CHAPTER 2

Health Concepts in Medicine

2.1 Introduction

What is health? This book addresses this fundamental question by narrowing the focus to contemporary medicine, specifically Western biomedicine or mainstream medicine.[1] This chapter and the next one introduce the strategy: to understand what health is, we need to analyze health concepts. The health concepts we will discuss and evaluate throughout the book are the statements found in regulatory documents of the medical and healthcare community, or the operational definitions found in research protocols and scientific articles. We will see throughout the book that each concept of health is a theoretical tool designed to serve specific goals.

We start by acknowledging the existence of different concepts of health, such as the WHO definition or health as the capacity for adaptation and self-management. Additionally, there are health-related concepts like quality of life or subjective and social well-being. When discussing these collectively, I will use the term "health concepts."

The chapter briefly outlines the functions of health concepts and why they were gradually introduced several decades ago. The chapter then

[1] Throughout this book, I will primarily discuss Western medicine, also referred to as mainstream medicine or the biomedical paradigm, unless otherwise specified. This narrow focus is not based on a value judgment but rather reflects the limits of my expertise in other medical and philosophical traditions.

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presents the main families of health concepts and provides an overview of the main constructs and measures associated with each of them. The subsequent chapters will analyze and evaluate health concepts in detail; for now, the goal is simply to recognize their diversity.

Some authors argue that today's medicine faces a "Babel of health," a situation where there is a disadvantageous lack of mutual understanding. This chapter examines that claim and introduces the question: how should we navigate a Babel of health concepts and measures? In philosophy of science, two major theoretical positions typically emerge in such situations: pluralism (accepting the existence of many different concepts) and monism (reducing them to one). The approach supported in this book is that before we choose a side, we need to adopt a suitable methodological framework. The chapter concludes by presenting the methodological framework that I believe is essential for addressing this question. This involves a type of conceptual analysis that I call "conceptual choice," which we will explore in detail in the next chapter.

2.2 Functions of Health Concepts in Medicine

Since the 1950s, several health-related concepts—such as health, well-being, and quality of life—have been developed and applied in the medical and healthcare fields. The development of health concepts addresses three main demands or macro-objectives. One is to create increasingly comprehensive models of people's medically relevant conditions that encompass not only pathology but also relationships, spirituality, environment, socio-economic status, and other factors. The ways in which an individual lives, the diseases they get, and their level of happiness are all influenced by their income, social networks, employment, gender, and ethnicity. Statistics show that poverty and prejudice, while indirectly, cause people to die younger. The idea here is that with a wide definition of health, one may capture this crucial information (Marmot & Wilkinson, 2005).

The second important function of concepts and measures of health in medicine is to assess the influence of intervention or disease on non-medical aspects of people's life, both in research and in clinical contexts. In the second half of last century, particularly with advancements in chronic disease management and palliative care, researchers and clinicians began to recognize that traditional health metrics, which measured disease parameters, did not capture the patient's experience and the broader impact of medical interventions on daily life (Cella, 1994). With this

function, the term "quality of life" and associated constructs gained prominence. In the case of a novel anti-tumor medication, for instance, a clinical trial now will be designed to assess not just how well the medication lowers the disease (efficacy in lab and effectiveness in the real world) but also whether or not it improves or rather burdens the patient's life in areas unrelated to the disease (Brock, 1993).

With health concepts associated with measures, the perspective of the person in care can be integrated in the methodological paradigm of evidence-based medicine (EBM). This is the system of rules for study design and for the ranking of evidence that structures contemporary medical research and practice (Guyatt et al., 2008; Howick, 2011). Now the EBM paradigm uses the acronym POEM (patient-oriented evidence that matters) to indicate research findings that have the potential to change clinical practice because they address issues that patients care about, such as mortality or pain remission, to be added to the research findings that address features of the disease only. For instance, vitamin E lowers and prevents platelet aggregation (disease-oriented evidence) but has a neutral or even harmful effect on cardiovascular mortality (patient-oriented evidence) (The HOPE and HOPE-TOO Trial Investigators, 2005). POEMS are strongly recommended and some medical journals regularly publish selections of best POEM articles; they often include health measures (Smith, 2002). Likewise, PROMs is the acronym for patient-reported outcome measures, questionnaires aimed to capture the way patients feel or function with a disease or with an intervention (Rothman et al., 2009). Guidelines for PROMs, as well as philosophers of science, recommend that they are devised and validated with input from the patient population they are intended for (McClimans, 2024).

On a broad level, clinical medicine, the introduction of health concepts reflects the ongoing shift toward the patient's point of view.[2] Traditionally, medical practice placed the physician's expertise at the center, with patients expected to follow medical advice without much input. Patient rights movements of the 1960s and 1970s, along with increasing awareness of

[2] The term "patient" is becoming increasingly outdated in the social sciences and humanities, as the individual is now seen as an active participant in their relationship with healthcare professionals. Terms like "healthcare user" or "person in care" are often preferred. However, "patient" is still commonly used in medical research literature. In this context, I will use the term "patient" as it is employed in legal and official documents from the European Commission and other regulatory authorities, particularly when discussing "patients' rights" or the ways in which patients participate in healthcare.

medical ethics, brought about a shift toward valuing the perspectives and autonomy of persons in care. Health concepts, constructs, and measures can be used as tools for including patients' own values, preferences, and life contexts to their care (Adamson, 2019). Most clinical trials today include assessments of health and quality of life as secondary outcomes, reflecting a growing recognition of their importance alongside primary clinical endpoints (Staquet et al., 1996). A medical field where health concepts, and especially quality of life, are central is palliative care, where improving the patient's quality of life is not just important but the very aim of medical intervention (Davis & Hui, 2017). Patient perspectives and health measures are also fundamental to health services research. This is the multidisciplinary field that studies how healthcare is accessed, the quality and cost of care, and the outcomes of health services for individuals and populations. It aims to identify the most effective ways to organize, manage, finance, and deliver high-quality care, reduce medical errors, and improve patient safety (Bowling, 2014).

