

Title: UBI and UBS for Health – Adversaries or Allies?

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Abstract: Universal Basic Income (UBI) can improve social protection. In 2017 the Institute of Global Prosperity proposed the alternative concept of Universal Basic Services (UBS). This study aims to explore whether UBI and UBS are alternative or complementary social interventions in relation to health.

UBI is a regular money transfer in a state jurisdiction. The fungibility of money allows the recipients to decide how, when and where to satisfy their needs. UBS means the delivery of specific activities and provisions to every person. These services allow for an economy of scale, implementation and delivery based on scientific evidence and a consideration of the balance between personal and common good in order to satisfy needs.

The situation in each state jurisdiction differs because of natural, cultural, economic, historical, institutional, political and social factors. The implementation of UBI or UBS depends on this context. This study examines the following questions in relation to health based on published literature:

- 1) How can UBI and UBS contribute to health and essential public health services?
- 2) What is the potential role of UBI in the context of the NHS England providing free and comprehensive healthcare services?
- 3) What services and provisions have been chosen by cash transfer recipients in international studies?
- 4) What is the feasibility that these services and provisions can be offered as UBS in the context of the United Kingdom?

The findings show that UBS for health are mainly concerned with diseases, their cure, prevention, protection from risk factors and preparedness for public health emergencies. UBI can make important contributions to all public health functions, especially in the areas of health promotion and spiritual health. A sufficient basic income is the necessary tool to achieve time autonomy as an important ingredient of health. The analysis of NHS England demonstrates that cash is required to access certain services. The review of international cash transfer reports highlights the role of UBI to increase financial security and improve spiritual and mental health. In conclusion it is important to combine UBI and UBS for health and avoid an inappropriate either/or dichotomy.

1 Introduction

Universal Basic Income (UBI) and Universal Basic Services (UBS) are sometimes presented as alternative options of social protection (Coote & Percy, 2020; Gough, 2021). Using the example of health I analyse in this paper that a social income (UBS) and a personal income (UBI) are both necessary for health. Social and personal incomes interact to provide the full experience of collective and individual health.

In 2017 the Institute of Global Prosperity proposed UBS to achieve social protection (Social Prosperity Network, 2017). The authors have described UBS as ‘*free public services that enable every citizen to live a larger life by ensuring access to safety, opportunity, and participation*’ (p. 11). The report has assumed that Healthcare, Education, Legal Services and Democracy are free and accessible at the point of need in the United Kingdom (UK). The terms UBS have been defined as follows (Coote & Percy, 2020; Gough, 2021):

- Universal is an entitlement to services according to need and not one’s ability to pay.
- Basic means essential and sufficient (rather than minimal) services to enable people to meet their needs, participate in society, and flourish.
- Services are collectively generated activities [and material provisions] that serve the public interest.

The author has added ‘material provisions’ such as medicines to the above definition, as they play an important role in the collective provision of healthcare services. UBS in the areas of health and education are not new ideas, as they have been provided with some challenges and deficiencies for some time in many countries.

The delivery of specific activities and material provisions to all residents allow for an economy of scale, implementation and delivery based on objective scientific evidence and a consideration for the balance between personal and collective common good in order to satisfy human needs. However, we have to question whether free and comprehensive services are ‘truly free and comprehensive’, personal needs are adequately taken into account and in the case of health all health service functions are adequately covered.

UBI is a regular and unconditional money transfer to every resident in a state jurisdiction. It has not yet been fully implemented in any state jurisdiction. Our experience and knowledge about UBI is based on conditional (CCT) and unconditional cash transfers (UCT), child and old age benefits and dividend schemes. The fungibility of money enables each recipient to decide how, when and where to satisfy their needs. The individual nature of UBI allows each person to define and decide about their priorities.

UBI can help to address the social determinants of health (CSDH, 2008) as structural barriers and promote health equity so that every person can achieve her/his full health potential. In this respect it is important to understand that health has an intrinsic and an instrumental value for people. The intrinsic part contributes to the full enjoyment of well-being, while the instrumental part enables activities and the full social participation of people.

