Melina Rutishauser:

»Health Insurance«

in: Dominik Mattes, Janina Kehr, Julia Koroknai, Friederike Rosenbaum, Helmar Kurz, Claudia Lang, Caroline Meier zu Biesen, Ehler Voss (eds.):

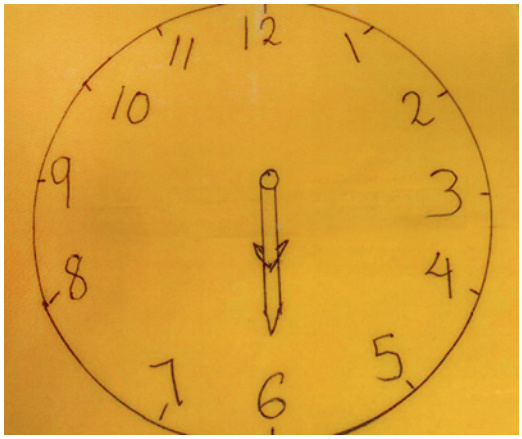
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RADICAL HEALTH

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Melina Rutishauser

HEALTH INSURANCE Entanglements



Postcard by Melina Rutishauser, Tanzania (2017).

At first glance, the time represented in this postcard is uniquely depicted. Nonetheless, it somehow irked me. I felt the need to take a second look at the picture. What is the time represented here? How should the picture be interpreted? How should the hour and minute hands be read? Indeed, moments of productive disruption to reconsider my own ideas, perceptions and narratives had become pivotal during my years of research.

Do health insurance schemes as new health care infrastructure in the Kilombero Valley have the potential to change the way diseases are dealt with?[1] The National Health Insurance Fund (NHIF), one of the main health insurance schemes in Tanzania, with a broad and comprehensive benefit package for civil servants and formally employed individuals, seemed to foster 'good' biomedical health care for the ones diagnosed with Type 2 Diabetes Mellitus (T2DM). In the context of the Kilombero Valley, in the Morogoro Region, Tanzania, a broad and comprehensive health insurance package made a difference concerning the biomedical treatment of T2DM for those who were insured by the NHIF between 2016 and 2019, and could be perceived at least partially as 'radical health'.

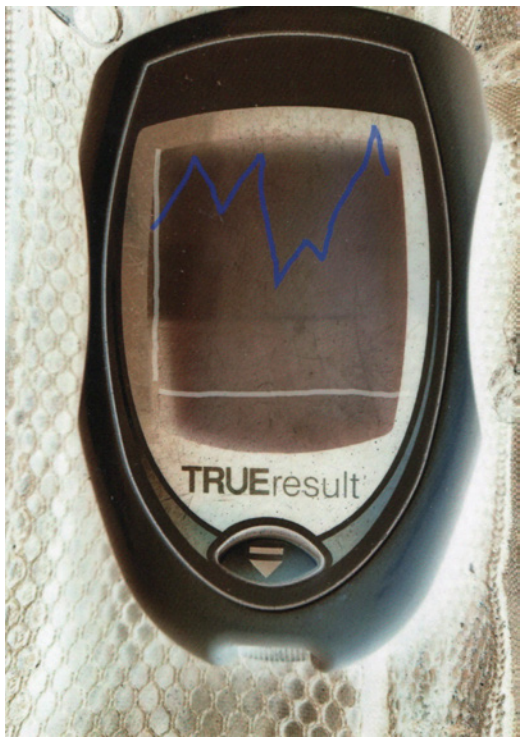
The term radical in this context can be understood in two different ways: as a new form of health protection compared to what was possible in the past; and as essential for a sustainable long term biomedical treatment regime for T2DM.