It should be noted at this point that some contemporary philosophers argue that all medical health concepts, including health-related quality of life, inevitably fall short in this regard. This is because they provide objective data through standardized questionnaires, failing to capture the subjective experience of illness and the individual's personal narrative. More broadly, the claim is that neglecting to validate the subjective experience of illness as expressed by the patient in their own terms constitutes an act of epistemic injustice within medicine. This not only inflicts ethical harm on the individual but also undermines the pursuit of knowledge (Carel & Kidd, 2014). In light of this, we need to remember that while medicine employs various health concepts and measures in research and clinical practice, these are just one of the many possible approaches to understanding and incorporating the perspective of the person being cared for.[3]

Returning to our primary discussion on the central roles of health concepts in contemporary medicine, a third category encompasses their application in epidemiology, public health, and health economics. In these fields, health concepts serve critical purposes, including comparing health

[3] Leah McClimans (2024) also offers a compelling radical critique of standardized PROMs in medicine, based on different grounds than the epistemic injustice complaint, but still centered on prioritizing inclusion. As her book was published when this volume was already nearly completed, I cannot fully do justice to her complex perspective here. However, some discussion of the tension between the goal of standardization and the goal of inclusion can be found in Chap. 8.

outcomes across and within populations, assessing the various causes of ill-health, and evaluating the effectiveness of public health policies (Hausman, 2015). The first one involves using health concepts and associated measures to compare population health across different regions or time periods. For instance, an often-cited study found out that the US population in late middle age is less healthy than the equivalent British population (Banks et al., 2006). These comparisons can reveal new research questions and also highlight health inequalities that may indicate social injustices. For example, investigating the health of disadvantaged minorities can clarify the extent of health disparities and guide policies aimed at reducing these inequities. A recent review shows that migrants and refugees in Europe have a lower health status than born Europeans, even in countries where healthcare is free for all (Lebano et al., 2020).

The second key function of health concepts and measures in epidemiology is to evaluate the impact of various factors (determinants) in overall population health. This includes quantifying the effects of nonfatal conditions, informing health service priorities, and guiding research and development in the health sector. Understanding the causes of good and bad health is crucial, even though resources may be limited to address all health issues. The COVID-19 pandemic has sparked numerous studies that utilize health concepts in this function. For instance, researchers have investigated the impact of school closures on children's health (Chaabane et al., 2021).

Finally, health concepts are needed for assessing effectiveness of health policies by analyzing their outcomes and informing debates on health service delivery. How many years of disease-free or "good" condition does this new drug provide to the population it is intended for? How much health benefit may be realized by investing in an informative campaign promoting papillomavirus vaccine rather than herpes zoster vaccine (Hall, 2020)?

The economic evaluation of medical interventions, too, became increasingly important in the latter half of the twentieth century. With rising healthcare costs and limited resources, societies are now in need to assess the value of medical treatments in terms of cost-effectiveness and economic impact. Health economics emerged as a field that uses tools such as cost-benefit analysis, cost-effectiveness analysis, and cost-utility analysis to evaluate medical interventions. Concepts like healthcare quality are also introduced in this context (Bowling, 2014). This does not mean that the value of health is now determined solely by money, in the broad sense.

Ethical considerations also play a significant role at various levels. Cost-efficiency is necessary, but not sufficient, for the overall evaluation that should guide allocation policies—a delicate political and philosophical issue (Hausman, 2006).

In summary, in medicine, concepts of health and related health concepts were introduced to serve various functions, each tailored to different fields, ranging from clinical research to public health and healthcare studies. Some of these functions are closely tied to quantitative measurement, while others are less so.

2.3 Health and the Goal of Medicine

Beyond the practical and societal needs that justify the introduction of health concepts in medicine, there are three additional reasons. They are philosophical, in that they involve medicine's reflection on itself. The first reason pertains to the philosophical inquiry into the goal of medicine. If we assume that the primary purpose of medicine is to restore, promote, or preserve people's health, then by clarifying what health is, we will have clarified the primary purpose of medicine (Ananth, 2017; Mordacci, 1995; Nordenfelt, 1993; Varga, 2024).

A short digression is in place here, to prevent a plausible objection from non-philosophically trained readers. To ask what the sole goal of medicine might seem arrogant or naive, or both. After all, medicine deals with a wide range of activities: childbirth, palliative care, bone prosthetics, cancer theragnostic, seasonal allergies, protruding ears, gambling addiction, athlete muscle efficiency, measles outbreaks, infection prediction, school cafeteria hygiene, alopecia, and fall prevention in the elderly, to name a few. Scientific and professional medical associations usually provide lists of medicine's purposes on their websites or in editorials and opinion articles (Callahan, 1999). Why trying to find the one goal, then?

The philosophical reply is that these lists can be questioned: How were they compiled? Are they truly comprehensive? Why is something missing? A list of elements presented as an answer to the question "what is x?" always needs justification. And if there's justification for the list (e.g., all activities are connected to preventing, maintaining, or restoring people's health), then there's a single answer to the question of medicine's purpose. This is the philosophical move: seeking what the elements of various medical activity lists have in common and abstract out the most plausible candidate answer (Broadbent, 2019b). One might argue that medical

activities have nothing in common: the purpose of medicine is everything doctors do (legally and ethically, within the profession). But this, too, is an answer, even if a deflationary one (i.e., it downplays the importance of the question).

Apologies for the digression; back to the main point. The medical scientific community often considers the goal of medicine because it helps direct research and care (Becker & Rhynders, 2012). For instance, a farsighted 2004 article in *The American Journal of Medicine* (*JAMA*) suggested shifting from solely curing diseases to also focusing on caring for individual patients, respecting their trade-offs between clinical outcomes (e.g., improved knee function) and life preferences (e.g., being a ski instructor living in an Alpine hut versus being a retired translator living in a suburban neighborhood with a car at the door) (Tinetti & Fried, 2004). The proposal of the article is that care should be understood not necessarily as eliminating or even attenuating disease but as controlling symptoms for the person's benefit. Many diseases, such as pancreatic cancer or schizophrenia, cannot currently be cured but can be controlled, making symptoms as compatible as possible with a good quality of life. In pancreatic cancer, control is about speed: success is achieved when the progression of cancer is slowed. This is considered a success because it allows the person to have a relatively good life for a longer period. So, why not say that the purpose of medicine is not to cure but to preserve or restore people's health, understood as well-being or the ability to act (Rueda et al., 2021)? This idea has been recently defended in philosophy by Sámogy Varga. For Varga, health involves the ability to act and personal autonomy (Varga, 2024). Here, however, I do not intend to discuss Varga's position; my aim was to show that the choice of a health concept can be brought to bear on what medicine should do, via the assumption that the primary goal of medicine involves health.

A second crucial debate that requires clarity on the concept of health is the discussion on models of healthcare. Philosophical theories of distributive justice argue that health is a matter of fair equality of opportunity. According to some scholars, ensuring that everyone has access to the necessary conditions for health is a moral imperative (Daniels, 2007). Based on these premises (or any premise that includes the universal right to health), it becomes essential to clearly define what health is (Schwartz, 2014).

A third and final crucial medico-philosophical issue is that, with a health definition in place, we are in a position to distinguish between treatments and enhancements, or, alternatively, to conclude that there is no

principled difference at all. Treatments are interventions aimed at restoring health and/or normal functioning, while enhancements are interventions that improve or augment a person's abilities beyond typical levels of health or functioning, in view of a better life. These may include cognitive boosters, physical performance enhancers, or cosmetic procedures that go beyond restoring previous or normal appearance and function (Bostrom & Roache, 2008). Understanding what qualifies as treatment versus enhancement helps in making ethical decisions about the allocation of medical resources. Treatments are generally prioritized over enhancements in healthcare systems because they address more immediate and necessary health concerns. Likewise, in medical research, distinguishing between treatments and enhancements matters for setting research priorities and allocating funding (Hofmann, 2017). However, if one adopts a broad concept of health—one that includes components such as well-being, achievement, or satisfaction—the distinction between treatments and enhancements may blur, along with the ethical and practical prioritization of certain medical interventions over others (Savulescu, 2006).