In Manitoba (Canada) a five-year experiment with a guaranteed annual income led to a reduced number of hospitalisations, especially related to mental health, accidents and injuries, and less physician contacts with mental health diagnoses (Forget 2011). An editorial in the British Medical Journal commented on this study 40 years later that the link between poverty, inequality and poor health have been known for a long time, but the mechanisms for these links are not well understood (Painter 2016). A scoping review of interventions similar to Basic Income (BI) found that Tribal Dividends improved adult mental health probably due to decreased financial stress (Gibson et al., 2020). These dividends of Native American nations are financed through casinos and distributed on a regular, permanent and universal basis to all tribal members. BI studies in Finland and Ontario in

Canada found similar positive effects on mental health (Jones 2021). A study of income maintenance showed an increase of birth weights (Gibson et al., 2020).

Two key questions arise from these and other findings about interventions similar to BI and its effects on health. What are the mechanisms which can explain the positive effects of BI like cash transfers on health? How do healthcare services and BI like cash transfers interact to achieve these effects on health? Negative effects of cash transfers on health are also possible through the purchase of certain goods such as tobacco, alcohol, illegal drugs and changes in behaviour such as risky sexual practices or gambling. A policy paper analysing 30 studies found the concerns that people would use cash transfers for alcohol or tobacco consumption unfounded (Evans & Popova, 2014). This article examines the interactions between health, healthcare services and BI and the potential of synergistic effects. A conference presentation has explored the mechanisms how cash transfers may improve health (Peters & Huss, 2021).

A study with General Practitioners (GPs) in the north-east of England investigated how a UBI may improve the health outcomes of certain patient groups (Johnson et al., 2019). Three patient groups were identified: long-term unemployed welfare recipients, workers on short-term/zero-hours contract with low levels of education and workers with a similar contract and higher levels of education. These groups could benefit from UBI through a reduction of patient-side barriers to healthcare. The effect may depend on the socio-economic status of patients, especially education, and probably requires a strong institutional context of health promotion. The reference to education and health promotion shows how UBI and UBS are intertwined and depend on each other. Haagh and Rohregger (2019) have described it as *'a new way of thinking around the close interconnectivity between basic social services and basic income security, ...it is only in their complementarity that they may realize their respective full potential.'* (p. ix)

A combination of UBI and UBS has been proposed to create a sustainable welfare system which satisfies people's needs within planetary boundaries (Büchs, 2021). This blend may help to overcome the requirement for economic growth in order to maintain the welfare system. Its environmental performance, distributional fairness and democratic governance will depend on the institutional arrangements in societies, in particular the processes of collective decision-making in the state and other organisations of society. I argue in this paper that time autonomy is an essential ingredient of personal health and democratic processes.

The study explores whether and how UBI and UBS can be complementary social interventions in relation to health. The initial part explores different perspectives on health and how UBI and UBS may contribute. The second part discusses the potential role of UBS and UBI in the achievement of essential public health (PH) functions. As the situation of each state jurisdiction differs because of natural, cultural, economic, historical, institutional, political and social factors, a specific assessment of the complementarity of UBI and UBS depends on this context. This part analyses the specific situation in England in terms of free and comprehensive healthcare services and how UBI may contribute to these services. A final part looks at resources obtained by cash transfer (CT) recipients in some international studies, how these resources relate to health and whether these could be better provided by UBS in the UK context.

2 Methodological approach

The author with a medical and public health background explored the published literature and used his expertise and judgement to address the following questions:

- 1) What are important perspectives on health and do UBI and UBS contribute to their realization?
- 2) What are essential PH service functions to restore and maintain health?
- 3) How do UBS and UBI contribute to these PH service functions?
- 4) What is the situation in England regarding free and comprehensive health services and the consideration of personal priorities?
- 5) What resources for health have been obtained by CT recipients in international studies (peer-reviewed and grey literature)?
- 6) What is the feasibility that these resources can be provided as UBS in the UK?

In view of the complexity of the topic the author identified grey and peer-reviewed literature using a snowballing approach and personal knowledge on the subject matter (Greenhalgh & Peacock, 2005):

- The reference lists of familiar literature were scanned for related documents.
- These were reviewed using title, abstract and full text for relevance to the above questions.
- The reference lists of these papers were again searched for relevant papers.
- Several discussion forums on UBI provided information about publications on UBI and UBS.

