeholder values and accurate data on social inequalities. In this way, the attention paid not only to identifying, but also to better defining, the contours of a reality can contribute to restoring visibility in a positive way to so-called vulnerable groups, as well as reducing generalizations or discourses that may be harmful to them.

What's more, this way of "deconstructing" vulnerability restores people's ability to act, by highlighting its potentially temporary or avoidable nature. Ethical reflection, highlighting the shared values on which public health action is based, can thus help to establish the conditions under which the notion of vulnerability is invested with meaning and becomes a lever. Thus, the integration of complex social and political realities into the very definition of vulnerability in public health makes it possible not only to observe inequities, but above all to contribute to the recognition of the capacities for resistance and action on the part of groups or populations to curb them (Knüfer, 2021).

3 ETHICAL ANALYSIS OF THE USE OF VULNERABILITY

As people's vulnerability is not static, it evolves in tandem with the policies likely to create, increase, or reduce it. Recognition of a situation of vulnerability can therefore represent a field of intervention in its own right for public health actors and, above all, be an object of mobilization by and for the groups or populations themselves. Prioritizing one or more groups is nevertheless an arduous exercise when several needs are identified simultaneously and the resources to meet them are limited. Allocating and distributing resources not only poses a challenge for the actors involved, but also generates moral or ethical dilemmas regarding the choices to be made.

3.1 The four-part thought process

Further reflection on the definition of vulnerability involves creating a space for questioning what it means to be "vulnerable" in the specific context of public health interventions. In an effort to open up this space for reflection and dialogue, we propose a tool for ethical analysis adapted to the complexity of the issues at stake. It is based on a four-part analysis, each part consisting of a set of questions to guide reflection with the group in question and the population concerned by the public health action. The aim is to be able to justify the merits of the planned measure or intervention and better anticipate its various effects, including possible negative consequences for certain individuals or groups. Without tackling it head on, this reflection is also part of the broader issue of prioritizing actions in public health, which is extremely fertile and complex (Nielsen, 2020).

The first part of the analysis involves identifying and clarifying what it means to be a vulnerable group or population in the situation in question. For example, are children, seniors, or racialized populations considered vulnerable groups? If so, does this mean that all children, seniors, and racialized populations are equally vulnerable? What makes these groups vulnerable? For example, do they have limited access to educational, food, social, health, or financial resources? It's important to remember that groups are rarely homogeneous, and that it is generally advisable to break them down to better understand the diversity of situations.

The second part aims to specify the type of intervention best suited to the situation of vulnerability identified in the first part. For example, will we decide to implement a public health measure while taking care to avoid exacerbating an identified vulnerability? Do we want to more directly seek to reduce vulnerability by modifying the environment (e.g., social, economic, political, physical) of a particular group or population? By specifying the logic of action of a measure or intervention, we are better able to assess its potential impact on the identified vulnerability or vulnerabilities. In so doing, it is important to broaden the analysis in order to better apprehend the incidental consequences that could arise through superimposed or

indirect effects. Are such consequences favourable or, on the contrary, do they risk increasing vulnerability?

The third part calls for the recognition and prioritization of the values at stake in the public health intervention being considered, whether they be, for example, beneficence, non-maleficence, solidarity, autonomy, efficiency, or usefulness (Filiatrault et al., 2015). Far from being confined to theoretical reflection, this step is based on the importance of getting to know or talking to the group or population targeted by an intervention, to ensure that the values underlying the intervention are as closely aligned as possible with their own, or at least do not clash with them. This part also enables us to assess the ins and outs of the intervention in terms of the pillars of public health: populational responsibility, prevention, and the key value of social justice.

The fourth part consists of ranking the values that are deemed to be priorities and shared in order to select one (or two) to put forward in the context of the intervention in question. This choice will influence and justify the means used to intervene in an ethically sensitive way. Specific methods or ways of doing things may emerge from the findings of the previous parts. In this final stage, the detailed analysis of vulnerability is integrated more concretely into public health action.

3.2 The practical tool

The grid below suggests questions relating to these four areas of analysis in a practical format. It draws heavily on the ethical review process used by the CESP (Filiatrault et al., 2017). Public health professionals can use it to shed light on any situation involving ethical issues related to the definition and use of vulnerability, and to justify the actions they agree to take.

The strength of the proposed process lies in the fact that it unfolds through deliberation. It is therefore advisable to set up a small group of no more than five to ten people, to encourage open and inclusive dialogue. The people in this group will ideally have scientific and experiential skills and knowledge in complementary fields. The aim is to allow the free expression of diverse points of view. Based on a real or fictitious situation rooted in a specific context, the aim is to deliberate by following the four suggested steps.

The proposed framework offers guidelines for reflection, but is not intended to be set in stone. It is important to note that the sequence of analysis is not necessarily linear and that the phases are not watertight. During deliberations, it may therefore be useful to go back over the previous steps to ensure that everyone understands them correctly. It is also possible to skip some of the steps if needed. During the last two, complementary tools can be employed, notably the Framework of values to support ethical analysis of public health actions (Filiatrault et al., 2015). Lastly, it should be remembered that analyzing a situation of vulnerability in all its complexity is

an unsettling process that can reveal stereotypes or prejudices about certain populations or groups. This requires a great deal of humility and openness. The integration of participatory approaches into public health action represents a privileged means of embodying these values, while promoting transparency in the thinking and actions undertaken and increasing trust within the population.