To sum up, there are good reasons to have concepts of health in medical research and healthcare. Well-defined health concepts, coupled with appropriate constructs and measurement scales (which we will discuss in Sect. 2.5), serve as valuable tools.

2.4 Families of Health Concepts

In this section, I introduce the main concepts of health discussed and used in medicine today. Each of these will be the focus of one of the upcoming chapters, so the discussion here will necessarily be brief. The aim is to show the variety of concepts, not the details of each of them.

Review articles in medical literature typically identify four primary families of concepts of health: health as no disease, health as well-being, health as ability or capability, and health as adaptation or resilience (Badash et al., 2017; Bodryzlova & Moullec, 2023; Leonardi, 2018; Larson, 1999) (Locker & Gibson, 2006). The no-disease concept is the most fundamental definition of health, closely linked to the biomedical model of care. It is a negative concept, meaning that it defines health simply as the absence of disease, without incorporating any additional components. Despite frequent criticisms for its narrow scope, this definition remains valuable in clinical research, epidemiology, public health, and health economics because of its ease of measurement (Hafen, 2016; Hausman, 2006). This

concept was pivotal in the development of scientific medicine and marked a shift away from the traditional view of the clinic as the art of healing individual cases, a topic we will explore further in the next chapter. Moreover, it aligns with the political goal of advocating for health as a universal right and supports the campaign for universal healthcare systems (Daniels, 2007). In the philosophy of medicine, Christopher Boorse has notably defended a version of this concept, known as the "pathologist's concept of health," against more complex and positive definitions (Boorse, 1977, 1997, 2014). Chapter 4 will be dedicated to health as no disease.

At the opposite end of the spectrum of complexity is the well-being family, with the WHO's definition of health, proposed in 1948, as its most prominent representative (World Health Organization, 2020). The WHO defines health as complete psychological, social, and spiritual well-being; it extends beyond medicine, influencing health marketing and public perceptions of health. Despite its widespread popularity, it has faced significant criticism for being an unattainable ideal, vague, difficult to operationalize, and inappropriate for elderly or chronically ill populations. Critics argue it medicalizes all aspects of life by linking happiness and a good life directly with health (BMJ, 2008; Callahan, 1973; Saracci, 2023). However, in post-World War II, this concept of health allowed the WHO to address broader issues like poverty and education, extending its influence beyond traditional medical spheres (Larsen, 2022; Schramme, 2023). The idea that this concept is the most effective means of addressing social determinants of health still has its advocates (Valles, 2018). We will discuss health as well-being in Chap. 7.

The third family of concepts of health focuses on abilities. An influential proposal by Dutch healthcare professionals in 2011, led by Machteld Huber, defines health as the ability to adapt and manage oneself in the face of social, physical, and emotional challenges. This inclusive concept—discussed in Chap. 5—allows even elderly individuals and those with chronic illnesses to be considered healthy if they can function in everyday life (Huber, 2014; Huber et al., 2011, 2016). In philosophy, Lennart Nordenfelt has defended a concept of health as ability over the years; health is defined as the ability to achieve one's vital goals (Nordenfelt, 1995). This definition differs from that of Huber and colleagues, as it characterizes health as a second-order ability—the ability to have the first-order abilities necessary to reach vital goals (better called "capability"). This implies that the concept of health has, so to speak, gaps that need to be filled by specifying the vital goals themselves; as Nordenfelt admits, this

is not an easy task (Nordenfelt, 2018). Ethicist Sridhar Venkatapuram connects health with the capability approach in political philosophy, as articulated by Amartya Sen and Martha Nussbaum (Nussbaum, 2009; Sen, 2005), and defines health as the capability to achieve a cluster of basic abilities to be and do things that reflect a life of human dignity. These include personal biological features, external social and physical conditions, and personal behaviors (Venkatapuram, 2013). Other philosophers have defined health in terms of ability to act (Fulford & Fulford, 1989) or to be an autonomous agent (Varga, 2024).

The final family of health concepts emphasizes environment and balance. This is a rather diverse and multifaceted group of concepts, connected more by family resemblances than by a shared, unified definition, as we will see in Chap. 6. According to one view, health is the organism's ability to maintain equilibrium with its surroundings, both social and natural. An organism is deemed healthy if it can grow, function, and flourish in its environment, while illness is seen as a temporary disruption (Lancet, 2009; Menatti et al., 2022). This perspective echoes the insights of French philosopher Georges Canguilhem, who posited that pathology is merely a contingent obstacle to health, and individuals with pathologies can achieve and maintain balance in appropriate environments (Horton, 1995). Historically, concepts of health as balance (*isonomia*) date back to Alcmeon of Croton (c.a.600 BC) and were later adopted by Hippocrates and his followers (Mackinney, 2022). The One Health model of health, which integrates human, animal, and environmental health, which integrates human, animal, and environmental health, is also part of this family because it emphasizes the interconnectedness of organisms and their ecosystems. It underscores the balance required between humans, animals, and the environment for maintaining health. It gained traction during the COVID-19 pandemic due to the zoonotic nature of the virus (Panel OHHLEP et al., 2022).

2.5 Health Problems for Philosophers Only

The concepts of health as complete well-being and of health as capacity share a significant commonality: both define health through other concepts that inherently express positive values. Well-being, or a good life, is something we naturally aspire to and pursue because it is intrinsically good; similarly, the capacity to act is closely linked to the values of personal autonomy and human dignity. Since well-being, autonomy, and dignity

are considered "thick" concepts—meaning they simultaneously describe and evaluate—the concept of health, when defined by these terms, also becomes evaluative rather than merely descriptive (Eklund, 2011; Väyrynen, 2021). These definitions of health as complete well-being and health as capacity directly reflect the intuition that health is something we inherently value (Nordenfelt, 1995). They define health in terms of elements that we already regard positively, thus making the normativity of health explicit. In contrast, the concept of health as the absence of disease does not directly convey why health is desirable or good (Boorse, 1977). On the contrary, the fourth family of health concepts, centered on balance, does not explicitly include evaluative (normative) components, although clarifying its various formulations is more complex, as we will see in Chap. 6.

This distinction between health concepts that directly convey their normative value and those from which the value of health must be inferred is crucial in philosophy—even too much (Amoretti & Lalumera, 2021). The philosophical debate on health has long been polarized around two dimensions: objectivity and normativity. Philosophers have extensively debated whether health is an objective concept, grounded in biological facts and free from human values (Boorse, 1997), or a normative one, inherently tied to human interests and evaluative judgments (Cooper, 2002; Wakefield, 1992). Alex Broadbent critiques this way of framing the polarization, arguing that objectivity and normativity are orthogonal dimensions. Concepts (or properties) of health can combine these traits in various ways—for example, being both normative and objective (as in: torture is objectively bad) or non-normative and subjective (like red or cold) (Broadbent, 2019a, pp. 93–100).

