## Medical ethics in the Anthropocene: how are €100 billion of German physicians' pension funds invested?



Many medical associations signed the Climate, Health and Equity Action Agenda<sup>7</sup> in order to prompt fundamental action to mitigate climate change across governments, businesses, civil society leaders, and elected officials. In line with several *Lancet* publications, <sup>1-3</sup> the German Medical Association's code of conduct states that "physicians must contribute to the conservation of nature with respect to its central meaning for human health". <sup>4</sup> In general, those who contribute least to climate change are the ones most affected. This central injustice puts the financial sector into focus because investment strategies can preserve the status quo or be a key factor for reaching the zero-emission-goal of the Paris Agreement. <sup>5</sup>

In Germany, physicians' pension funds are controlled by democratically elected boards of the medical authorisations associations in each federal state, of which every physician is compulsorily a member. Hence, German physicians democratically control the investment strategies of their 18 pension funds.

We are a group of German scientists interested in the role of physicians in mitigating the effects of climate change on health who joined efforts in an interdisciplinary project aimed at analysing the investment strategies of the German Physicians' pension funds. The primary goal was to investigate whether and how environmental, social, and governance (ESG) criteria of sustainability are applied in investment decisions. A secondary goal was to quantify how much of the capital is invested according to ESG criteria.

Supported by the GLS Bank (Bochum, Germany), an 18-item questionnaire was developed (appendix). We aimed to understand the standards and principles that are applied when selecting an investment and whether specific business sectors (eg, oil extraction) or practices (eg, exploitative child labour) are excluded in part or totally. Other items aimed to evaluate how quality is assured with respect to the application of ESG criteria (eg, which data sources are used for the analysis, how frequently sources are updated, and which control mechanisms are applied). Additionally, we screened the most recent business reports of the pension funds to quantify the investments with respect to asset classes. In April, 2019, we invited all advisory and supervisory

boards of the 18 German physicians' pension funds to complete our questionnaire, ensuring anonymity for any data they would provide.

2 months later, 13 pension funds had responded to the invitation. However, none filled out the questionnaire. The most recent business reports of 12 pension funds showed capital investments of €75·4 billions (55% stocks, 19% fixed-interest-bearing securities, 5% real estates, and 21% other). Based thereupon, we estimated that the pension funds combined, including those that did not respond to our request, possess capital reserves of approximately €100 billions.

The pension funds' individual responses to our invitation varied considerably. Nearly all provided explanations for not answering the questionnaire (four generally do not participate in studies, one refused because of the administrative burden, and the others claimed the questionnaire was not applicable to their situation) and stated that they consider aspects of sustainability, with many anticipating an increase in their investments in renewable energies in the coming years. Three pension funds defined yield as an aspect of sustainability and stated that, according to their investment guidelines, yield is prioritised over ESG criteria.

Most pension funds noted that they consider ESG criteria in general, but did not provide details about how such criteria are defined or specify how much of the capital investments they are applied to. Many funds mentioned the UN Principles of Responsible Investment (PRI), which have to be signed by either asset managers or the institution itself (one fund signed). However, on the basis of available evidence<sup>2</sup> and of current recommendations for actions to be taken by physicians against climate change, 4.6,7 respecting the PRI is a minimal effort with respect to the implementation, application, and compliance with ESG criteria. One pension fund stated not to consider any ESG criteria and that, at the time of their response, their administration was waiting for suggestions from the umbrella organisation (ie, the association of German professional pension funds).

Few pension funds provided more detailed data. One fund specified that the UN recommendations for sustainable development are respected in 83.0% of its

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investments with less than 0.5% of the capital invested in fossil fuels. Another fund mentioned that 5.3% of the capital is placed in infrastructure, of which three quarters are invested in the generation of renewable energies (which equals less than 4% of the fund's capital reserves). Since 2017, all the buildings the fund invests in are exclusively supplied with renewable energies. For new investments in buildings, a seal of approval from the German Sustainable Building Council is required. One fund claimed not to use paper for meetings any more, whereas another reported the construction of 120-megawatt renewable-energy power plants and that the buildings they invested in were awarded an ecological certification. Finally, two pension funds do not invest in cluster munition and one of them provided a list of 17 countries whose government bonds must not be bought or sold at short notice.

It was disappointing that, despite assurance of anonymity for the data, none of the pension funds allowed us to gain a deeper insight into their investment strategies. Many managing boards appear to think that the consideration of ESG criteria might compromise the yield, although it has been evident for many years that considering ESG criteria would not affect economic interests and that, on the contrary, it is a prerequisite for an economically sustainable investment.8,9 Millar and colleagues have published a set of principles of investment that can contribute to mitigate climate change.5 Their deliberations are founded on two facts: first, to stop global warming (at 1.5°C, 2°C, or even 4°C), carbon dioxide emissions must fall to zero and, second, the goal of the Paris Agreement is to reduce carbon dioxide emissions to zero before reaching a 2°C temperature increase compared with preindustrial levels. Accordingly, organisations and companies are requested to develop a strategy to accomplish the zeroemission goal within a certain time span, to define intermediate steps, and to present a model of a zeroemission business that remains profitable.5

In conclusion, the elected boards of the German physicians' pension funds significantly underestimate how much respecting actual medical ethics is linked to sustainable investment strategies in the Anthropocene. The funds do not systematically apply and control ESG criteria in their investments. If any, only a small part of their huge capital reserves is invested according to ESG criteria. These choices do not correspond to a

modern capital investment strategy and do not comply with the code of conduct of professional medical associations.<sup>4,6,7,10</sup> Furthermore, ethical values seem negotiable when estimating the yield of an investment.

Finally, physicians are an important voice in any society. Therefore, they should promote sustainable investment strategies according to ESG criteria as a matter of course in the health sector, in policies, and with patients for the conservation of natural resources, keeping in mind that such strategies do not preclude economic gains.

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