European Journal of Analytic Philosophy EuJAP | Vol. 17 | No. 2 | 2021

INTRODUCTION TO THE SPECIAL ISSUE ON PHILOSOPHY OF MEDICINE

GUEST EDITORS

Saana Jukola[1] and Anke Bueter[2]

[1] University of Bonn
[2] Aarhus University

ABSTRACT

This article is an introduction to the special issue on philosophy of medicine. Philosophy of medicine is a field that has flourished in the last couple of decades and has become increasingly institutionalized. The introduction begins with a brief overview of some of the most central recent developments in the field. It then describes the six articles that comprise this issue.

***Keywords**: philosophy of medicine; medical ethics; medical epistemology; disease; diagnosis*

1. Introduction

In the last couple of decades, philosophy of medicine has become established as a distinct branch of philosophy. While in 2008 it was possible to pose the question “Does Philosophy of Medicine Exist?” (Marcum 2008, 3), today research in the field flourishes and has become increasingly institutionalized. There are professional associations for philosophers of medicine (e.g., the Philosophy of Medicine Roundtable) and events addressing philosophical questions that arise in the context of biomedical research and clinical practice are organized regularly. In 2020 a new journal, *Philosophy of Medicine,* was established, adding to the already existing journals such as *Theoretical Medicine and Bioethics* and *Medicine, Health Care and Philosophy*. New generations of philosophers of medicine can now acquire credentials in specialized study programmes (e.g., at King’s College London) and by reading introductory textbooks of philosophy of medicine (e.g., Thompson and Upshur 2017; Stegenga 2018;

Correspondence: sjukola@uni-bonn.de; abueter@cas.au.dk

Broadbent 2019). Philosophical topics are also included in the curricula in many medical schools (e.g., Tonelli and Bluhm 2020).

Research in philosophy of medicine uses tools and theoretical approaches from different areas of philosophy. Traditionally, philosophical contributions addressing medicine focused on issues either ethical or conceptual in nature (Stegenga et al. 2016). Medical ethics has millennia of history behind it and since the second half of the last century the field has become institutionalized (Jonsen 2000). Issues such as informed consent (e.g., O'Neill 2003; Beauchamp and Childress 2006), euthanasia (e.g., Rachels 2019) and questions related to justice regarding the access to healthcare (e.g., Daniels 2001; Powers and Faden 2006) have been discussed in journals and conferences dedicated to the field. Conceptual explorations related to medical practice have, in turn, typically focused on the definitions of 'disease' and 'health' (e.g., Boorse 1977; Cooper 2002).

During the last years, contributions to medical epistemology have grown in number. Questions concerning, for instance, evidential standards used for evaluating causal claims or problems related to clinical decision-making have become more central. In particular, the development and pre-eminence of evidence-based medicine has sparked a lively debate about which methods should be used for making claims about the effectiveness of different interventions. Scholars have been especially interested in presenting arguments for and against the use of randomized controlled trials in comparison to other ways of collecting evidence (e.g., Howick 2011; Parkkinen et al. 2018). With respect to clinical practice, a prominent question has been how evidence, expertise and patient values should be integrated into decision-making (e.g., Tonelli 2006; Loughlin et al. 2017). The use of artificial intelligence in the clinical context is another emerging focus of research (e.g., Genin and Grote 2021). Moreover, the experiences of patients and the epistemic status of their testimonials have been analysed by drawing on Miranda Fricker's (2007) work on epistemic injustice. For instance, Carel and Kidd (2014) have argued that ill persons in general face testimonial and hermeneutical injustices, a problem even more prominent for patients with mental illnesses (e.g., Bueter 2019, 2021; Crichton et al. 2017; Scrutton 2017). A related addition to the conceptual debate on health and disease is the phenomenology of illness that focuses on the lived experience of patients (e.g., Carel 2011, 2016; Ratcliffe 2014). This focus on patient perspectives can, in turn, impact our thinking about the study, classification, and treatment of diseases.

