MVF Congress ‚The impact of the pandemic on healthcare' (part 2 - panel discussion)

Pfaff: ‚Ideas are not enough to achieve success'

Two presentations in particular gave rise to heated, sometimes very controversial, but therefore also interesting discussions during the MVF Congress ‚The impact of the pandemic on healthcare'. The first was the statement by Prof Dieter Köhler, MD, former Medical Director of Kloster Grafschaft Hospital, that uncritical adherence to the S3 guideline ‚Recommendations for inpatient treatment of patients with Covid-19' had led to an unnecessarily high number of corona deaths during the pandemic. The second was the presentation by Prof Dr Holger Pfaff, Head of the Institute for Medical Sociology, Health Services Research and Rehabilitation Science at the University of Cologne, who presented a new approach to how serious decisions can still be made on an uncertain data basis.

>> Köhler's central thesis was that around 45% of corona deaths in Germany could have been saved if they had not been intubated, as around 80,000 patients died unnecessarily from intubation and ventilation. Köhler concluded that the fundamental question of whether there is any evidence at all for intubation in isolated hypoxaemia had never been asked.

‚We certainly need to rethink the whole chapter,' concluded Prof Ralf Kuhlen, Chief Medical Officer and Group Managing Director Medicine at Helios Health and Chairman of the IQM Scientific Advisory Board. He was quick to demand that studies were needed to answer the question ‚intubation yes or no'. At the very least, however, studies have been carried out to determine whether terminating non-invasive ventilation too late can also be relevant to mortality. There are also meta-analyses that show that a significant increase in mortality occurs when non-invasive ventilation is used in hypoxaemia w

is used and intubation is performed too late. In general, however, Kuhlen believes that more people die if they are not intubated than if they are intubated. ‚Exactly this study does not exist,' Köhler replied. According to Köhler, an animal experiment can answer the question because an RCT on humans is not possible for ethical reasons. Following an objection from Prof. Dr Bertram Häussler, Director of the IGES Institute and idea generator of the MVF Congress, that it was dramatic regardless of whether the number of people who died unnecessarily from forced ventilation was 80,000 or 8,000, Kuhlen replied that he could not comprehend these figures in the data available to him. In principle, however, he admitted that many people underestimate how great the risks of the treatments really are. This also applies to basic assumptions such as the postulate that the intensive care units must not become too full, which determines coronavirus pandemic management. Nobody has even once asked the question of whether the intensive care units are justifiably full or not.

According to Kuhlen, a look at neighbouring European country Spain, where Helios is active with the Quirónsalud Group, helps here. The colleagues working here not only operate far fewer intensive care units (according to OECD statistics, Germany has 33.9 beds per 100,000 inhabitants, Spain only 9.7) than in Germany, but also utilise them far less. As a result, it can be assumed that the Spanish would also have used less forced ventilation during coronavirus. Nevertheless, according to Kuhlen, hospital mortality in both countries was comparable down to the decimal place for a similar patient cohort. Kuhlen: ‚We have many more intensive care units, but we also use them much more.' For him, the question now is how much intensive care is actually necessary and how much intensive care utilisation is really necessary in order to create the greatest possible outcome benefit; this question has probably been discussed far too little in recent years. However, this also means that the German basic assumption or theory that as many intensive care beds and ventilators as possible were necessary to get through the pandemic ‚was certainly wrong'.

‚We need EBMplus. Where I would clearly disagree is that evidence-based medicine or studies based on it could take place without theory. That would be very poorly applied EBM. The danger of Pfaff's presentation is also that a ‚good' theory can compete with the available evidence.'

Prof. Dr. Matthias Schrappe, University of Cologne

Prof Dr Holger Pfaff, Head of the Institute for Medical Sociology, Health Services Research and Rehabilitation Science at the University of Cologne, is familiar with theories as well as evidence-based medicine (EBM). From a sociological perspective, EBM is a proven method for reducing complexity and an equally proven method for reducing decision-making uncertainties, especially for decision-makers in the political, epidemiological or medical field, who all have to make decisions quickly under uncertainty. ‚If I have clear information from guidelines, I can be sure that I am making the right decision and don't have to think about it for long,' said Pfaff, explaining Köhler's criticism of the unquestioning adherence to guidelines. EBM is primarily used by decision-makers to be sure they are doing the right thing. This is because EBM promises a statement about the most effective measure and is thus seen as part of science as a provider of truth and as an eliminator of doubts.