However, the focus on objectivity and/or normativity has led philosophers to largely neglect the task of critically evaluating the different families of health concepts that medicine has produced.[4] Questions such as the coherence of these concepts, their alignment with medical objectives, or their ethical and social consequences have been sidelined. Philosophers of medicine have preoccupied themselves with one philosophical problem about health—whether it is normative or objective—but not with the philosophical problem that medicine grapples with: How best to define and measure health, how complex the concept should be, and which components it ought to include? This is akin to arguing over whether a measuring

[4] Notable recent exceptions are Schramme (2023; van der Linden & Schermer 2024).

instrument should be owned or borrowed while leaving its functionality and reliability untested. By focusing narrowly on one question, the debate has often failed to engage with the practical and ethical challenges posed by health as a medical and societal concern. In the next chapters, while discussing specific health concepts, we will see instances of the misalignment.

Another reason for the misalignment between philosophical and medical debates on health concepts stems from the conflation of discussions about disease with those about health.

After presenting the families of health concepts in medicine, this short detour into the philosophical debate was necessary to situate our concerns within a broader intellectual map. While the philosophical debate offers valuable insights, it is not the focus of this book. Our primary aim is to examine the variety of health concepts that medicine has produced, evaluating their coherence, objectives, and implications. Let us now return to exploring the rich and diverse landscape of health concepts as they are understood and applied in medical practice.

2.6 Constructs and Measures of Health

Following a schematization offered by Anna Alexandrova in her work on well-being, we may state that a general concept of health, such as the WHO's definition of health as well-being, can correspond to (or "justify" in her terms) different mid-level constructs, such as subjective well-being or social well-being (Alexandrova, 2017). In research, constructs are used to refer to something not directly observable, such as bone fragility, hunger, or corruption. More technically, a construct is described as the "well-defined and precisely delineated subject of measurement" (de Vet et al., 2011). It should be clearly defined in advance and tailored specifically to the intended function of the instrument being used. Specific aspects or components of a broader construct are called "dimensions." For example, in the context of health-related quality of life for individuals with diabetes, dimensions might include fatigue, reduced participation in daily activities, or changes in family roles. In the field of healthcare measurement science, "multidimensionality" means that many health constructs are too complex to be fully captured by a single, unidimensional measure. Instead, multiple dimensions are often necessary to provide a comprehensive assessment of the construct in question (Swan et al., 2023). Health-related constructs provide a bridge between abstract concepts and practical

measurement, guiding how we interpret different components of health such as emotional well-being or functional capability.

Measures of health are the concrete tools and instruments developed to assess these constructs, such as surveys, questionnaires, diagnostic tests, and observational checklists. They differ in the aspects of reality they include to capture the concept of health—in technical terms domains, dimensions, indicators, or, more generally, attributes. These may be broad and abstract, such as independence or happiness, or they may refer to very specific and concrete indicators, such as visual ability or the detailed ability to open a can. Health measures must be valid and reliable to accurately reflect the underlying constructs and, by extension, the broader concept of health (Cronbach & Meehl, 1955; Krabbe, 2016). It is worth noting that according to philosopher of science Leah McClimans, the whole world of measurement in medicine—not just health measures—is a "black box" for philosophers, meaning that it is taken for granted and seldom if ever opened for investigation (McClimans, 2017, 2024) (we will discuss this in Chap. 8).

The plurality of general concepts of health just surveyed is reflected in the variety of constructs and measures used to assess health. In this long section, we will review some of them. We begin with the constructs associated with the concept of health as the absence of disease. Essentially, to assess and measure health in this context, the focus is on testing and diagnosing diseases. Health is then inferred from the absence of these diseases. This means that all diagnostic constructs, as well as laboratory tests, imaging, and clinical evaluations used to determine the presence or absence of disease in an individual, are part of the essential toolkit. As explained in a clinical testing textbook, a clinical test involves measuring a component of the blood, bone marrow, urine, or another physiological parameter to determine whether the patient's value falls within the normal range (Provan, 2018). This can either suggest a diagnosis (as with white blood cell counts in certain infections) or directly provide one (as in the case of insulin testing for diabetes). Imaging tests, such as CT scans or ultrasound scans, also fall into this category, even though they may not immediately provide numerical values but images (Lalumera & Fanti, 2020).

There are also conditions whose diagnosis relies on clinical observation, either because lab or imaging tests are not available, or because they are not needed. For example, some orthopedic diseases such as rotator cuff tears are diagnosed based on the observation of movement, and in common conditions like migraines or irritable bowel syndrome, diagnosis is

based on the patient's reported symptoms and history (Lacy & Patel, 2017; Lipton, 2011). In psychiatry, the absence of disease is determined either through clinical observation and evaluation or standardized interviews, as no biomarker has been validated for clinical practice yet (Carvalho et al., 2020). Preventive screenings for cancers, diabetes, and hypertension are crucial, as are biometric measurements using devices like blood pressure monitors, glucose meters, and lipid panels. These, too, can be used to measure health as no disease from the public health perspective of prevention (Miller & Haug, 2019).

Constructs and measures associated with the concept of health as the absence of disease are also widely used in epidemiology (Gordis, 2013). For example, if one aims to determine whether the population in area A is healthier than the population in area B, understanding disease prevalence and incidence is essential. Prevalence refers to the total number of existing cases—both new and pre-existing—of a disease or condition in a population at a specific point in time, while incidence measures the number of new cases within a defined period. Mortality rates, including cause-specific, crude, and age-adjusted mortality, are also key indicators used to compare the health status of populations. Additionally, disability-adjusted life years (DALYs) provide a summary measure that reflects both mortality and morbidity by combining years of life lost due to premature death and years lived with disability. Comparing DALYs between two populations can reveal differences in the overall burden of disease (Murray, 1994). Quality-adjusted life years (QALYs), which combine both the quantity and quality of life lived, offer an even broader measure of health that extends beyond the mere absence of disease (Hausman, 2006).

Access to healthcare services is another crucial construct that derives from the concept of health as no disease. This can be measured by looking at the utilization rates of medical services, such as access to hospital and visits to the family doctor. Differences in these measures can highlight disparities in healthcare accessibility between areas A and B (McDowell, 2006; Ware et al., 1981).

Let us now review the main constructs associated with the concept of health as complete well-being—the most expansive and holistic approaches, as it encompasses not only the absence of disease but also the presence of positive physical, mental, and social states. At the physical level, this concept is associated with constructs such as physical fitness, energy levels, and the ability to perform daily activities without limitation. At the mental level, it covers emotional stability, the presence of positive mental states,

and the absence of mental disorders. Social well-being constructs are also crucial, involving the quality of relationships, the extent of social support, and a person's sense of belonging within their community.