The international cash transfer studies were identified through an umbrella review of reports on cash transfer studies (Hasdell, 2020). The author randomly selected and analysed 34 documents.

3 Findings and Discussion

3.1 Health and Basic Income

The World Health Organization (WHO) defined health as a state of complete physical, mental and social well-being and not just the absence of disease and infirmity (Constitution of the WHO, 1948). This definition presented an important change in comparison to older concepts, because social welfare linked to social environment, living and working conditions has become an important aspect of health (Svalastog et al., 2017). BI can contribute to its achievement.

The WHO definition has been criticized for presenting a static and ideal concept of health and lacking spiritual well-being. Others have described health as a dynamic process with a continuous move between health and disease ranging from optimal functioning and well-being to illness and ultimately death (Svalastog et al., 2017). In 1978 the Alma-Ata declaration of Primary Health Care provided a functional perspective stating that the health of people should enable them to lead a socially and economically productive life (Declaration of Alma-Ata, 1978). Spiritual well-being has been added as a responsibility and contribution to the common good and the successful management of everyday life which leads to a sense of fulfilment and is rooted in people's values, beliefs and the search for meaning (Svalastog et al., 2017; National Library of New Zealand, 2004-2021).

The perspective of public health has been on risk factors, the protection of health from these factors and the prevention and treatment of disease due to these factors (Antonovsky 1996; 18). This has been

labelled the pathogenic perspective. Antonovsky (1996) proposed a salutogenic perspective with a focus on General Resistance Resources (GRR). He described them as the assets of a person, a collective or a situation which '*facilitated successful coping with the inherent stressors of human existence*' (p.15, Antonovsky 1996). GRR enable a movement towards health when people make cognitive, instrumental and emotional sense of their environment based on repeated life experiences. Antonovsky (1996) combined the dimensions of Comprehensibility, Manageability and Meaningfulness into the Sense of Coherence (SoC) concept of Salutogenesis. The SoC enables humans during their life cycles to move towards the health/ease end of the multidimensional health/ease - disease/illness poles of life. Subsequently further asset and resource concepts of Salutogenesis have been proposed (Lindstrom, 2020).

The WHO Ottawa Charter has introduced the concept of health promotion (Government of Canada, 1986) which is related to Salutogenesis.

'Health promotion is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being.' (p.1, Government of Canada, 1986)

The Ottawa Charter proposes income rather than work as an essential resource for health. Health promotion requires intersectoral collaboration and the cooperation of many actors at different societal levels such as central and local government, civil society organisations, media and industry. Health promotion is different from healthcare services which are better characterized as "disease" services. In the United Kingdom (UK) these disease services are provided by the National Health Service (NHS).

"Life Expectancy at Birth" is often used to measure overall health and compare and categorize countries (WHO, 2021). In the WHO statistics Japan and Switzerland appear at the top and Lesotho and the Central African Republic at the bottom of the list. The number of years lived with a healthy experience is probably more important to the individual. This is measured as "Healthy Life Expectancy (HALE) at Birth". The country statistics only change slightly with Japan and Singapore at the top and the same countries at the bottom of the list. However, these statistics do not tell us anything about who is in control of the healthy time lived as individual.

Time is our most important non-renewable resource provided as a continuous and finite flow (Huss, 1994). The health promotion and SoC concept refer to the process of taking control of our own health (Lindstrom, 2020; Government of Canada, 1986). Therefore the capability to decide how to use our time for either other-determined (heteronomous) or self-determined (autonomous) social and economic activities is an important determinant of personal health (Huss, 1994). Prime autonomous activities which are relevant for personal, social and spiritual health are breast-feeding, childcare, care for the sick, elderly and dying and general mutual support in communities. A sufficient UBI which covers all basic human needs generates a sphere of time autonomy which enables people to protect and maintain their health.

Some of the BI and CT literature takes an economic perspective (Birnbbaum, 2011) with a focus on employment. Concerns are expressed whether people receiving a sufficient BI will do paid work.