However, the legitimate question is whether this is the right view. According to Pfaff, EBM is perfect for simple interventions or slowly developing areas of application that offer sufficient time to build up the necessary evidence. However, EBM reaches its limits with complex interventions and dynamically

developing environments such as a pandemic. He described the basic problem that becomes apparent here as ‚EBM-lag', because the EBM system inevitably always lags behind social, biological and technological changes, as it takes a long time to build up the necessary evidence. Pfaff: ‚To be more precise, it is not EBM that has the problem, but the scientists who have to advise decision-makers on what to do in the event of a pandemic, for example.' This is why EBM first and foremost needs an ‚accelerated solution', which he described as the ‚organic turn of EBM', a kind of systematic solution that is still based on the principles of evidence generation, but is more flexible. Here he advocatesthe ‚EbMplus' approach, which Prof Dr Trisha Greenhalgh, co-director of the Interdisciplinary Research in Health Sciences (IRIHS), has called the ‚EbM crisis'. This approach, which in addition to RCTs also systematically considers mechanistic evidence, i.e. studies that aim to explain what factors and interactions exist and are responsible for a phenomenon, should, in Greenhalgh's view, be handled ‚on a par with probabilistic, clinical and epidemiological studies'.

‚Health services research should have emphasised more strongly during the pandemic that if a theory is actually being used, it should be argued on a theoretical basis. But which theory, which turned out to be valid in retrospect, would have helped me at the beginning of the pandemic?'
Prof. Dr. med. Martin Möckel, Charité

‚The Health Data Utilisation Act will soon come into force. The exciting question will be whether we will be able to gain new insights that we need for EbMplus with the opportunities that arise here.'
Prof. Dr.-Ing. Thomas P. Zahn, University of Applied Sciences

Mechanistic evidence can encompass a wide range of designs, including in vitro experiments, biomedical imaging, autopsies, animal experiments (as suggested by Köhler), aerosol science, technical research and simulations, as well as established theories. However, evidence for mechanisms would have to be combined with probabilistic evidence from clinical studies (and possibly evidence from non-randomised comparative and observational studies) in order to be able to convincingly describe causality. This means that'no evidence stands alone'.

However, according to Pfaff, the implementation of EBMplus studies can only partially solve the problem of ‚EBM-lag', as these also take time. He therefore argues in favour of a theory-integrating solution: ‚EBMplus and theory'. The solution that he formulated with his colleague Prof Dr Jochen Schmitt from Dresden in two scientific articles to answer the question of how serious decisions can still be made on an uncertain data basis is a four-point convention for evidence-based healthcare policy: 1. recalibration of the definition of scientific quality in complex, rapidly changing situations.

2. discuss conditions for sufficiently low uncertainty in health policy measures.

3. health policy decision-making requires double reduction of uncertainty: intervention and implementation uncertainty.

4. integration of empirical and theoretical knowledge for knowledge-based medicine and health science (EbMplus and theory).

However, this requires one thing above all: high-quality theories. Pfaff's demand: ‚We need to deliver better theories over time and drive forward theory development. Because only high-quality theories are suitable for policy advice.'

Häussler agreed with Pfaff in the first speech after his presentation that ‚EBM is only ever the best of the day before yesterday'. He also agreed with Pfaff that EBMplus should allow more study designs than just RCTs. Where he was at a loss was the inclusion of theory, because EBM without theory does not actually exist. As he put it: ‚If there is a result that EBM does not produce with or against all theory, then there is fire under the roof.'

However, Pfaff makes a small but subtle distinction here. We know that RCTs as the basis of EBM are feasible without theory; we don't need theories, just an idea. Pfaff's objection: ‚Many people in healthcare research also have an idea, but the idea is not enough to be really successful.'

Häussler's second point of criticism concerned the quality of theories. If many theories can be used, the question arises as to which theory should ultimately be selected - in case of doubt, these could also include false or even conspiracy theories. Häussler: ‚That brings us back to square one.' In his opinion, one should rather orientate oneself on concepts such as hedge funds. These were invented in order to be able to make investments under uncertainty. Generally speaking, a hedge fund does not throw all its golden eggs into the same ‚basket', but into different ones and analyses which ‚basket' performs better than others. A similar approach

‚In the end, the experts advise and the politicians decide. We have to think about where our job ends by defining the relationship between science and politics and answering the question of where the job of science ends.'
Prof. Dr. Holger Pfaff, IMVR

is also advisable in the case of pandemics, for example by creating a kind of innovation island in which different approaches and treatments are used; where, for example, forced ventilation is used in one, but not in the other. Or one where immunisation is used, but not in the other. In this way, society could learn from natural experiments. However, Germany is not at all prepared for such approaches because German society always favours an ‚all-or-nothing' approach.

