Bioethics Digest

In this feature, our team provides you with an overview of the most recent publications in the field of bioethics, with a particular focus on contributions coming from (or having relevance for) Switzerland.
Buona lettura! Bonne lecture! Viel Spass beim Lesen! Enjoy your reading!

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AI ETHICS

"Trust does not need to be human: it is possible to trust medical AI"

In this paper, Ferraio and colleagues tackle the topic of trust regarding Artificial Intelligence (AI) in medicine. The authors criticise the philosophical argument that only mere "reliance" can be achieved towards medical AI - never real "trust". They invalidate this claim by providing a less human-centric conceptualization of "trust", which they name "simple trust". Differently from "trust", which requires of the trustee to possess specific trustworthiness properties, "simple trust" describes a relation characterised "by a diminished willingness [of the trustor] to actively update the belief on the trustworthiness [of the trustee]". The authors then demonstrate – by means of a practical example – that "simple trust" could be achieved also with respect to AI systems in medicine (e.g. decision support systems).

Ferrario A, Loi M, Viganò E. Trust does not need to be human: it is possible to trust medical AI. *Journal of Medical Ethics* Published Online First: 25 November 2020. doi: 10.1136/medethics-2020-106922

"Explainability for artificial intelligence in healthcare: a multidisciplinary perspective"

In the context of Artifical Intelligence (AI), "explainability" can be defined as "a characteristic of an AI-driven system allowing a person to reconstruct why a certain AI came up with the presented predictions". But what is the role of "explainability" in the development and use of clinical decision support systems (CDSS)? The paper by Amman and colleagues focuses on this question. From a technological perspective, they review what types of explainability methods exist, and to what extent they are (or should be) used for CDSS. From a legal perspective, they reflect on the relationships between explainability and: 1) informed consent for data processing; 2) approval of CDSS systems as medical devices; 3) liability when using CDSS. They then focus on the perspectives of doctors and patients and argue that lack of explainability in CDSS may complicate the relationships between them and impair the development of patient-centred medicine. Lastly, the authors reflect on the ethical implications of explainibility in CDSS, mentioning – of particular relevance – the question of epistemic authority (on what ground would/should doctors be allowed to overrule the suggestions by CDSS?).

Amann J, Blasimme A, Vayena E, Frey D, Madai VI; Precise4Q consortium. Explainability for artificial intelligence in healthcare: a multidisciplinary perspective. *BMC Med Inform Decis Mak.* 2020 Nov 30;20(1):310. doi: 10.1186/s12911-020-01332-6.

CLINICAL ETHICS

"Strong second COVID-19 wave calls for a second look at ICU triage guidelines"

As Switzerland has been hit by the second wave of SARS-Cov-2 infections, the questions of how to allocate Intensive Care Unit (ICU) resources in case of scarcity has become actual again. This prompted the Swiss Academy of Medical Sciences to revise their ICU triage guidelines, which are commented in this publication by Suter and Parggerr. The two authors highlight the most important changes of these new version, including e.g. the necessity of focussing on short term-prognosis, the exclusion of age-disability-dementia as direct criteria to (de)prioritise patients and the implementation of a national coordination body "to ensure that optimum use is made of all ICU treatment capacity available across Switzerland". The authors underline that such guidelines should prompt a more general reflection – both inside hospitals and in the public sphere – on resource allocation and on the limits of even advanced healthcare systems like the Swiss one.

Suter P, Pargger H. Strong second COVID-19 wave calls for a second look at ICU triage guidelines. *Swiss Med Wkly*. 2020 Nov 12;150:w20407. doi: 10.4414/smw.2020.20407.

DIGITAL ETHICS

"What's next for COVID-19 apps? Governance and oversight"

In this contribution, Blasimme and Vayena explore the topical issue of digital contact tracing apps (DTC) as public health digital tools to help contain the spread of coronavirus disease 2019 (COVID-19). The authors reflect on the factors that determine the acquisition of "social licence and trust" by DCT, two elements which "depend on the capacity of either corporations or governments to meet societal expectations in relation to a specific activity". To boost "social licence and trust" for DTC, it is necessary to deal with the public reluctance of using such tools and to develop adaptive governance – which includes considering public engagements and technical aspects, but also (and especially) ethico-legal issues (e.g. "trade-offs between privacy and effectiveness, or between users' expectations and utility"). At a practical level, the authors recommend the creation of robust oversight mechanisms to monitor the implementation of DTC and the use of reflexive adaptation in governance, consisting in

"regularly questioning assumptions about design, risks, and users' attitudes [towards DCT] to adapt technological features."

Blasimme A, Vayena E. What's next for COVID-19 apps? Governance and oversight. *Science*. 2020 Nov 13;370(6518):760-762. doi: 10.1126/science.abd9006.

RESEARCH ETHICS

"Going first: the ethics of vaccine self-experimentation in coronavirus times"
What are the ethical issues associated to self-experimentation? The paper by Manríquez Roa and Biller-Andorno investigates this question, with specific reference to the COVID19 situation. After a brief overview of the history of self-experimentation in medicine, the authors demonstrate that such practices are not uncommon during the current pandemic. What follows is an explanation of the ethical questions raised by self-experimentation (e.g. the pressure of laboratory directors on their subordinates to make them join the self-experimentation), but also of its potential benefits (e.g. it could foster "public trust in research because it demonstrates the researcher's genuine commitment to the quest for knowledge"). The authors conclude by recommending clarification and better regulation of these practices.

Manríquez Roa T, Biller-Andorno N. Going first: the ethics of vaccine self-experimentation in coronavirus times. Swiss Med Wkly. 2020 Nov 26;150:w20415. doi: 10.4414/smw.2020.20415.