Participation in the formal economy is assumed to be good for each person, society and our biosphere. There appears to be an underlying assumption that economic arrangements are either neutral or based on the common good. This assumption has to be questioned, if our economic system is analysed from a health perspective. As examples I present the health consequences of the legal small weapons and the illegal drugs economy. The production and trade in small firearms and their use led to an estimated global annual mortality of 210,000 people in 2016 (Mc Evoy & Hideg, 2017). At the same time global society has invested considerable resources in the prohibition and control of illegal drugs which led to an estimated global annual mortality of 450,000 in 2015 (International Drug Policy Consortium, 2018). Half of these deaths were related to overdoses and the other half related to diseases associated with illegal drug-taking. Both types of death could be reduced considerably with the decriminalisation of illegal drugs. A BI can empower citizens to address these ethical conflicts between the aims of economic productivism and health in society. First a BI will give every citizen a right to choose between formal economic and other economic and social activities. Second a BI will enhance the ability of participants in the formal economy and the voluntary sector to assure transparency and accountability to society revealing practices which are corrupt and harmful to the individual, society and the environment. Third a reduction in working time is likely to lead to a reduced ecological footprint (Schor, 2004). Finally a BI will enable citizens to participate more effectively in the political and ethical decision-making of society on economic and social activities. BI will increase the decision-space of citizens to do politics rather than politics being done to them.

Table 1 provides an overview how UBI and UBS may affect different perspectives on health. UBS as Public Health (PH) services have either been shown or are likely to have a positive effect for most perspectives. However they will not contribute to time autonomy, political and ethical decision-making and spiritual well-being. These are the areas where UBI will play an important role. The following section will analyse the potential interaction of UBI and UBS and their joint contribution to several health perspectives. It has already been mentioned that UBI could theoretically contribute to diseases (pathogenesis) through the consumption of goods such as tobacco and alcohol. However, the evidence from CT studies in developing countries shows on average no increase in the consumption of so-called temptation goods (Evans & Popova, 2014).

Table 1: Health perspective and the role of UBI and UBS

| Perspective on health | UBI | UBS |
|--|------------|------------|
| State of complete physical, mental and social well-being | + | + |
| Spiritual well-being | + | O |
| Pathogenesis | +/- | + |
| Salutogenesis | + | + |
| Health Promotion | + | + |
| Life expectancy | + | + |
| Healthy life expectancy | + | + |
| Time autonomy | + | O |
| Political and ethical decision-making | + | O |

+ : positive effect, -: negative effect, O: no effect

3.2 Essential PH service functions

Frameworks of essential PH include two types of cross-cutting and service-based functions (WHO, 2018). The former include Governance, Financing, Human Resources, Health Information Systems,

Research, Social Participation and Communication. The latter comprise Health Protection, Health Promotion, Disease Prevention, Healthcare, Preparedness for Public Health Emergencies and other options such as Traditional Medicine. Citizens come in contact and make use of the health system through these service-based functions. I provide definitions of these functions and analyse the potential contributions of UBS and UBI to these service-based functions.

Health protection is concerned with regulations and legal protections for workers, patients, consumers, the environment and citizens in general (WHO, 2018). It includes areas such as environment, occupational health, patient safety, consumer safety and traffic safety. These are normally well covered by UBS, although there may be gaps and weaknesses in regulation and enforcement. These cannot be directly addressed by UBI. However, UBI may give interested citizens the necessary free time to participate in problem-solving and decision-making.

Health promotion is defined as the process of enabling people to increase control over, and improve their health (Government of Canada, 1986; WHO, 2018). It refers to the social determinants of health, community and social participation, health education and literacy. The social determinants comprise many areas such as culture and history, civil society, business and government sector, economic arrangements and employment opportunities, daily living and working conditions, support for family, children and communities, education and skill development, information and communication technology, food and agriculture, housing and transport, healthcare and health equity, energy generation and use, natural and social environment, sport facilities and physical activities (CSDH, 2008). The WHO commission makes the following recommendations to address these determinants ‘*Improve daily living conditions*’ (p. 2, CSDH, 2008) and ‘*...create social protection policy supportive of all...*’ (p. 2, CSDH, 2008). While enhanced UBS can play an important role to provide services such as transport and information, UBI enables people to increase control over their health and develop personal GRR for health (Antonovsky, 1996). Two examples are sport and artistic activities.