But what are the challenges to achieve novel forms of healthcare and maintain and expand them to actually call them radical health for all? The contribution presented here interlinks postcards written by myself during the field research for my PhD with reflections on (in)visibilities created by and through digital technologies in T2DM health care infrastructures in Tanzania and their possible contribution to achieve healthier biomedical futures. The creation of the postcards – through the Swiss Post *PostCard Creator App* – became a method complementing the interviews, note taking, participation and observation and at the same time extending them, as it allowed my creativity to follow free associations and to express affects in another way.[2] The postcards were therefore important to depict thoughts and ideas in a visual and creative language and offering different forms of knowledge production. As formal

field notes and the documentary photographs were not fitting the needed format to think through and deposit thoughts, I searched for another medium which would allow me an openness to think and look at things.[3]

Sending postcards allowed to let go of specific concerns and emotions for a moment and be mentally agile to create, figuratively speaking, new space for further considerations.

This distinguished it from the classical diary writings where I kept the notebooks with me all the time. However, as I had sent the postcards to my home in Switzerland, I knew the visual and written reflections were not lost as such and I could work again with them having a temporal and geographical distance. Additionally, as the postcard consists of a predefined space, the written and visual thoughts were a unit with a start and an end. These reflections could later on be arranged in different forms like constantly evolving mind maps. This stands in contrast to the rather linear form of the written diaries I produced in the field. Digital technologies were part of the creation of the postcards as well as present in the diagnosis of T2DM, but they were also relevant to health insurances. Through the utilization of certain health technologies, including for example test strips for the glucometer as well as other investigations and a range of pharmaceutical products, specific individuals gain access to biomedical treatments through health insurance schemes. The multi-layered aspects of technologies and the (in)visibility created at different levels by them caught my interest whilst talking to women and men with a T2DM diagnosis. The postcards presented here are engaging with this (in)visibility, as there are only objects depicted on the postcards even though T2DM is experienced by real people. But they allude also to questions and criticisms, for example by using different visualization techniques in the creation of each postcard, such as the X-ray filter on the image of the glucometer.



Postcard by Melina Rutishauser, Tanzania (2019).

A blood glucometer is a point-of-care device and as such a technological product which makes T2DM visible and shapes its biomedical management. Nevertheless, the depicted numbers on its screen do not represent the complex picture of the individuals' constraints and health capacities even though these aspects are influencing the displayed glucose value. How do insurance schemes influence Diabetes Mellitus (DM) (in)visibility through such technologies? For me personally, digital technologies always evoke a sense of disruption and disconcerting vigilance due to privacy concerns. Nevertheless, digital technologies are crucial in today's medical perceptions of DM and at the centre of the diagnosis of the disease.[4] However, digital technologies are also at the centre of a related health infrastructure – the health insurance schemes. Through the underlying datafication they establish new ways of monitoring and evaluating health expenses and health seeking behaviours.[5]

Like the glucometer, such data produces a specific visibility and creates a form of invisibility and inequality at the same time.

Many individuals were testing their glucose value not only at the visits on their monthly diabetes clinic days. Yet, in a place such as the Kilombero Valley, most individuals do not have the possibility and the financial means to buy their own glucometer, which was reported to cost around 65'000 TZS (approx. $28). Therefore, individuals often test at small private laboratories. To test at private laboratories instead of the diabetes clinic is more convenient due to the distance, the price, the time spent for testing and waiting and so forth. This data is missing and does thus not form part of a broader picture of the person's health by medical staff attending them in the clinic. In that regard it cannot enhance the correct adjustment of the T2DM medication. The blood glucose values measured remained in a note book in the laboratory. Additionally, the data also remains invisible to enable a broader picture on T2DM in a particular health care facility and thereby misses to inform health policies. Similar things could be observed concerning health insurance schemes. Individuals in the research area did know that this person or that neighbour got a service paid for by the NHIF. However, what a specific health insurance plan covers and why the policy of the benefit package changed at a particular point in time remained invisible to individuals diagnosed with T2DM with and without health insurances. There were mainly two insurance schemes present in the narratives of individuals in the Kilombero Valley: the National Health Insurance Fund (NHIF) and the improved Community Health Fund (iCHF - CHF Iliyoboreshwa). The NHIF is a mandatory health insurance scheme for civil servants and formally employed individuals, while the iCHF is a so-called pre-payment scheme for people without 'formal' employment in rural areas. The premium settings and the benefit packages of the two health insurance schemes differed substantially.

