Title: Basic Income, its health effects, and the theory of Salutogenesis

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Introduction

Universal Basic Income (UBI) policies are receiving increasing attention as they may assure subsistence without a job in the formal economy and enhance other welfare policies related to health and education (1). Essential healthcare services and basic income security may complement each other to improve individual and population health. It is increasingly likely that genuine UBI pilots will arrive in the near future. Therefore, in order to meticulously monitor and evaluate UBI's effects on health, the pathways between cash and health, the underlying mechanisms and the interactions with healthcare and other social services need to be better understood.

A first attempt is to examine former cash transfer (CT) trials and programmes. However, none evaluated a full BI as defined by the Basic Income Earth Network (2). The majority were not universal, were directed towards households instead of individuals, and several were conditional and targeted towards a specific group such as those in poverty. These design differences can have far-reaching consequences on CT recipients' health effects and long-term health-related behaviours. Conditionality, in particular, creates a reliance on the authority of the assessor. Sen has stressed that poverty does not just mean lack of income but also capability deprivation in terms of political rights, transparency, and access to bureaucratic state support (3). One of the authors with long-term work experience in healthcare in low-income countries has summarized this challenge as "Special Services for the Poor are often Poor Services". Mismanagement and corruption are minimal risk misdemeanours with people in poverty and it is not sufficient to appeal to state bureaucracies to empower poor people (4, 5). For similar reasons it is important to differentiate between CTs to individuals and households. Households may not share their resources equitably due to power dynamics within a household or family (3, 6). A full basic income (BI) would respect the human rights of the individual recipient and it could provide agency and power. A conditional cash transfer (CCT) creates further dependency.

Concept of health

Despite these design challenges of CT interventions, they still hold potential to inform us on the potential health effects of a full BI on health as these do share some of its characteristics. Several recent reviews of CT studies reported about the effects on health in recipients, their health-related behaviours (e.g., diverse diets), and the wider social determinants of health (7, 8, 9). The documents provided helpful information on the effects of CT interventions and programmes on different health dimensions including general, physical and mental health and showcased the potential of a full BI to promote health among its recipients (10, 11). However, there was limited reference in the reviews to some aspects of health such as social and spiritual health (7, 8, 9).

Health is a multi-facetted concept with different perspectives. With the establishment of the World Health Organization (WHO), health was defined in its constitution as a state of complete physical, mental, and social well-being and not just the absence of disease and infirmity (12). This definition

presents an important modification to ancient Chinese, Greek and Indian explanations of a healthy mind in a healthy body, because social welfare linked to social environment, living and working conditions has become an important part of comprehensive health (13). The WHO definition has been criticized as static, ideal and lacking spiritual well-being. Health has been described as a dynamic process in every person with a continuous move between health and disease ranging from optimal functioning and well-being to illness and ultimately death (13). Whereas in the 1978 Alma-Ata declaration of Primary Health Care, a functional interpretation was given and stated that the health of people should enable them to lead a socially and economically productive life (14). Spiritual well-being has been described as a responsibility and contribution to the common good and the successful management of everyday life which leads to a sense of fulfillment and is rooted in people's values, beliefs, and the search for meaning (13, 15). To get a more comprehensive understanding of CT interventions on health, health dimensions such as spiritual and social health should be considered.

Pathways to health and their underlying mechanisms

Public health research and practice focused on risk factors, the protection of health from these factors (e.g., contaminated food) and the prevention and treatment of disease due to these factors (16, 17). This is also reflected in CT intervention design and evaluation which has been described as the pathogenic perspective. The WHO Ottawa Charter as foundation document for global health promotion was published in 1986 (18). The charter states the following fundamental conditions and resources for health: 1) Peace, 2) Shelter, 3) Education, 4) Food, 5) Income, 6) Stable Eco-system, 7) Sustainable Resources, 8) Social Justice, and 9) Equity.

A recent realist case study aimed to explain the mechanisms between CTs and health (19), and how these address the social determinants of health (SDH) (20). According to the authors a better understanding of the 'black box' how CT programs' work linking interventions to their outcomes is required. They used scientific realism as an approach which depicts that '*programs only have successful outcomes when these introduce appropriate ideas and opportunities (mechanisms) to groups in appropriate social and cultural conditions (contexts)*' (p. 57, 21).

It is essential to appreciate the concept of mechanisms within scientific realism (22). A programme or intervention offers resources. This also refers to visible mechanisms as link between the financial mean cash and how it has been used to obtain and combine certain resources for health and what health effects have been verified and/or measured in these studies. These resources change the reasoning of recipients and lead to a change of behaviour in a specific favourable context. These are also referred to as invisible mechanisms (23) which represent the various decision-making processes at different stages between the receipt of cash and the improvement and maintenance of health.