Disease prevention and control may cover communicable and non-communicable diseases and injuries through risk factor reduction, education, screening, immunization, and other interventions (Martin-Moreno et al., 2016). This is a typical public health service function and the relevant activities are often provided free at user point. However, the free provision of services does not necessarily mean that the service is truly ‘free’ for the user. The user may incur transportation costs and have to pay for the goods, e.g. condoms, to implement the educational guidance provided at the free service. A BI is an easier way to cover these costs than individual reimbursements based on bureaucratic assessment.

Personal healthcare covers curative, rehabilitative and palliative services and is the domain of the National Health Service (NHS) in the United Kingdom (UK) which will be discussed in the next section. Curative care means the treatment of health problems, while rehabilitative care refers to the improvement of lost functioning due to illness and palliative care improves the quality of life due to life-threatening diseases. All of these are often covered by personal public healthcare services. However, even so-called free public services do not cover all costs. Depending on the healthcare and social system of a country patients and relatives may have to cover such costs as transportation, loss of productivity (work) and care arrangements at home (Dee et al., 2014; Tajima-Pozo et al., 2015; Deba et al., 2017; Laurence et al., 2015). Public services may exclude patients from certain care against their own expressed choice due to political or professional decisions. This may apply to the

termination of pregnancy or euthanasia in case of patients with serious and terminal illness. Therefore patients may have to look for these services in the private sector or abroad. BI may help to cover some of these additional costs of patients and family carers. However, BI may play a negative role in people with addiction problems.

Preparedness for public health emergencies (WHO, 2018) covers events with sudden, large-scale, negative impact on public health such as infectious disease outbreaks, natural, technical and mixed disasters, severe weather events, migratory flows, accidents, terrorism, and incidents due to other environmental or human causes. These potential emergencies require plans of local, national international authorities with regular updates and mock exercises. In the event they require collaboration of different government levels, sectors and disciplines according to size, speed and severity of the emergency. According to the type of the event, e.g. infectious disease outbreak versus severe weather event, the National Health Authority may or may not play the lead role. UBI can play an important role to strengthen the capability of citizens and communities to respond to events in an adequate manner and restore and maintain social and economic activities. The global COVID-19 pandemic has demonstrated that most governments had to introduce social protection measures (Gentilini et al., 2021; Huss et al., 2021). However these financial measures often focused on maintaining the income of people in formal employment rather than assuring universal and unconditional financial security for all residents. Unfortunately the call for an emergency basic income in order to have a fast and flexible response, protect the most vulnerable people and promote national and global solidarity has not been heeded (De Wispelaere & Morales, 2021). This would have offered the opportunity to transform the emergency BI into a permanent UBI in order to support citizens' responses to the recurrent emergencies of our ongoing climate crisis.

Some essential PH functions are unique to specific countries (WHO, 2018). In China “Managing traditional Chinese medicine” is a separate PH function and worth mentioning in the context of this paper, because it is part of the wider concept of traditional, alternative and complementary medicine. Traditional medicine is defined as the knowledge, skill and practices based on the theories, beliefs and experiences indigenous to a specific culture (WHO, 2019). Complementary and alternative medicine (CAM) refers to healthcare practices that are not part of the traditional or conventional medicine of a country and these are not fully integrated into the public healthcare system. Complementary practices are used together with conventional healthcare, while alternative medicine is used instead of conventional healthcare. These practices include acupuncture, chiropractic, herbal medicines, homeopathy, meditation and osteopathy. They are often excluded from conventional healthcare systems, because the treatments lack objective scientific evidence of effectiveness. The subjective perceptions of people may differ and therefore these treatments are popular with some patients. It is beyond the scope of this paper to go into further details. In summary many public healthcare services do not provide free access to these treatments, while UBI will give patients the freedom to choose this option.

Table 2 provides a brief summary whether UBI or UBS contribute to essential PH service functions based on my analysis.