Insurance schemes do not operate in isolation.

Individuals that I met who were insured by the NHIF were either insured through their public employment status or due to their status as a dependent of an insured public employee. In that category, the NHIF had an employer/employee split where each party contributed three percent of the monthly salary which was deducted directly. It covered two parents and four dependents. The coverage however changes for the NHIF after the retirement of the previously employed main policy holder. After retirement only the former employee and her/his spouse are insured any longer, and only in case if such a change has been initiated by the main policy holder. If the main policy holder has contributed 120 months or more to the scheme, the retired individual and her/his spouse receive free health insurance services for the rest of their life.[6] The iCHF was paid by an annual lump sum of 30'000 TZS (approx. $13) in

advance for a household of six individuals. During the years of the research the NHIF enabled individuals not only to access different types of public and private facilities on all levels up to Muhimbili National Hospital, including privately run pharmacies and accredited drug dispensing outlets (ADDOs), but also to get different technologically mediated investigations and pharmaceutical products as for example the test strips for the individual glucometer. In the same years, the iCHF did not pay for the test strips of the glucometer and only some pharmaceutical products for the treatment of T2DM were available at public health centres and public hospitals. There were no broader and well established agreements between the iCHF and privately run pharmacies or ADDOs during these years.[7] Insurance schemes as well as other technologies, such as different testing tools, form part of an interlocking system of power and inequalities.[8]

HEALTH INSURANCE Making (In)Visible

In a biomedical representation, DM is characterized by a high blood sugar level over a continuous period of time due to the impairment of the pancreas in producing insulin, or the inappropriate response to the produced insulin by the body cells due to an insulin resistance. DM thus belongs to a group of metabolic disorders, which are occurring in our body and are in its depiction typically not noticeable to the human eye. The medical technologies used – as for example a glucometer – assist by making the disease visible, representing digits of the glucose content in the blood. The technologies should therefore operate as a support to control the glucose content life-long and enhance access to biomedical treatment. Due to the characterization of DM, the outcome of a recommended daily test regime is not a positive or negative result as it would be for a malaria or HIV/AIDS test, but rather a sequence of numbers, which has to be interpreted and organised by human beings. Therefore, testing can offer different ways of understanding aspects of our health and thinking about health and disease. However, one should carefully look at what is being tested, how it is tested and how the data is interpreted and represented.

"[F]or many reasons that are both lay and professional, diabetes is a controversial and contested diagnosis."

Carolyn Smith-Morris: "The Chronicity of Life: The Acuteness of Diagnosis", in: *Chronic Conditions, Fluid States: Chronicity and the Anthropology of Illness*, United States of America: Rutgers University Press (2010), p. 27.

During the research on T2DM, I was supported by two research associates: Dr. Judith Mheni and Dr. Eusebius J. Mikongoti, who are both medical doctors. During our encounters in 2019, the glucometer became increasingly present in the narratives of women and men diagnosed with T2DM from all socioeconomic statuses. Of the 34 individuals we were in regular contact with over these years, seven have purchased the device out of pocket. One person got it through a special promotion by the NHIF and a local pharmacy. However, the machine as such is not the most expensive part. What makes it expensive are the strips and the needles to get blood out of the fingertip. A set of fifty strips costed by then around 45'000 TZS (approx. $20), which is not even two strips a day. Each device requires different strips and needles. The micro-specifications of each glucometer are therefore very important, and spare parts are not always available for all types of devices on the local market. Out of the eight individuals who own a device, only two persons were not insured by the NHIF. One person paid for the test strips out of pocket and used it just in case of feeling unwell. The other has received the strips as a gift and was often not able to use the device at all. As DM is considered to be a chronic disease, the biomedical discourse represents it as a disease which requi-

res continued monitoring – at least until the medications are adjusted in case that an individual is not using insulin. The insurance thereby bolstered the aspiration for 'modern individualized health care' through the emphasis on individual testing via a glucometer. Encouraging people to test their own blood glucose levels at home, and therefore to buy a glucometer, was mentioned by people from all backgrounds as a common piece of advice from doctors. According to medical professionals, this habit allows patients to better understand and assess their own health conditions.