In relation to this theory, it is important to differentiate between resources and means to resources. Cash is a means to obtain resources. The fungibility of money allows recipients to select the most appropriate resources for their plans. However, the availability and accessibility of these resources are required to realise the recipient's intentions.

A potentially suitable theory to research the visible and invisible mechanisms underlying CTs and, the various aspects of health, is Antonovsky's Sense of Coherence Theory. Antonovsky, who was aware of the Ottawa Charter, developed a theory of health promotion called Salutogenesis (16). The

salutogenic perspective has a focus on General Resistance Resources (GRR) which he described as the assets of a person, a collective or a situation which '*facilitated successful coping with the inherent stressors of human existence*' (p.15, 16). These GRR facilitate a movement towards health when people are able to make cognitive, instrumental, and emotional sense of their inner and outer environment based on repeated life experiences. According to Antonovsky the link between poverty and poorer health was not only due to the inadequate quality of health services, but also to the conditions and continuous stress to which the poor were exposed (24). He stated that the poorest class and minority groups had the highest stress loads and very few breathing spells. The constancy of imposed stressors and continuous emergencies in the life of poor people would make it difficult to resolve tensions (24).

Antonovsky presented his theory of Salutogenesis as the Sense of Coherence (SoC) concept with the three dimensions of Comprehensibility, Manageability and Meaningfulness (16). Meaningfulness describes the motivation of a person to cope. Comprehensibility is the personal belief that the information of the internal (body) and external environment makes sense and is understood. Manageability describes the belief of a person that the resources are available and can be applied to cope with a stressor situation. A functioning SoC enables people to cope with stressors during their life cycles. Subsequently other assets and resource concepts of Salutogenesis have been developed (17).

The SoC concept highlights the potential of a universal and unconditional BI for health, and also its potential limitations. BI addresses the Manageability dimension. The fungibility of money allows BI recipients to decide how, when, and where to spend money to satisfy their needs and respond to life stressors. The latter may be particular important for mental health. People may use the cash to obtain goods and services which can have a positive or negative effect on their health. Our study analyses whether the identified CT studies reported health effects, differentiated between physical, social, mental, and spiritual health, and tried to explain the observed effects in terms of visible and invisible mechanisms.

Hazardous goods

The pathways between CTs and health also require an exploration of risky health behaviours. Opponents of a UBI often argue that the cash will facilitate the purchase and use of hazardous goods including such as alcohol or tobacco which could undermine health (25). While there is a statistical association between income poverty and tobacco and alcohol consumption in various context (26), this could be interpreted as either a cause or a consequence of poverty. Therefore, it is important that CT studies examine the change of risky behaviours related to health and explore the reasoning (invisible mechanisms) of cash recipients.

Research question/objective

We formulated the following research objectives:

1. To evaluate whether and how the CT reports differentiated between various dimensions of health and explored the use of health-related resources
2. To explore the suitability of the SoC model to understand the mechanisms between CTs and various dimensions of health

3. To examine whether the CT trial and programme evaluations considered and assessed the use and effect of goods and behaviour hazardous to health

Our analysis may provide guidance for future BI and health studies.

Methods

Literature search

In view of the topic's complexity, our choice to focus on CT studies across the globe, and due to time constraints, we initially selected references from published reviews, adopted a snowballing approach (27), and used our current knowledge on the topic to present preliminary findings.

We started with literature familiar to us and scanned the literature's reference lists for relevant papers. Subsequently, we identified most international cash transfer studies through an umbrella review of various reports on CT studies (8). Then, we reviewed the identified papers using title, abstract and full text for relevance to the above questions. Lastly, we repeated our search for relevant papers through the reference lists of the selected papers. Both grey and peer-reviewed literature in the English language was included for analysis. We could not access some publications due to pay barriers (n=2).

Conceptual framework

We developed a conceptual framework for the analysis of the selected literature (Table 1). In this framework we assumed that the cash is required to be exchanged for resources, and that these resources need to be combined to achieve promotive, preventive, or curative health functions. For example, an individual could utilise the received cash to pay for transport and obtain healthcare services. We have called these services "disease services" to describe their predominant purpose to deal with disease rather than health. This is important in order to differentiate between curative healthcare (disease) services and health promotion which may require other resources related to sport, art, and other areas. The combination of the three health functions contribute to physical, mental, social, spiritual, and general health. The individual who receives the cash makes decisions between each step from cash to resources to health functions and their combination to restore or maintain various aspects of health.

A noteworthy gap in the CT literature is the lack of a clear theory to explore the mechanisms between a cash transfer and health. The same applies to temptation goods.