Social epistemology has turned out to be a particularly fruitful tool for analysing how institutional and social factors influence research and practice in different areas of healthcare. For example, the impact of commercial interests in pharmaceutical research has attracted ample attention (e.g. Biddle 2007; Holman 2019; Bueter and Jukola 2020). In addition, the problem of neglected diseases has inspired scholars to apply theories from political philosophy to the evaluation of the distribution of research efforts in biomedical sciences (e.g. Reiss and Kitcher 2009). Besides such economic and institutional matters, scholars have noted that the social context can also affect medical research by introducing value-laden background assumptions and concepts. For example, this relates to categories of race and gender and the question whether and how these should be treated as significant variables in health science research (e.g., Bueter 2017; Valles 2021).

Metaphysical questions studied by philosophers of medicine include, for example, the nature of the relationship between pregnant organisms and fetuses (Kingma 2019) and the question of diseases as natural kinds (Beebee and Sabbarton-Leary 2010). Ontological commitments in mainstream biomedicine have been discussed by Marcum (2008), among others.

Another notable development in philosophy of medicine is the growing interest in epidemiology. Epidemiological research has attracted philosophers' attention since Alex Broadbent's seminal book (Broadbent 2013). During the COVID-19 pandemic many philosophers have increasingly focused on, for example, the epistemic nature of theories, causal inference and data practices in epidemiology—often publishing together with scholars from other fields (e.g., Broadbent et al. 2020; Fuller 2021; Harvard et al. 2021). The interconnectedness of ethical and epistemic aspects of research (for instance to health disparities) is another area where philosophers of medicine have contributed to the study of epidemiology (e.g., Katikireddi and Valles 2015; Amoretti and Lalumera 2020).

As noted by Thaddeus Metz and Chadwin Harris (2018, 282), philosophers of medicine have typically drawn on Western medical sources while overlooking healthcare practices in other parts of the globe. However, some scholars have addressed other medical practices. In their article, Metz and Harris discuss some fruitful philosophical questions that arise from African sources. Lee (2017), in turn, addresses philosophical foundations of Chinese medicine.

2. Papers in the Special Issue

An important motivation for this special issue was the observation that many of the particularly critical philosophical questions that arise in the context of healthcare cannot be answered by drawing on one philosophical tradition alone. Traditionally there has been a gap between, for example, bioethics and medical epistemology, and contributions to these fields have been published and discussed in different fora. However, as the COVID-19 pandemic made clear, and as all of the articles in this special issue show, ethical, socio-political, epistemic and ontological issues in philosophy of medicine are often deeply interconnected. For instance, the question of what mitigation measures should be undertaken to control the pandemic cannot be answered without considering both the effectiveness of the measures in slowing the spread of the virus and their political implications. Similarly, the classification of diseases gives rise to problems that are at the same time epistemic, ethical, and political.

Ashley Graham Kennedy and **Bryan Cwik** delve into issues related to diagnostic testing in the COVID-19 pandemic. Diagnosis, as they emphasize, is an essential cornerstone of clinical medicine. As such, it deserves more attention from philosophers of medicine, as it gives rise to a host of ethical and epistemic questions. Kennedy and Cwik develop a concept of diagnostic justice as requiring an equitable distribution of the burdens and benefits of testing. Looking at COVID-19 through this lens of diagnostic justice, they differentiate three areas in which testing is undertaken: in the clinical care for individuals, as an entry criterion for trials in clinical research, and in surveillance on the population level. These areas come with different goals for testing, which need to be clearly communicated and give rise to ethical questions about the moral obligations towards test subjects in these specific contexts.

Philosophical questions raised by the COVID-19 pandemic are also addressed by the second paper in this special issue. In her article, **Daria Jadreškić** looks at adaptive clinical trials. In contrast to fixed randomized controlled trials, these allow for changes of design features during a trial, based on interim results. While this comes with an increased risk of certain biases, adaptive design trials also have advantages such as a faster proliferation of results. Unsurprisingly, they have therefore played a big role in pandemic research—from Ebola to COVID-19. Jadreškić argues that adaptive design trials do not in principle lack validity. Rather, validity has to be assessed on a case by case basis (as with fixed randomized controlled trials) and with a focus on operational conditions and implementation. In addition, she shows that adaptive trial design is not a novelty introduced by COVID-19 research, but can be placed within the larger context of the productivity crisis in pharmaceutical research and new developments in translational medicine.