Testing seemed to be gaining in importance in a local biomedical treatment regime.

In the narratives of individuals diagnosed with T2DM, the emphasis on testing in the monthly check-ups gave also way to the comprehensive instructions on dietary changes to control the glucose level in the blood. In present encounters at the clinic, the adherence and management of medicines and the measuring of the height, weight, the blood glucose content and the blood pressure level was emphasised as women and men recounted to us. Still, the emphasis on measuring had no influence on the long diagnostic journey to get a T2DM diagnosis yet, as narrated by other interlocutors.[9] A misidentification as malaria and/or HIV/AIDS due to the symptoms – such as pain all over the body, sweating, fever, extreme tiredness, thirst, headaches or losing weight – was mentioned by many individuals.[10] Nevertheless, diabetes was represented by medical professionals as becoming increasingly common. However, research and donor funded projects on DM were still rare. Or has DM just been marginalised by most donor-funded projects since decades as Amy Moran-Thomas' research indicates?[11] And how will health insurance schemes change or reinforce this discrepancy in the future in places like the Kilombero Valley? In the conversations with individuals diagnosed with T2DM, health insurance schemes were not represented to help shorten the diagnostic journeys. But being insured via the NHIF was said to be helpful to pay for the biomedical treatment costs afterwards, and to facilitate to receive a "favourable treatment" at private and public health care facilities on all levels of the hierarchically structured health care system. During the years of research, malaria treatment was covered by both insurance schemes the iCHF and the NHIF. Access to T2DM treatment was however limited through the iCHF by then. A sustainable and comprehensive access to biomedical T2DM treatment was only available for individuals insured via the NHIF.

The format of the postcard helped me to combine visual considerations and written thoughts.

In a multi-layered process – involving the selection of a topic, its visual conceptualization as well as the depiction by using different tools – I created visual reflections for the postcard front. On the reverse side of the postcard, I inserted a written comment, a reflection or questions and concerns which were linked to or contrasting the visual composition. The front and the back of the postcards were linked in one or the other way. Yet while looking at one side the other is invisible and allows in that moment to rethink of and explore additional associations. The postcard of the glucometer, for example, can enable us to critically reflect on so called true results, and how they can differ depending on the individuals and places involved in the process of measuring a disease. Not only does the time of the day influence the result, also the mental well-being such as fear, stress or heavy thoughts are changing it. Even the fact of having looked at food is activating the insulin production by our pancreas through messengers sent by the brain.

What then is a true result?

Applying the X-ray filter to the photography additionally triggers questions about different meanings of series of daily blood glucose readings. Who can afford several blood glucose readings a day in the Kilombero Valley? How much do we actually know about a person through these sequences of numbers? How do numbers affect the treatment? Which numbers – blood glucose value, insurance card number etc. – are influencing the actual biomedical treatment, and how so? Through the depiction of the device – without the lancets nor the testing strips which are essential to perform their actual function – questions concerning practical issues around its working arise. Where to get batteries, lancets, strips while living in the Kilombero Valley? How long are the strips available on the market? Is the type of glucometer on the list of the Medical Store Department of Tanzania, or was it just a donation by a program? The drawn graphs can remind an observer of the ups and downs – the chronicity with which T2DM is often associated, and the acuteness of the diagnosis and so forth. It can raise questions on when and how health insurances are needed and actually used.

