

Dietmar

Equal access to mHealth technology?

Dietmar is a retired widower. He used to work in construction, but was sent into early retirement due to chronic back injuries. He does not have a lot of savings, so he mostly lives from a state pension. He owns a 2004 Peugeot 206, which he doesn't use much, but which gives him a sense of freedom. He has a smartphone, but mostly uses it for playing Patience on his balcony.

2018 was a bad year for Dietmar. His dog, Bärbelchen, died. He was diagnosed with hip arthrosis and had to undergo hip replacement surgery and as if this wasn't bad enough his old Peugeot started to make weird clunking noises; the cv axle needed replacement, as well as, as it turned out, the drive belt. Costs: 1200 euros. Luckily, his two children (Paula and Anders) could help chip in, but Dietmar doesn't like to depend on them financially, even though they can easily afford it.

Dietmar does not have a lot of money to spend, but he is not unsatisfied. After paying his rent and regular expenses, he has 375 euros left every month. From this, he always sets aside 150 for unexpected costs, gasoline and infrequent purchases, such as clothing. This leaves roughly 7,50 every day for his daily expenses, which Dietmar thinks is fine. He tries to make it a sport to spend exactly that amount when doing groceries, sometimes going to three or four different stores in a day.

Dietmar's hip replacement recovery takes longer than he expected. He knows he should exercise more, but he cannot muster the discipline. He visited a physiotherapist last year, a young lad called Ian. Dietmar doesn't really like Ian, and he doesn't like being told what to do by someone who doesn't even have a proper beard yet, but the physiotherapy sessions seemed to help. Unfortunately however, his insurance only covered eight sessions. Luckily, so the physiotherapist tells him, the practice cooperates with a health app company. The application monitors the progression and suggests new exercises every day. The subscription "only" costs ten euro a month, so the physiotherapist assures Dietmar, or as he helpfully translates, "the price of a cup of coffee a week!" At that point, Dietmar felt as if he and Ian were worlds apart.

Discussion: Equal access to mHealth technology?

Problems of poverty and unequal access to technology are often a matter of degree: it is not the case that Dietmar cannot afford the app suggested by Ian. But the suggestion that ten euro a month is a negligible amount of money rubs Dietmar the wrong way. Contrary to Ian, he would have to pass up on other things in order to pay for the app. The implicit suggestion that anyone has the money to buy a coffee at restaurant prices whenever they feel like it is irksome to Dietmar who takes such care to stay within his 7,50 euro budget.

Beyond this personal friction, there is an ethical issue at stake here: to what extent should healthcare professionals presume that commercial health apps can function as a sort of extension of the care offered? Ian's offer seems at first sight like well-meaning advice, but, coming from a health professional, there is a certain amount of pressure exercised as well. Dietmar will probably not choose to use the app

suggested by Ian. But he may end up feeling bad about that as well – and he may certainly take longer to recover. Dietmar may also end up blaming himself for not being strong enough to motivate himself to exercise, which may only further a feeling inaptness and work counterproductive to further recovery.

As a consequence, even in a relatively egalitarian country, we may observe how the careless introduction of technologies may lead to unequal outcomes.

Currently, mobile health technology is usually not reimbursed by medical health insurers. German law has provided the option for reimbursement of certain health apps from the year 2020 on, but many regulatory and practical questions remain open.

LITERATURE

Nadine Bol, Differences in mobile health app use: A source of new digital inequalities?
Ruger, Jennifer Prah. "Ethics of the social determinants of health." *The Lancet* 364.9439 (2004): 1092-1097.

SOURCE

This case is mostly fictitious, specifically, although there exist physiotherapy apps, most of those are 'free'. 'Dietmar' may encounter a physiotherapist who recommends such an app – but currently there is little chance of him having to pay anything for this (see however this app this app for a paid-for medical application that is being used in close collaboration with physicians).

Since 'free' software in the medical context comes with its own problems, however, the developments may very well be moving towards more paid-for apps such as described in this case.

1. <https://www.divsi.de/publikationen/studien/divsi-umfrage-gehen-internet-nutzer-deutschland-mit-agb-und-datenschutz-bedingungen-um/agb-lesertypen-nichtkaum-lesen-vs-genau-detailliert-lesen/>
2. <https://www.nytimes.com/interactive/2019/06/12/opinion/facebook-google-privacy-policies.html?action=click&module=Opinion&pgtype=Homepage>