Anne-Marie Gagné-Julien's paper contributes to the burgeoning literature on pathocentric epistemic injustices. She argues that the framework of epistemic injustice can be fruitfully applied to the question of how to identify wrongful medicalization. Rather than focusing on a substantive account of medicalization, which aims to tie the legitimacy of medicalization to, e.g., the presence of harmful dysfunction, she takes her departure from Kaczmarek's pragmatic account of medicalization. She proposes to expand this account with a focus on epistemic injustices created or diminished by specific procedures instrumental in medicalization. She then applies this to the case of “Premenstrual Dysphoric Disorder”, a diagnosis added to the Diagnostic and Statistical Manual of Mental Disorders (DSM) in 2013. Here, the focus on epistemic injustice shows why this is a problematic case of medicalization, as the process of the diagnosis’ establishment lacked in inclusivity.

Medicalization is also at the heart of **Jacob Stegenga’s** contribution, which deals with yet another gender-specific disease category, namely low female sexual desire. The respective DSM diagnosis of “Female Sexual Interest/Arousal Disorder” has stirred a lot of controversy, not least because of the recent approval of pharmaceutical treatments. Stegenga identifies two major and conflicting perspectives on low female sexual desire. The mainstream view considers it a genuine disease and often focuses on biological underpinnings of low levels of desire, as well as on pharmaceutical solutions. By contrast, the critical view focuses on the social context and cultural factors that impact sexuality and respective ideas of normality. Stegenga analyzes the main arguments for each camp––which include disagreements on empirical as well as normative issues— and proposes to focus on pragmatic considerations of the harms and benefits of medicalization.

Kathleen Murphy-Hollies applies Jerome Wakefield’s concept of mental disorder as harmful dysfunction (HD) to the case of gender dysphoria. She argues that HD fails to reach its own goal of avoiding a pathologization of normal states, because it leaves the relation between its components (“harm” and “dysfunction”) undertheorized. She argues that we have to take a closer look at why exactly purported dysfunctions in gender dysphoria are perceived as harmful and disvalued. Firstly, this leads her to a distinction between sex dysphoria and gender dysphoria, that correlate with different sources of dysfunction and harm. Secondly, she shows that the legitimacy of the diagnosis of gender dysphoria depends on how we conceptualize gender in a sociological sense, thereby calling for a greater involvement of sociological theory in discussions of (gendered) medicalization issues.

Thomas Schramme approaches the underlying issues in the problem of medicalization from a more general and conceptual angle. His paper addresses the problem of how to draw a line between "functional" and "dysfunctional" in functions that allow for grades. This quantitative problem of where to draw a threshold has recently played a big role in the debate on normativist versus naturalist conceptions of disease. Schramme argues that the quantitative problem does not require us to make value-laden or arbitrary decisions, but can be based on biological facts about goal-effectivity. Thus conceived, biological dysfunction is a necessary condition for a state or process to be a disease. Yet it is not sufficient, as Schramme shows by introducing a distinction between biological and clinical dysfunction. While the identification of clinical dysfunction calls for evaluative and pragmatic considerations, the fact that it is based on empirical questions about biological functions helps to avoid over-medicalization, as Schramme argues.

REFERENCES

Amoretti, Maria Cristina, and Elisabetta Lalumera. 2020. "The Concept of Disease in the Time of COVID-19." *Theoretical Medicine and Bioethics* 41 (5–6): 203–21. https://doi.org/10.1007/s11017-021-09540-5.

Beauchamp, Tom L., and James F. Childress. 2006. *Principles of Biomedical Ethics*. 6th ed. New York: Oxford University Press.

Beebee, Helen, and Nigel Sabbarton-Leary. 2010. "Are Psychiatric Kinds Real?" *European Journal of Analytic Philosophy* 6 (1): 11–27.

Biddle, Justin. 2007. "Lessons from the Vioxx Debacle: What the Privatization of Science Can Teach Us about Social Epistemology." *Social Epistemology* 21 (1): 21–39. https://doi.org/10.1080/02691720601125472.

Boorse, Christopher. 1977. "Health as a Theoretical Concept." *Philosophy of Science* 44 (4): 542–73. https://doi.org/10.1086/288768.

Broadbent, Alex. 2013. *Philosophy of Epidemiology*. New Directions in the Philosophy of Science. Basingstoke, Hampshire ; New York: Palgrave Macmillan.

———. 2019. *Philosophy of Medicine*. New York, NY: Oxford University Press.