Pfaff's response to the use of possibly false or even conspiracy theories was to demand quality levels for theories. Theories of poor quality are those that are not accepted in the community because they have not been empirically tested. They are then also not suitable for counselling; only high-quality theories with long-term positive agreements can be used for this purpose. Pfaff liked Häussler's idea of a kind of innovation hedge fund, because the problem in medicine in particular is that everyone is running in one direction, as deviations from guidelines are not permitted. Therefore, more learning spaces are needed to allow innovation. If everyone is going in one direction, you can only hope that the direction is right. However, also in reference to Köhler's assumptions: ‚The direction is only good as long as the guideline is based on sufficient empirical evidence.'

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Because something has not been found does not mean that something is wrong. For once, we live in a system where you have to prove what you are doing and also why you are not doing something.'
Prof. Dr. Ralf Kuhlen, Helios Health/IQM

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Comment

For reasons of space, this summary can only represent a small part of the discussion and is therefore incomplete. You can listen to everything in detail, see links below

MVF-Kongress Teil 2 am 18.1.2024

Teil 2: Evidenz aus der Versorgungsforschung		Links
Begrüßung/Warm-up	Prof. Dr. Reinhold Roski, MVF / Prof. Dr. Bertram Häussler, IGES	https://t1p.de/m8vrc https://t1p.de/iio4w
Gab es tatsächlich eine Covid-19-bedingte Übersterblichkeit? – Methoden und Daten	PD Dr. Daniel Wollschläger, Universitätsmedizin Mainz	https://t1p.de/55n16
Effekte der SARS-CoV-2-Pandemie auf die stationäre Versorgung	Prof. Dr. Ralf Kuhlen, Helios Health und IQM, Berlin	https://t1p.de/wxxis
Intensivversorgung: Was hat die forcierte Beatmung gebracht?	Prof. Dr. Dieter Köhler, eh. Ärztlicher Direktor KH Kloster Grafschaft	https://t1p.de/2gjvy
Kollateralschäden und Langzeiteffekte des Rückgangs von KH-Fällen während der Pandemie	Prof. Dr. Martin Möckel, Charité Berlin	https://t1p.de/mq56a
EbM + Theorie: Wie man auf unsicherer Datenbasis schwerwiegende Entscheidungen treffen kann	Prof. Dr. Holger Pfaff, Universität zu Köln	https://t1p.de/nahnk
Podiumsdiskussion: Wie hat sich Corona auf die Versorgung ausgewirkt?	Moderation: Prof. Dr. Reinhold Roski, MVF	https://t1p.de/ee6hj

Education and health

>> Children from socio-economically weaker backgrounds not only have lower educational qualifications than children from better-off homes. New studies based on the family demographic panel FReDA show that health in adulthood is also worse if the parents have a lower level of education. Analyses show that parental education has a causal effect on children's health over the course of their lives. ‚Our analyses show significantly poorer health among people with less educated parents. In the long term, this poorer health will translate into lower life expectancy,' writes Mathias Hübener, who published the current BiB analysis ‚Parents without A-levels: children less healthy in the long term' in ‚Bevölkerungsforschung aktuell' together with Mara Barschkett.

According to the analysis, there are clear differences in the health of adults depending on the educational background of their parents. Almost half of the respondents between the ages of 18 and 50 whose parents do not have a high school diploma (FA) have a BMI of over 25. If only one parent has FA, 40% are overweight; this proportion drops further to 31% if both parents have FA. The proportion of people with obesity is more than twice as high (18%) when parents do not have FA compared to people whose parents both have FA.

When looking at health across the age of adults in relation to the parents' level of education, consistently poorer health is seen in people with less educated parents. Firstly, the proportion of overweight people increases with age and general health declines. If a distinction is made according to whether neither parent or at least one parent has FA, a gap emerges: Within the overweight group, it is about 11 percentage points for 25- to 34- and 35- to 44-year-olds. Under 25 and over 45 it appears smaller, but is similar to that between 25 and 44. In the subjective assessment of general health, people with less educated parents also show consistently poorer health. <<