HEALTH INSURANCE Hidden Costs

As I got to understand through conversations with individuals, DM often implied complex and expensive therapies which are regarded as life-long in a biomedical sense. The range of the costs for a biomedical treatment regime varied among our interlocutors and for the individuals over time, and was reported to be between 9'500 TZS and around 90'000 TZS (approx. $4-$44) per month without the myriad costs for the recommended diet, the testing tools and the transportation costs to the respective healthcare facility. In case of long-term implications, co-morbidities and synergetic interrelations, further investigations and additional medicines were recommended by medical professionals. The individuals could seldom manage these costs as well as the care scheme over many years alone. The cost did not only correlate with the progression of the disease and the long-term implications set in motion, including high blood pressure and/or an experienced stroke; but also, between individuals insured via the NHIF, the iCHF and out-of-pocket payments, due to the different service coverage policies of the insurance schemes. Where the NHIF covered different related investigations and a range of medicines for T2DM, the iCHF was represented by most individuals diagnosed with T2DM to alleviate the treatment costs only marginally and just if prescribed with some few specific pharmaceutical products available in public health centres and hospitals. None of the insurance packages covered the cost of the recommended diet, nor did they cover transportation costs to health facilities. These costs remained invisible for the health care system but not for the budget of the individuals diagnosed with T2DM.



Postcard by Melina Rutishauser, Tanzania (2017).

Access to technologically mediated infrastructures is fluctuating for individuals diagnosed with T2DM. The technological infrastructures are being transformed, adapted, shaped and redesigned, often influenced by international organisations. During the years of my research, there were several changes concerning the iCHF. Most importantly, its national roll-out to 26 regions of mainland Tanzania starting in 2019 and the increase of the annual fees to insure six individuals from 10'000 TZS to 30'000 TZS (approx. $4-$13) in the Kilombero Valley, which took place simultaneously. Access to health insurance was also fluctuating due to changes in the individuals' socioeconomic positions and changing relations to other individuals such as neighbours and kin. Therefore, health insurances manifest themselves concurrently, and over time as enabling and liberating, for example for elderly women formerly employed by the state as nurses or teachers, who after retirement were able to access private health care facilities and specialists all over the country without the need to ask relatives for financial support. At the same time, health insurances revealed themselves as inhibiting and excluding,[12] as for example they only cover biomedical treatment costs even though it is recommended and represented as essential to follow a balanced diet with vegetables and whole grains. Such a healthy diet is more expensive and less accessible than processed grains. Another example would be that individuals who are insured based on the employment status of a relative can lose their access to insurance coverage in case the employment status of the daughter/son, mother/father or their marital status has changed. In a biomedical treatment regime, DM cannot be covered by a minimum insurance package.

A comprehensive insurance system is a form of radical health, although its implementation seldom fulfils such a promise for all over a long period of time.

Health insurances are not radical in the sense of exceeding conventional ways of doing health for all. Nevertheless, to keep a curiosity in different and at times maybe even contradictory implications of such technologically mediated infrastructures as health insurance schemes, can help us to see some radical possibilities. In this regard, it is useful to (re)consider one's own standpoints and subdue oneself to a temporary sense of discomfort so as to perceive other aspects and "[...] challenge our own visions of the real".[13]

HEALTH INSURANCE Postcards

As versatile material objects, I had the possibility to assemble the postcards and reassemble them in different ways and create through that new ideas and focus on different insights. Assembling for example the depicted postcard of an individual glucometer (second postcard), a postcard of food and another with colourful pills drew attention to the different effects these products can have on the displayed blood glucose values. This allowed for reflections on how these aspects were presented in different occasions by different stakeholders. Complemented with the postcard on money (third postcard), questions on costs, availability and dependency of markets and policies and their global entanglements were arising. All these aspects were rather invisible while looking at one postcard alone. Additionally, because of the printed-out postcards, some of my thoughts became visible and palpable objects which I could take along with me and share with others. During the discussions with family, friends and colleagues from a qualitative data analysis group, additional layers of entanglements became visible. When a friend saw the postcard with the inscription "TRUEresult" on the glucometer, as well as the depiction of time on the first postcard in the present contribution, an interesting discussion emerged. We debated the entanglements of the true and therefore valuable results and their medical and individual links to time, for example concerning an individual's T2DM care during the harvesting season or a burial ceremony and the