Broadbent, Alex, Herkulaas Combrink, and Benjamin Smart. 2020. "COVID-19 in South Africa." *Global Epidemiology* 2 (November): 100034.

https://doi.org/10.1016/j.gloepi.2020.100034.

Bueter, Anke. 2017. “Androcentrism, Feminism, and Pluralism in Medicine.” Topoi 36 (3), 521-530. https://doi.org/10.1007/s11245-015-9339-y

———. “Epistemic Injustice and Psychiatric Classification.” *Philosophy of Science* 86 (5): 1064–74. https://doi.org/10.1086/705443.

———. 2021. “Diagnostic Overshadowing in Psychiatric-Somatic Comorbidity: A Case for Structural Testimonial Injustice.” *Erkenntnis,* 1–21. https://doi.org/10.1007/s10670-021-00396-8.

Bueter, Anke, and Saana Jukola. 2020. “Sex, Drugs, and How to Deal with Criticism: The Case of Flibanserin.” In *Uncertainty in Pharmacology*, edited by Adam LaCaze and Barbara Osimani, 338:451–70. Boston Studies in the Philosophy and History of Science. Cham: Springer International Publishing. https://doi.org/10.1007/978-3-030-29179-2_20.

Carel, Havi. 2011. “Phenomenology and Its Application in Medicine.” *Theoretical Medicine and Bioethics* 32 (1): 33–46. https://doi.org/10.1007/s11017-010-9161-x.

———. 2016. *Phenomenology of Illness*. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199669653.001.0001.

Carel, Havi, and Ian James Kidd. 2014. “Epistemic Injustice in Healthcare: A Philosophial Analysis.” *Medicine, Health Care and Philosophy* 17 (4): 529–40. https://doi.org/10.1007/s11019-014-9560-2.

Cooper, Rachel V. 2002. “Disease.” *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 33 (2): 263–82. https://doi.org/10.1016/S0039-3681(02)00018-3.

Crichton, Paul, Havi Carel, and Ian James Kidd. 2017. “Epistemic Injustice in Psychiatry.” *BJPsych Bulletin* 41 (2): 65–70. https://doi.org/10.1192/pb.bp.115.050682.

Daniels, Norman. 2001. “Justice, Health, and Healthcare.” *American Journal of Bioethics* 1 (2): 2–16. https://doi.org/10.1162/152651601300168834.

Fricker, Miranda. 2007. *Epistemic Injustice: Power and the Ethics of Knowing*. Oxford: Oxford University Press.

Fuller, Jonathan. 2021. “What Are the COVID-19 Models Modeling (Philosophically Speaking)?” *History and Philosophy of the Life Sciences* 43 (2): 47. https://doi.org/10.1007/s40656-021-00407-5.

Genin, Konstantin, and Thomas Grote. 2021. “Randomized Controlled Trials in Medical AI: A Methodological Critique.” *Philosophy of Medicine* 2 (1). https://doi.org/10.5195/philmed.2021.27.

Harvard, Stephanie, Eric Winsberg, John Symons, and Amin Adibi. 2021. “Value Judgments in a COVID-19 Vaccination Model: A Case Study in the Need for Public Involvement in Health-Oriented Modelling.” *Social Science & Medicine* 286: 114323. https://doi.org/10.1016/j.socscimed.2021.114323.

Holman, Bennett. 2019. “Philosophers on Drugs.” *Synthese* 196 (11): 4363–90. https://doi.org/10.1007/s11229-017-1642-2.

Howick, Jeremy. 2011. *The Philosophy of Evidence-Based Medicine*. Chichester, West Sussex, UK: Wiley-Blackwell, BMJ Books.

Jonsen, Albert R. 2008. *A Short History of Medical Ethics*. Oxford: New York: Oxford University Press.

Katikireddi, S. Vittal, and Sean A Valles. 2015. “Coupled Ethical–Epistemic Analysis of Public Health Research and Practice: Categorizing Variables to Improve Population Health and Equity.” *American Journal of Public Health* 105 (1): e36–42. https://doi.org/10.2105/AJPH.2014.302279.

Kingma, Elselijn. 2019. “Were You a Part of Your Mother?” *Mind* 128 (511): 609–46. https://doi.org/10.1093/mind/fzy087.

Lee, Keekok. 2017. *The Philosophical Foundations of Classical Chinese Medicine: Philosophy, Methodology, Science*. Lanham: Lexington Books.