To measure this comprehensive view of health, several scales have been developed. The World Health Organization Quality of Life (WHOQOL-BREF) is a widely utilized instrument that assesses physical, psychological, social, and environmental well-being, providing a broad picture of an individual's health status (World Health Organization, 2004). Another important tool is the SF-36 Health Survey, a comprehensive 36-item questionnaire that evaluates overall health across multiple domains, including physical functioning, mental health, and social functioning (Ware & Sherbourne, 1992). For measures focusing specifically on mental well-being, the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) is often used, capturing aspects such as optimism, energy, and emotional functioning. All these scales, and many others, adapted for special populations, are employed for capturing the multidimensional nature of health as complete well-being (Tennant et al., 2007). We will discuss other construct and scales associated with health as complete well-being in Chap. 7.

In contrast, the concept of health as capacity shifts the focus toward functional ability and autonomy. Here, health is defined again not just by the absence of disease but also by an individual's ability to perform activities that are necessary or meaningful in life, including basic daily tasks and socially or personally significant roles. This concept emphasizes the importance of autonomy and independence, particularly the ability to make decisions and act independently in various life domains, as well as the capacity to adapt and manage physical, mental, and social challenges. To operationalize this concept, various scales have been developed. The Activities of Daily Living (ADL) Scale measures basic functional abilities such as eating, dressing, and bathing, which are assumed as crucial for independent living (Katz, 1963). Similarly, the Instrumental Activities of Daily Living (IADL) Scale assesses more complex activities necessary for maintaining independence, such as managing finances, cooking, and shopping (Lawton, 1969). A more recent scale, the Health Assessment Questionnaire (HAQ) has been proposed to measure health as defined by Huber and colleagues—capacity to adapt and self-manage—particularly in patients with chronic diseases (Huber et al., 2016).

It can be argued that both the concepts of health as complete well-being and health as ability are implicit in the main health utility measure, quality-adjusted life years (QALYs), used to measure the burden of

diseases but also the value of medical intervention. In the context of QALYs, "perfect health" is a theoretical state that represents the highest possible level of health and well-being, and it is typically assigned a value of 1. Perfect health is a state where an individual is free from any physical, mental, or social impairments; is capable of performing all activities of daily living without limitations; experiences no pain or discomfort; has full cognitive and emotional functioning; and enjoys a high quality of life. Other health states are given values depending on the quality of life they correspond to (often measured by the WHOQOL-BREF). For example, a patient with metastatic breast cancer might gain 0.5 QALYs per year, reflecting both the reduced life expectancy and lower quality of life due to ongoing symptoms and treatment side effects (Gold, 1996).

Lastly, the concept of health as balance and resilience revolves around an individual's ability to maintain physiological and psychological balance in the face of external stressors, as well as their capacity for "bouncing back" from psychological stress, trauma, or adversity. It is associated with constructs such as resilience and adaptation, which are currently defined in various ways (Johnston et al., 2015; Luthar et al., 2000; Vella & Pai, 2019). Correspondingly, several scales are used to measure health as defined by this complex concept. The Connor-Davidson Resilience Scale (CD-RISC) is a prominent tool for assessing an individual's ability to cope with stress and adversity (Connor & Davidson, 2003). Another measure is the Resilience Scale (RS), which evaluates psychological resilience, particularly focusing on personal competence and acceptance of self and life (Wagnild & Young, 2011). In a more holistic sense, the Salutogenic Health Indicator Scale (SHIS) measures the sense of coherence and the ability to find meaning in life, which relates directly to maintaining balance and resilience (Bringsén et al., 2009). Physiological stress markers, such as cortisol levels or heart rate variability (HRV), are also often measured to assess the body's ability to maintain physiological balance and respond to stress, providing a more objective insight into the concept of health as resilience (Kim et al., 2018) (Hellhammer et al., 2009).

This is by no means a complete list of health constructs and scales associated with the four main families of concepts of health. To make the landscape even more varied, however, we need to introduce the distinction between subjective and objective health measures. In short, subjective measures are based on an individual's self-reported perceptions, feelings, or experiences (Bowling, 2014; Krabbe, 2016; Stegenga, 2018). In the context of health, subjective measures often capture aspects of quality of

life, mental well-being, and pain, which are inherently personal and vary from person to person. Objective measures, on the other hand, are based on observable, quantifiable data that can be independently verified. These measures typically involve clinical tests, physiological assessments, and other forms of evaluation that produce consistent results regardless of the individual's subjective experience. In health, objective measures include laboratory tests, imaging studies, and standardized physical tests. Of the scales mentioned above, WHOQOL-BREF, SF-36, WEMWBS, CD-RISC, RS, and SHIS are subjective measures, whereas ADL, IADL, physiological stress markers (cortisol levels, HRV), and access to healthcare are objective in the above sense. Some scales, like the HAQ, incorporate both subjective and objective elements to provide a more comprehensive evaluation.

Is subjective better than objective, or vice versa? This is of course a naïve question to raise about health measures. Measurement error can occur in both subjective and objective assessments; neither type is inherently more accurate or precise in every situation. Subjective measures rely on personal assessments and are influenced by individual perspectives, emotions, and psychological states. Objective health parameters can exhibit a significant degree of measurement error, be subject to expert misclassification, or have limited predictive and prognostic validity (Krabbe, 2016). Whether health should be subjectively or objectively evaluated and measured, or both, is a fascinating philosophical question, and one that is seldom if ever discussed in the philosophical debate—exceptions are Leah McClimans's work (McClimans, 2010, 2013, 2017, 2024) and a mention in Jakob Stegenga's book (Stegenga, 2018). Another important philosophical question in medicine is whether, how, and why health constructs and measures should be developed in collaboration with patients and other non-medical stakeholders (McClimans, 2024). While this book does not address the issue directly, the stance of critical pluralism, which will be introduced later in this book, suggests that a one-size-fits-all approach is unlikely. Instead, patient involvement as a goal for a specific construct or measure should be weighed alongside other aims, assessed in relation to the broader objectives it seeks to serve.

2.7 The Health Babel

There is currently no consensus on concepts, constructs, and measures of health in medicine.[5] At the level of concepts, there is an ongoing discussion on the merits and failures of the WHO definition, and on the alternatives—a discussion we will explore in the next chapters (Armitage, 2023; Bickenbach, 2015; Callahan, 1973; Choudhury & Nageshwaran, 2023; Habersack & Luschin, 2013; Hafen, 2016; Larsen, 2022; Popay, 2023; Schramme, 2023). Setting aside health as no disease, a recent scoping review of the literature analyzed 1813 abstracts from medical and scientific articles that included definitions of positive health. The review revealed that positive health is defined in various ways, primarily focusing on well-being, resilience, or capacity (Bodryzlova & Moullec, 2023). Another recent scoping review grouped articles with health concepts in the title or abstract according to the perspective or viewpoint, such as the elderly, the general population, healthcare professionals, patients, patients with specific condition, and also including theological and philosophical perspectives. They found a wide variety of definitions and constructs, from no disease to perceived well-being (van Druten et al., 2022). In a review on oral health, we read that despite decades of research aimed at measuring health, there remains significant uncertainty regarding how to define health and the best methods for operationalizing these definitions (Locker & Gibson, 2006).