Ideally, we would like to assess individual decision-making processes to understand how an individual BI may contribute to health. However, in most studies the recipients are households and not individuals. Therefore, we analysed the CT studies for decision-making at the household level.

Table 1: Conceptual Framework for analysis

<table>
<tr><td>Input</td><td>Decision-making</td><td>Resources</td><td>Decision-making</td><td>Health Functions</td><td>Decision-making</td><td colspan="2">Multidimensional Health-Disease Continuum (Health)</td></tr>
<tr><td rowspan="11">Cash Transfer</td><td rowspan="11"></td><td>Nutrition</td><td rowspan="11"></td><td rowspan="2">Promotive</td><td rowspan="11"></td><td rowspan="2">Physical</td><td rowspan="11">General</td></tr>
<tr><td>Education</td></tr>
<tr><td>Spiritual</td><td rowspan="4">Preventive</td><td rowspan="3">Mental</td></tr>
<tr><td>Disease Services</td></tr>
<tr><td>Hygiene</td></tr>
<tr><td>Clothing</td><td rowspan="6">Curative</td><td rowspan="3">Social</td></tr>
<tr><td>Housing</td></tr>
<tr><td>Transport</td><td rowspan="3">Spiritual</td></tr>
<tr><td>ICT</td></tr>
<tr><td>Other</td></tr>
</table>

Findings and Discussion

CT design characteristics

Until present we reviewed 68 studies of 25 CT programmes and 5 CT trials which were implemented in a wide range of countries contexts that used various evaluation methods. The CT interventions varied in terms of coverage of essential material needs, conditionality, targeting and recipients. Some were universal and permanent (n=3). Most studies were statistical analyses on the health effects of CTs, with a few being qualitative (n= 4) and mixed methods (n= 1).

Health outcome indicators

No studies measured the dimensions of social or spiritual health. However, a few studies referred to aspects of social health in their findings.

Underlying mechanisms

Most studies did not have a theory or framework guiding their design nor evaluation. Furthermore, none of the identified studies assessed the complete pathway between the CT, the exchange into resources, the use of different health functions and the intention to focus on specific or all aspects of health. In particular the decision-making processes were rarely investigated.

Several studies did discuss potential mechanisms without a direct link to the observed health effects. However most identified studies focussed on the potential mechanisms as outcomes and did not link this to the various health outcome indicators.

Risky behaviours

There was limited analysis mentioning whether recipients used the cash for goods or behaviours which may be hazardous and undermine health. This is surprising, as opponents of CTs or UBI often argue that the cash may be used for goods and behaviours which are potentially harmful such as tobacco and alcohol. Few studies examined the question whether CTs may lead to an increase in fertility to prolong the period or increase cash. In fact, most studies reported no change in fertility behaviour and only one study from Honduras found some evidence that the CT may have led to an increased fertility due to the specific programme design.

Detailed preliminary findings will be presented during our session at the conference.

Limitations

To be presented

Conclusion and Recommendations

To be presented

References

1) Haagh, L. and Rohregger, B. 2019. Universal basic income policies and their potential for addressing health inequities. Transformative approaches to a healthy, prosperous life for all. Copenhagen: WHO Regional Office for Europe. Website: http://www.euro.who.int/__data/assets/pdf_file/0008/404387/20190606-h1015-ubi-policies-en.pdf (Accessed 29/07/2021)
2) BIEN | About Basic Income. Here are the 5 Characteristics of Basic Income. Website: https://basicincome.org/about-basic-income/ (Accessed 18/06/2021)
3) Sen A. Development as freedom. Oxford: Oxford University Press. 1999.
4) Huss, R., Green, A., Sudarshan, H., Karpagam, S. S., Ramani, K. V., Tomson, G., &Gerein, N. Good governance and corruption in the health sector: lessons from the Karnataka experience. Health Policy and Planning 2010, 26: 471-484.doi:10.1093/heapol/czq080
5) Huss R. Our Blind Spots in the Fight Against Health Systems Corruption Comment on "We Need to Talk About Corruption in Health Systems". Int J Health Policy Manag. 2020 Jan 1;9(1):34-38. doi: 10.15171/ijhpm.2019.81.
6) Harriss B. Chapter 10:The Intrafamily Distribution of Hunger in South Asia. DOI:10.1093/acprof:oso/9780198286356.003.0010 . In: The Political Economy of Hunger: Volume 1: Entitlement and Well-being. Jean Drèze and Amartya Sen. Oxford Scholarship Online. 2008.
7) Gibson M. et al. The public health effects of interventions similar to basic income: a scoping review. The Lancet. Public Health 5(3), pp. e165–e176. 2020. doi: 10.1016/S2468-2667(20)30005-0.
8) Hasdell, R. (2020) What we know about Universal Basic Income: A cross-synthesis of reviews. Stanford, CA: Basic Income Lab. Website: https://basicincome.stanford.edu/research/papers/what-we-know-about-universal-basic-income/(Accessed 20/07/2021)
9) Owusu-Addo E, Renzaho AMN and Smith BJ. The impact of cash transfers on social determinants of health and health inequalities in sub-Saharan Africa: a systematic reviewHealth Policy and Planning, 33, 2018, 675–696. doi: 10.1093/heapol/czy020
10) Forget EL. The Town With No Poverty: Using Health Administration Data to Revisit Outcomes of a Canadian Guaranteed Annual Income Field Experiment. Canada: University of Manitoba. 2011. Website: http://nccdh.ca/images/uploads/comments/forget-cea_%282%29.pdf (Accessed 29/07/2021)
11) Johnson M and Johnson E. The Health Case for Universal Basic Income: Supporting Document for The Labour Party's Report on Universal Basic Income. Report on Universal Basic Income. Lancaster University. Website: https://eprints.lancs.ac.uk/id/eprint/130510/(Accessed 04/08/2021)
12) Constitution of the World Health Organization. 1948. Website: https://www.who.int/about/governance/constitution (Accessed 20/07/2021)
13) Svalastog AL, Donev D, Kristoffersen NJ, Gajović S. Concepts and definitions of health and health-related values in the knowledge landscapes of the digital society. Croat Med J. 2017; 58: 431-5. https://doi.org/10.3325/cmj.2017.58.431

14) Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978. Website: https://www.who.int/teams/social-determinants-of-health/declaration-of-alma-ata (Accessed 20/07/2021)
15) Any Questions? Health and wellbeing (hauora). National Library of New Zealand. Website: https://anyquestions.govt.nz/many_answers/health-and-well-being-hauora (Access 11/04/2021)
16) Antonovsky A. The salutogenic model as a theory to guide health promotion. Health Promotion International 1996: Vol. 1 (1) 11-18.
17) Lindstrom B. Salutogenesis: an introduction. 01 Dec 2020. Local Government Association Website: https://www.local.gov.uk/salutogenesis-introduction (Access 11/04/2021)
18) Government of Canada. Ottawa Charter for Health Promotion: An International Conference on Health Promotion. November 17-21 1986. Ottawa, Ontario, Canada. Website: https://www.canada.ca/en/public-health/services/health-promotion/population-health/ottawa-charter-health-promotion-international-conference-on-health-promotion.html (Accessed 20/07/2021)
19) Ebenezer Owusu-Addo, Andre M.N. Renzaho, Ben J. Smith. Developing a middle-range theory to explain how cash transfers work to tackle the social determinants of health: A realist case study. World Development130, 2020, 104920,ISSN 0305-750X, https://doi.org/10.1016/j.worlddev.2020.104920.
20) CSDH (2008). Closing the gap in a generation: health equity through action on the social determinants of health. Final Report of the Commission on Social Determinants of Health. Website: https://www.who.int/publications/i/item/WHO-IER-CSDH-08.1 (Accessed 18/06/2021)
21) Pawson R and Tilley N. Realistic evaluation. London: SAGE.1997.
22) Dalkin SM, Greenhalgh J, Jones D, Cunningham B andLhussier M. What's in a mechanism? Development of a key concept in realist evaluation.Implementation Science.2015. 10:49. DOI 10.1186/s13012-015-0237-x
23) Pawson R. Invisible mechanisms. Evaluation Journal of Australasia, 8 (2), 2008, 3-13.
24) Vinje HF, Langeland E and Bull T. Aaron Antonovsky's Development of Salutogenesis, 1979 to 1994. pp 25-40 Chapter 4 In: M.B. Mittelmark et al. (eds.), The Handbook of Salutogenesis, 2017. DOI 10.1007/978-3-319-04600-6_4
25) Evans DK and Popova A. Cash Transfers and Temptation Goods - A Review of Global Evidence. Policy Research Working Paper 688. The World Bank Africa Region. 2014. Website: https://documents1.worldbank.org/curated/en/617631468001808739/pdf/WPS6886.pdf (Accessed 08/08/2021)
26) Blakely T, Hales S, Kieft C, Wilson N and Woodward A. The global distribution of risk factors by poverty level. Bulletin of the World Health Organization 2005;83:118-126. Website: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2623808/pdf/15744404.pdf (Accessed 02/08/2021)
27) Greenhalgh T, Peacock R. Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources. BMJ 2005; 331:1064–5. Website: https://www.bmj.com/content/331/7524/1064 (Accessed 20/07/2021)