Loughlin, Michael, Robyn Bluhm, Stephen Buetow, Kirstin Borgerson, and Jonathan Fuller. 2017. “Reasoning, Evidence, and Clinical Decision-Making: The Great Debate Moves Forward.” *Journal of Evaluation in Clinical Practice* 23 (5): 905–14. https://doi.org/10.1111/jep.12831.

Marcum, James A. 2008. “Reflections on Humanizing Biomedicine.” *Perspectives in Biology and Medicine* 51 (3): 392–405. https://doi.org/10.1353/pbm.0.0023.

Metz, Thaddeus, and Chadwin Harris. 2018. “Advancing the Philosophy of Medicine: Towards New Topics and Sources.” *The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine* 43 (3): 281–88. https://doi.org/10.1093/jmp/jhy007.

O’Neill, Onora. 2003. “Some Limits of Informed Consent.” *Journal of Medical Ethics* 29 (1): 4–7. https://doi.org/10.1136/jme.29.1.4.

Parkkinen, Veli-Pekka, Christian Wallmann, Michael Wilde, Brendan Clarke, Phyllis Illari, Michael P Kelly, Charles Norell, Federica Russo, Beth Shaw, and Jon Williamson. 2018. *Evaluating Evidence of Mechanisms in Medicine: Principles and Procedures*. SpringerBriefs in Philosophy. Cham: Springer

International Publishing. https://doi.org/10.1007/978-3-319-94610-8.

Powers, Madison, and Ruth R. Faden. 2006. *Social Justice: The Moral Foundations of Public Health and Health Policy*. Issues in Biomedical Ethics. Oxford, New York: Oxford University Press.

Rachels, James A. 2019. "Active and Passive Euthanasia." In *The Social Medicine Reader, Volume I, Third Edition*, edited by Jonathan Oberlander, Mara Buchbinder, Larry R. Churchill, Sue E. Estroff, Nancy M. P. King, Barry F. Saunders, Ronald P. Strauss, and Rebecca L. Walker, 273–79. Duke University Press. https://doi.org/10.1215/9781478004356-042.

Ratcliffe, Matthew. 2015. *Experiences of Depression: A Study in Phenomenology*. First edition. International Perspectives in Philosophy and Psychiatry. Oxford: Oxford University Press.

Reiss, Julian, and Philip Kitcher. 2009. "Biomedical Research, Neglected Diseases, and Well-Ordered Science." *Theoria. Revista de Teoría, Historia y Fundamentos de La Ciencia* 24 (3): 263–82.

Scrutton, Anastasia Philippa. 2017. "Epistemic Injustice and Mental Illness." In *The Routledge Handbook of Epistemic Injustice*, edited by Ian James Kidd, Josè Medina, and Gaile Pohlhaus. London: Routledge.

Stegenga, Jacob. 2018. *Care and Cure: An Introduction to Philosophy of Medicine*. Chicago: The University of Chicago Press.

Stegenga, Jacob, Ashley Kennedy, Serife Tekin, Saana Jukola, and Robyn Bluhm. 2016. "New Directions in Philosophy of Medicine." In *Bloomsbury Companion to Contemporary Philosophy of Medicine*, edited by James Marcum, 343–67. London: Bloomsbury Academic.

Thompson, R. Paul, and Ross Upshur. 2018. *Philosophy of Medicine: An Introduction*. London, New York: Routledge, Taylor & Francis Group.

Tonelli, Mark R. 2006. "Integrating Evidence into Clinical Practice: An Alternative to Evidence-Based Approaches: Integrating Evidence into Clinical Practice." *Journal of Evaluation in Clinical Practice* 12 (3): 248–56. https://doi.org/10.1111/j.1365-2753.2004.00551.x.

Tonelli, Mark R., and Robyn Bluhm. 2020. "Teaching Medical Epistemology within an Evidence-Based Medicine Curriculum." *Teaching and Learning in Medicine* 33 (1): 98–105. https://doi.org/10.1080/10401334.2020.1835666.

Valles, Sean A. 2021. "Why Race and Ethnicity Are Not like Other Risk Factors: Applying Structural Competency and Epistemic Humility in the Covid-19 Pandemic." *Philosophy of Medicine* 2 (1). https://doi.org/10.5195/philmed.2021.52.