This uncertainty is largely due to the widespread use of vague and overlapping terms like health, health status, well-being, and health-related quality of life. These terms are often used interchangeably in the literature (Testa & Simonson, 1996) or without clear definitions (Wolfensberger, 1994), complicating efforts to develop consistent and reliable health scales and indexes. Studies focusing on definitions of quality of life also highlight inconsistencies and overlapping of terms, generating a "Babel of health" (Dijkers, 2007; Moons et al., 2006; Mor & Guadagnoli, 1988; Wolfensberger, 1994).

How is this variety judged? As the metaphor of Babel suggests, it is predominantly viewed negatively in the medical and healthcare literature, as a problem that needs to be addressed. According to this stance, the lack

[5] The Babel becomes even more evident when we step outside the realm of medicine and consider health as it appears in everyday discourse, social sciences, and philosophy. Elizabeth Barnes's book (Barnes, 2023) takes this broader perspective. While we may agree on the description of a Babel of health, our approaches diverge: my focus is exclusively on medicine.

of consensus on health concepts and measures is more than a theoretical concern; it has tangible and often profound negative impacts across multiple domains within medicine and healthcare. These misalignments can ripple through research, clinical practice, policymaking, public health initiatives, and the education and professional development of healthcare providers.

The inconsistency in health definitions may lead to significant challenges in medical research (Locker & Gibson, 2006). Different studies may adopt varied definitions and measures of health, resulting in data that are not easily comparable. This inconsistency complicates meta-analyses and systematic reviews, which rely on the ability to synthesize findings across multiple studies. When different health constructs are used in research, the variability in constructs can significantly impact the outcomes and interpretations of these studies. For instance, studies on the health benefits of exercise often use a range of constructs associated with health as no disease, such as cardiovascular fitness and muscle strength, while others focus on mental well-being and overall quality of life. When different studies focus on different constructs without a common framework, it can be challenging to compare results or to synthesize the findings into a coherent understanding of how a particular exercise regimen, such as Pilates or outdoor training, influences health (Cruz-Ferreira et al., 2011; Mazzarino et al., 2015).

Another example of this issue can be found in research comparing the effects of different diets, such as the Mediterranean diet on health. Some studies might focus on no-disease constructs, such as overall mortality, cardiovascular diseases, cancer, cognitive disorders, metabolic disorders (Dinu et al., 2018), while others might emphasize mental health outcomes like stress reduction or cognitive function. In general, the concept of health applied to diet is ambiguous and covers a wide range of health constructs (Neufeld et al., 2023). This diversity makes it difficult to generalize findings across studies and may affect the development of evidence-based guidelines and recommendations. Another example of this issue can be found in research comparing the effects of different diets, such as the Mediterranean diet on health. Some studies might focus on no-disease constructs, such as overall mortality, cardiovascular diseases, cancer, cognitive disorders, and metabolic disorders (Dinu et al., 2018), while others might emphasize mental health outcomes like stress reduction or cognitive function. In general, the concept of health applied to diet is ambiguous and encompasses a wide range of health constructs (Neufeld et al.,

2023). This diversity makes it difficult to generalize findings across studies and may affect the development of evidence-based guidelines and recommendations. I chose these examples to make it vivid that difficulties in evidence synthesis are not just abstract concerns raised by methodologists; they have real consequences for people. The lack of conceptual clarity in health research directly impacts the reliability of recommendations, shaping medical advice, public health policies, and ultimately, individual decisions about what to eat or to do.

In clinical practice, the variation in health concepts can lead to inconsistent patient care (van Druten et al., 2022). Health professionals, each adhering to their own interpretations and priorities, may offer differing treatments and advice. For example, one clinician focusing on physiological parameters may prescribe no intervention, while another emphasizing psychological well-being may advice new imaging tests, for the patient's tranquility (Lam et al., 2020). This variation can be particularly problematic when patients receive conflicting messages about their health status from different healthcare providers, potentially undermining their trust in the medical system (Hillen et al., 2011).

Policymaking and the allocation of healthcare funding are also adversely affected by misaligned health concepts. Policies designed around different health definitions can lead to inconsistent implementation and evaluation, creating inefficiencies and gaps in service delivery. Furthermore, funding agencies may struggle to allocate resources effectively without a clear understanding of the health outcomes they aim to achieve. This misalignment can direct resources toward less impactful areas, reducing the overall efficiency and effectiveness of health interventions.

Public health initiatives can suffer, too, when health concepts are misaligned. Campaigns designed around specific health definitions may not resonate with all segments of the population, limiting their effectiveness (Abelin & World Health Organization. Regional Office for Europe, 1987). This can be particularly problematic in diverse societies where cultural perceptions of health can vary widely. For instance, a qualitative study explored how health concepts are understood across groups with varying levels of education, where education serves as a proxy for socioeconomic status. Across all groups—those with low, medium, and high levels of education—participants identified health components related to the absence of disease and disabilities, frequently mentioning factors like disease, pain, discomfort, disabilities, and functional abilities. In the group with lower educational attainment, the focus was predominantly on the absence of

disease or physical complaints. In contrast, participants from the intermediate educational group, and to a lesser extent those from the higher educational group, more frequently discussed health in terms of functional abilities such as being physically capable of doing what they desire. Moreover, in the higher educational group, there was also an emphasis on self-perceived health, with participants referencing aspects like vitality (Stronks et al., 2018).

Last but not least, the misalignment of health concepts can exacerbate health disparities, as marginalized groups may not benefit equally from health initiatives designed with a narrow or differing concept of health. Specifically, misalignment of health concepts in the context of Indigenous populations presents an additional challenge in both healthcare delivery and research. Indigenous communities often have holistic views of health that encompass physical, mental, spiritual, and communal well-being. These perspectives contrast sharply with the more biomedical and individualistic definitions of health commonly used in Western healthcare systems. For instance, while Western medicine may focus on treating specific diseases or symptoms, or with personal achievement, Indigenous health paradigms might emphasize balance, harmony with nature, and the interconnectedness of individuals with their community and environment. This misalignment can lead to misunderstandings, miscommunication, and inadequate care (Davis, 2007; Durie, 2004; Graham & Stamler, 2010; Odom et al., 2019).

2.8 What to Do with the Babel of Health

The issue can be framed as follows: there are various definitions of health, each justifying different constructs and corresponding to different measurement scales. This raises the question: should there be only one standard definition in medicine, or is the existence of multiple definitions justified? The question might seem trivial: given that there are many concepts of health that don't seem likely to be reduced to a single one anytime soon, why should we think or hope that there could be just one? Shouldn't we focus on explaining reality rather than speculating on how it could be?