To help you familiarize yourself with the proposed tool, it may be useful to give a quick demonstration of the reflexive process it enables. Let us take the example already cited of the following finding: there is a higher mortality/morbidity rate in the population aged 70 and over that is infected with the COVID-19 virus. Given the particular vulnerability of this group, the actors involved want to think about developing targeted measures to reduce their susceptibility to infection. As a first step, the discussion between actors could focus on bringing out the different perceptions of the vulnerability of people aged 70 and over to the virus. At first glance, various characteristic elements of this group could emerge, such as their more delicate immune system, their physical fragility, the higher pre-existence of chronic diseases, but also living conditions in communities conducive to outbreaks (RPAs, CHSLDs), etc. This type of discussion opens the door to a portrait of the reality of the population concerned, which should ideally highlight not only risk factors (e.g., higher prevalence of chronic disease), but also protective factors (e.g., one's social network, access to services). This will highlight the underlying living conditions that create or accentuate vulnerability, illustrate the heterogeneity of situations, and explain the role played by certain social determinants (e.g., housing).

Once these determining factors have been clarified, the various actors will be able to plan preventive measures which, in addition to limiting infections, can help maintain or even improve people's general living conditions. An examination of the values involved—in particular **beneficence**, **solidarity**, and **non-maleficence**—could make it possible to prioritize one or the other in order to justify the broadest-spectrum measure, i.e., one that will offer the group in question the opportunity to maximize the benefits of the intervention while minimizing the harm that may be associated with it. For example, non-maleficence could be defined as not contributing to the accentuation of ageism through measures targeting the elderly as a monolithic block of vulnerable people. To avoid the detrimental effect of such a label, measures should minimize the importance of age as a criterion and be based on relevant risk factors (e.g., the existence of comorbidities). Furthermore, coordinated actions in line with a shared desire to act on living conditions that improve seniors' health, as set out in the government's Plan d'action gouvernemental pour contrer la maltraitance envers les personnes aînées (MSSS, 2021), could help to achieve the values of beneficence and solidarity.

Grid for ethical reflection on vulnerability

Part 1: Defining the vulnerability or vulnerabilities

- Who are the groups considered vulnerable that are affected by the measure or intervention?
- How would you describe the vulnerability or vulnerabilities identified? Are they linked to any risk factors? Are there any protective factors? What social determinants are associated with these risk and protective factors?
- Are there cumulative risk factors for certain groups?

Part 2: Defining the degree of impact

Is the planned intervention designed to target the group(s) identified in **Part 1**?

If yes:

- Will the measure or intervention act on the risk/protective factors or on the social determinants linked to vulnerability? How?
- Could the measure or intervention help reduce the vulnerability of this (or these) group(s)?
- How will the impact of the measure or intervention on the vulnerability of the target group(s) be assessed?
- Could other, non-targeted groups be adversely affected? How can this be avoided?

If no:

- How are the groups in question factored into the design and implementation of the measure or intervention?
- Are there any actions that could be taken to address some of the particularities identified in **Part 1**?

Part 3: Defining the values at stake

Based on the Framework of values to support ethical analysis of public health actions (Filiatrault et al., 2015):

- What values are at stake in this public health intervention (beneficence, non-maleficence, equity, solidarity, etc.)? What values does public health embody? What are the values of the group(s) identified in **Part 1**? For the general population? What are the shared values?
- What values should be prioritized? Are these values in line with those favoured by the group(s) identified in **Part 1**?

Part 4: Define priority values and justify intervention

- How is the intervention justified in terms of the prioritized values?
- What measures have been taken to promote the inclusion, collaboration, and concrete involvement of the groups identified in **Part 1**? How did we ensure that the prioritized values are shared?
- What means or mitigation measures have been put in place to avoid stigmatization or any other disadvantage resulting from the non-fulfillment of important values?

4 CONCLUSION

As part of a set of key public health values, the various uses of the concept of vulnerability make it clear that its consideration is not limited to the identification of at-risk groups. It requires, among other things, a constantly renewed assessment of the potential harm that can result from the words we use and the actions we choose to implement. It also involves integrating the experience of the people targeted by the intervention, right from the start.

Thus, the measures or public policies that will be prioritized will have to be based on a detailed analysis of the complexity of the population in question and the values that drive the different groups within it. Assigning criteria, categories, or labels to target specific groups for public health intervention is fraught with pitfalls, not least of which is the risk of sidelining ethical reflection. Whether the aim is to prevent disease, protect the health of certain groups, or support them in a difficult social situation, it's a question of bringing to the fore the ethical, equity, and social justice issues that underlie the term "vulnerable group."

In this respect, the proposed tool outlines a number of guidelines to help public health actors in their reflexive process. Through the range of questions it raises, the tool aims to restore meaning and complexity to this concept, the analysis of which is rich and relevant for guiding public health interventions.

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