sleeping and eating rhythms shaping these moments, which may contradict biomedical recommendations elaborated in different guidelines. This discussion clearly triggered some interesting questions and thereby enhanced the analysis.

Notes

1 The presented insights were gained during my ethnographic research conducted between 2016–2019 in the independent ethnographic research project Participation in Social Health Protection: An Anthropological Case Study in Tanzania (January 2017–August 2021) funded by the Swiss National Science Foundation (SNSF Grant Nr. 10001H_169476) and led by Prof. em. Dr. Brigit Obrist van Eeuwijk. Special thanks go to Brigit Obrist and Andrea Buhl-Colmsee for their inputs to the article, to the whole group of section infrastructures for their feedback, and to the continuous and supportive engagement of the Radical Health editorial team, as well as to all the individuals who made the research in Tanzania possible. For the English review, I would like to thank Krista Calleja and Jascha Forster.
2 Swiss Post: PostCard Creator App, https://www.post.ch/en/sending-letters/sending-letters/postcard-creator-app.
3 Mascha Gugganig, Sophie Schor: "Teaching (with) Postcards: Approaches in the Classroom, the Field, and the Community", in: *Teaching Anthropology* 9/2 (2020), p. 60.
4 Arlena Siobhan Liggins: *Making Diabetes: The Politics of Diabetes Diagnostics in Uganda*, Bielefeld: Transcript (2020), p. 30.
5 Jessica Mulligan: "Insurance Accounts: The Cultural Logics of Health Care Financing", in: *Medical Anthropology Quarterly* 30/1 (2016), pp. 37–61.
6 NHIF Retiree Benefit Plan, https://www.nhif.or.tz/pages/retiree#gsc.tab=0.
7 Angel Dillip, Albino Kalolo, Iddy Mayumana, Melina Rutishauser, Vendelin T. Simon, Brigit Obrist: "Linking the Community Health Fund with Accredited Drug Dispensing Outlets in Tanzania: Exploring Potentials, Pitfalls, and Modalities", in: *Journal of Pharmaceutical Policy and Practice* 15/1 (2022), pp. 1–12.
8 Brigit Obrist, Angel Dillip, Albino Kalolo, Iddy Mayumana, Melina Rutishauser, Vendelin Simon: "Toward Digital Participation? The Work of Aspiration in Improving the Community Health Fund in Tanzania", forthcoming.
9 Arlena Siobhan Liggins: *Making Diabetes: The Politics of Diabetes Diagnostics in Uganda*, Bielefeld: Transcript (2020), pp. 119–148.
10 Emmy Metta, Ajay Bailey, Flora Kessy, Eveline Geubbels, Inge Hutter, Hinke Haisma: "'In a Situation of Rescuing Life': Meanings Given to Diabetes Symptoms and Care-Seeking Practices among Adults in Southeastern Tanzania: A Qualitative Inquiry", in: *BMC Public Health* 15/1 (2015), p. 4.
11 Amy Moran-Thomas: *Traveling with Sugar: Chronicles of a Global Epidemic*, Oakland/California: University of California Press (2019).
12 Erik Bähre: *Ironies of Solidarity: Insurance and Financialization of Kinship in South Africa*, London: Zed Books Ltd (2020), p. 11, pp. 21–24.
13 Joel Robbins: "Beyond the Suffering Subject: Toward an Anthropology of the Good", in: *The Journal of the Royal Anthropological Institute* 19/3 (2013), p. 458.