We can say that the objection reflects a typical attitude scientists have toward issues like this. A scientist focuses on using a construct that represents a particular concept of health for a specific research project. They don't concern themselves with whether this construct is superior to others or feel a theoretical obligation to prove that other concepts are worse. In

practice, scientists are pluralists (Alexandrova & Fabian, 2022). Philosophers, however, approach things differently. They tend to see the choice of one concept as an alternative to others. A philosopher only feels justified in defending and applying a concept once they've shown that other similar concepts are inadequate—philosophers tend to be monist in practice. For example, in the philosophy of medicine, Christopher Boorse has been defending the concept of health as the absence of disease by actively seeking counterexamples and objections to other definitions of health. This adversarial approach is common among contemporary (analytic) philosophers.

However, both these attitudes—pluralism in science and monism in philosophy—are not reflective. Neither questions whether there should be only one concept of health or many. Pluralism or monism, in fact, are meta-positions; they answer a meta-question (a question about the kind of response best suited to address the main issue). This means that the objection we have considered—"Look at the practice!"—misses the point because practice itself is neutral regarding the meta-question.

To tackle the meta-question, we need to start by clearly outlining the alternatives. Metaphysical monism proposes that health (or well-being, or quality of life) is a single, unified entity in the world—a kind, a property, or a disposition. Metaphysical monism aligns well with certain scientific phenomena. For example, one could be a monist about heat, arguing that there is only one phenomenon in nature referred to as "heat," and that our theories strive to describe it. Similarly, one might adopt monism regarding type 1 diabetes, claiming that it represents a specific process or entity (or however one chooses to define diseases) that medicine investigates, and that people exhibit when diagnosed with type 1 diabetes. Metaphysical monism works particularly well in cases involving natural kinds. Natural kinds are entities or phenomena that enable us to make reliable predictions and draw inferences. They possess inherent properties that explain their characteristics and exist independently of how we perceive or conceptualize them. Classic examples of natural kinds include chemical elements and substances like water or oil. In these contexts, metaphysical monism provides a compelling framework for understanding and describing the phenomena in question (Khalidi, 2023).

Metaphysical monism and conceptual monism might sound like two sides of the same coin, but they're not. Metaphysical monism claims that a phenomenon like health, well-being, or quality of life is a single, unified entity in the world—think of a natural kind, as it is possibly the clearest

example. Conceptual monism, on the other hand, insists there should be only one "correct" way to define or think about that phenomenon. Conceptual monism appeals to those who believe that a concept should serve one function or objective that is superior to others. It is also often motivated by practical concerns, such as avoiding the confusion and inefficiencies that arise when multiple definitions coexist in research, clinical practice, or public health. In the next chapter, we'll explore this further through the framework of "conceptual choice," which provides a systematic way to evaluate and refine health-related concepts.

Interestingly, metaphysical monism doesn't preclude conceptual pluralism. You can believe that a phenomenon has one underlying nature while still acknowledging the need for multiple ways to describe or engage with it. Take graphite and diamond, for example. Both are pure carbon, but their distinct crystal structures result in dramatically different properties. Graphite is soft and conducts electricity, while diamond is hard and an excellent insulator. These differences justify having separate concepts for the same underlying substance. This balance between a unified reality and diverse conceptual frameworks offers a valuable perspective on health and related matters. For now, however, we'll set metaphysical concerns aside and focus on the challenges and opportunities presented by conceptual pluralism.

2.8.1 Conceptual Pluralism

Motivations for the "can" version of conceptual pluralism—the weakest in terms of modality—are in these terms: we might believe that for a certain phenomenon that we consider to be a natural kind, there are currently several valid theories and defining concepts. This is because reducing one concept to another, or one theory to another, does not offer any practical advantage. An example would be the concept of heat in physics. There are different equations that define heat in physics, and it is not useful to reduce them to just one, even though we recognize that the phenomenon itself is singular (Bormashenko, 2020). In medicine, one might argue that having two concepts of diabetes is advantageous—one clinical, based on signs and symptoms, and one scientific, based on pathology. In fact, the WHO uses the clinical concept of diabetes while recognizing the validity of the pathological concept for research purposes (Lalumera, 2023a; World Health Organization, 2019). Weak modal conceptual pluralism (there can be different concepts) may also be seen as a phase in research where multiple

concepts and theories coexist, as long as they are compatible with the available evidence. However, as evidence accumulates, only one concept or theory will ultimately prove to be fully adequate. For example, for some time, medical researchers conceptualized AIDS as an autoimmune disease, while a small group argued that it was a viral disease. These two concepts coexisted for a while until evidence overwhelmingly supported the viral nature of the disease (Duesberg, 1994).

Conceptual pluralism in its stronger modal form—the idea that there *ought to* be multiple concepts for the same phenomenon or normative conceptual pluralism—is often motivated by ethical reasons. For example, Mitchell and Alexandrova argue that there ought to be multiple concepts and constructs of well-being in order to protect the values and interests of the communities that use these concepts in different contexts. A single, unified concept of well-being would silence some of these perspectives, which would be unjust (Mitchell & Alexandrova, 2021). This argument is based on the "thick" nature of the concept of well-being, meaning that it includes both factual and value-based components—it is both descriptive and normative. If we assume that values vary and are relative to specific contexts and communities, and that this diversity should be preserved, then strong conceptual pluralism follows: multiple concepts are a priori better than one. A similar version of this view goes under the label of "competitive pluralism." This idea is that the existence of different concepts is justified because of the different contexts and interests of those involved. For example, Polly Mitchell and colleagues argue that competitive pluralism is the best approach to healthcare quality, as quality inherently means different things to different people in different social, geographical, or clinical contexts (Mitchell et al., 2021).[6]

The label "constitutive pluralism" is also present in the philosophical literature. This describes situations where a concept has multiple dimensions as integral parts. Having multiple dimensions doesn't mean there are multiple coexisting concepts, but it may be a precondition. For example, the World Health Organization's (WHO) definition of health includes complete social, psychological, and spiritual well-being, not just the absence of disease. These different dimensions can sometimes be in tension with one another—one could be in good spiritual health but have a

[6] Leah McClimans's position in her latest book appears to align with a form of normative conceptual pluralism (McClimans, 2024).

serious illness. When this happens, the dimensions of the concept in fact become alternative concepts in practice, leading to pluralism.

Regarding pluralism (both conceptual and metaphysical), it's worth noting that it currently enjoys great popularity in the philosophy of science, possibly starting with John Dupré's work on pluralism in biology (Dupré, 1993). Today, pluralism is often seen as the more modern, sophisticated, and thus preferable position, compared to monism, which is reminiscent of older views like Neopositivism and the long-abandoned idea of the unity of science (Ludwig & Ruphy, 2021). In other words, many philosophers today see pluralism as the default position at the meta-level, even though, as mentioned earlier, philosophical unreflective practice tends to be monistic and adversarial. Of course, this is just an observation. The hypothesis that pluralism itself has become a "thick" concept with positive connotations in philosophy would require more textual evidence than I can provide here.

2.8.2 Levels of Pluralism

Let us now revisit the core question—framed as a reflective meta-question—about how to navigate the Babel of health concepts. Setting metaphysics aside, we've seen that conceptual pluralism often serves as philosophy's default stance. But applying this stance to health concepts requires greater precision. To make sense of the complexity outlined earlier in this chapter, we need to distinguish between three distinct layers: the multiplicity of general health concepts (conceptual pluralism in its purest form), the diversity of constructs associated with these concepts (operational pluralism), and the variety of measurement scales used to assess health (measurement pluralism).

Let's start with measurement scales, which, while technically complex, may be conceptually more straightforward to address. Many experts stress the importance of exercising caution when introducing new measurement tools, especially if existing ones are already available (Bowling, 2017; Krabbe, 2016; Lindert et al., 2015). Additionally, many current scales that evaluate health, well-being, and quality of life have validity issues. This is partly because the techniques used to validate these scales originate from psychometrics, a field not typically included in the training of medical researchers (Swan et al., 2023). Enhancing the validity of these measurement tools could significantly reduce the number of scales, allowing only the most robust and reliable ones to be retained (Cano & Hobart, 2011;

Ghai et al., 2022; Terwee et al., 2018). Overall, there is a consensus on the need to support standardization, which, as discussed earlier, facilitates the synthesis of evidence, improves communication, and enhances the overall utility of health measures within healthcare institutions. The COnsensus-based Standards for the selection of health Measurement INstruments (COSMIN) checklist is one such tool developed to assess the methodological quality of studies on the measurement properties of PROMs, contributing to this standardization effort (Mokkink et al., 2018).

Even granted that there is a partial technical fix to the Babel of health at the level of scales for the same construct or concept, the problem persists at the level of constructs and general health concepts. Is it acceptable to have a wide range of health concepts—such as health as complete well-being, health as capacity, health as balance, and health as the absence of disease? Here, again, two opposing positions emerge. Pluralism argues that it is acceptable and even beneficial to have multiple health concepts in medicine. Monism, on the other hand, insists that there should be only one.

Monists include authors who advocate for a single definition of health, and we will explore several of these perspectives in the following chapters, including those of Boorse and Nordenfelt in philosophy, as well as the definitions supported by the WHO and Huber and colleagues in the medical field (Boorse, 1977; Huber et al., 2011; Larsen, 2022; Nordenfelt, 1995). Philosopher of public health Sean Valles is an interesting case, as his approach exemplifies the necessity of keeping the three levels of analysis—concepts, constructs, and measures—distinct. While he advocates for conceptual monism by defending health as complete well-being and by rejecting competing definitions, like health as absence of disease or health as capacity, he acknowledges the need for pluralism in the constructs and measures used to operationalize the health as well-being concept, allowing flexibility in its practical applications. We will return to his position and its implications in Chap. 7.

Many philosophers have turned to conceptual pluralism about health concepts recently (Barnes, 2023; De Vreese, 2017; Lalumera, 2023b; van der Linden & Schermer, 2022). Elizabeth Barnes, for instance, questions the utility of attempts to "fix" the concept of health with a unique definition; her "ameliorative skepticism" suggests embracing the complexity and instability of health (in medicine and elsewhere) without trying to resolve them, for "nothing can do all the work we want a theory of health to do for us" (Barnes, 2023, p. 65). Quill Kukla advocates a pluralist and

pragmatic view of health; they argue that context-sensitive definitions are needed to serve varied practical goals. However, they also stress critical oversight to ensure these definitions do not reinforce inequities or fall prey to "elite capture," where dominant groups impose their health concepts (e.g., in enforcing "healthy nutrition habits" or "healthy sexuality") to marginalize and exclude less powerful groups (Kukla, 2024). The elite capture challenge can be seen as a way of filtering out ethically suspicious health concepts. In this respect, Kukla's approach and the conceptual choice methodology (illustrated in the next chapter) are forms of what I will call critical pluralism here.

2.8.3 Critical Pluralism

While pluralism has clear advantages, it also has limitations. Not all concepts or constructs are equally valid or useful. Some may lack coherence or fail to serve their intended purposes effectively. Moreover, pluralism risks creating inefficiencies and inconsistencies in practice, as discussed earlier in the context of the "Babel of health." What to do with the Babel of health concepts, then?

This book takes a critical stance. We shouldn't commit to either pluralism or monism right away. Instead, we should evaluate health concepts based on how well they serve their intended goals. Are they clear and empirically adequate? Do they align with ethical principles? Are they practical in real-world settings? Pluralism needs to be earned. It's easy to assume that having multiple health concepts is automatically good, but this isn't always the case. Some concepts may fail to meet their goals, creating more confusion than clarity. Others might conflict with one another, undermining broader scientific or social priorities. Conceptual pluralism only works if the concepts it includes are well-designed and serve legitimate purposes. This is where conceptual engineering and conceptual choice come in—fixing or replacing flawed concepts to ensure they're up to the task (Burgess & Plunkett, 2020; Cappelen, 2018; Isaac et al., 2022; Thomasson, 2021) and then prioritizing among the objectives of those who passed the test (Lalumera, 2023a). Only after we've assessed the options should we decide whether pluralism or monism makes sense. In the end, whether we adopt pluralism or monism should depend on the outcome of this critical process.

2.9 Conclusion

This long first chapter has taken us through the varied and often conflicting ways health is conceptualized in medicine today. From the simplicity of defining health as the absence of disease to more expansive notions like well-being, capability, and resilience, each approach captures different priorities and contexts in research, clinical practice, public health, and policy. Constructs and measures turn concepts into actionable tools, enabling us to study and apply ideas of health in the real world. Yet these tools are not neutral: they come loaded with assumptions and value judgments that demand our attention and critical scrutiny.

In the next chapters, we'll take a closer look at how to make sense of all this multiplicity. Using a framework I call conceptual choice, we'll explore how to systematically evaluate health concepts based on their clarity, ethical implications, and practical usefulness. Before declaring ourselves monists or pluralists about health concepts, we first need to understand what these concepts aim to achieve, how they've been constructed, and what consequences their use entails. Only then can we decide whether pluralism or monism is the better fit.

But before we can tackle this, some groundwork is necessary. We need to clarify what concepts are and how we can analyze and evaluate them effectively. We must also pause to address the skeptics. Can concepts really be changed or deliberately chosen? What kind of power allows us to reshape them—aren't they as fixed and immovable as the course of rivers or the shape of mountains? Conceptual work is not universally embraced among philosophers of medicine; some argue it is unnecessary, unhelpful, or even counterproductive. These objections merit careful consideration, and the next chapter, dedicated to methodology, will take them up in detail.

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