Table 2: Essential PH service functions and role of UBI and UBS

| PH service functions | UBI | UBS |
|--|--------|--------|
| Health protection | ? | + |
| Health promotion | + | + |
| Disease prevention and control | ? | + |
| Healthcare services (curative, rehabilitative, palliative) | + or - | + |
| Preparedness for PH emergencies | + | + |
| Complementary and alternative medicine (CAM) | + | ? or O |

+ : positive role, -: negative role, O: no role, ? : unclear role

3.3 NHS Healthcare Services of England

This section analyses the question of free public healthcare services and uses the example of the NHS England (NHS, 2021a), as the situation differs between the four nations of the UK. While most public healthcare services are free for legal residents, there are some charges and expenses to make full use of the services (Table 3). However, not all charges are explained on the NHS services website such as earwax build-up (NHS, 2021b). Not all General Practitioners remove earwax and the patient may have to pay for the removal privately. This may appear like a trivial health problem. However, earwax can lead to hearing loss and impaired social participation, especially in older people.

Table 3: Charges and expenses for healthcare services (Date: 26 July 2021)

| Description | Charges and expenses | Comment |
|--|---|--|
| Outpatient prescription charges excluding contraceptives | £9.35 per item, Alternative is prescription prepayment certificate (PPC) for all NHS prescriptions: a 3-month PPC costs £30.25, a 12-month PPC is £108.10 | These charges could be abolished with comprehensive free public healthcare services. |
| Charges for health items | a surgical bra is £30.70, an abdominal or spinal support is £46.30, a stock acrylic wig is £75.70, a partial human hair wig is £200.50, a full bespoke human hair wig is £293.20. | These charges could be abolished with comprehensive free public healthcare services. |
| Dental services | Urgent dental treatment – £23.80: emergency care, Band 1 course of treatment – £23.80: e.g. examination, diagnosis, advice, preventative care; Band 2 course of treatment – £65.20: e.g. fillings, root canal work, tooth extraction; Band 3 course of treatment – £282.80: e.g. crowns, dentures, bridges | These services could only be free, if they are fully integrated into the NHS. As alternative UBI can provide some funding. |
| Eye test and cost of glasses or contact lenses | Variable costs of private providers. | These services could only be free, if they are fully integrated into the NHS. As alternative UBI can provide some funding. |
| CAM | Most practices have to be covered by patient, as objective evidence of effectiveness is lacking. | UBI can provide choice and access. |
| Healthcare travel costs | These are normally paid by patient. Some people qualify for help. | UBI can cover most costs. |
| Personal health budget | People with continuing healthcare and their specific needs are normally paid by patient, unless person qualifies for help. | Complex topic which may always require specific assessment. |

The charges for prescription and health items are either justified as a co-payment and contribution to the NHS or as an approach to reduce moral hazard. Moral hazard is a concept that is central to risk and insurance management. It refers to change in behaviour when healthcare costs of individuals are borne by another party such as the state and individuals make increased or unnecessary use of these services. The first argument of co-payment is like a tax on essential healthcare needs. In terms of solidarity it makes more sense to tax the healthy in order to finance the needs of the sick. The challenge of moral hazard is probably better avoided or reduced, if public healthcare services are organised as an economy of the commons (Ostrom, 1990) rather than an economy of the state. This institutional arrangement would not only reduce the moral hazard problem through collective self-monitoring but also avoid the risk that political parties in government may misuse and underfund public healthcare services because of their specific partisan political objectives.

Initially when the NHS was started in 1948 dental healthcare was free. Charges were introduced in 1951 and have increased since then. Primary dentistry and eye sight tests are offered by private

practitioners. In order to provide comprehensive free services in both areas at low costs these would need to be integrated into the NHS.

It makes public sense not to provide most CAM services as part of the NHS, as the objective evidence of effectiveness is often lacking (NHS, 2018). However people may have a different subjective perspective. In this case a UBI may facilitate access for all people.

All services of table 3 except for CAM and including healthcare travel costs and specific healthcare needs can be provided free of charge, if a person deemed to be in need and meets certain criteria. However the application system may not be easy for people with low educational skills and under mental distress because of poverty. Therefore such an assessment system perpetuates stigma, bureaucratic power over people and as a consequence distress. A UBI can resolve some but not all access problems due to personal healthcare costs.

3.4 Cash transfers and resources for health

The identification details about the cash transfer documents can be found in annex 1. Among the 34 reports 30 documents examined Cash Transfers (CTs) in low and middle-income countries (LIC, MIC), while four looked at CTs in the USA as the only included high-income country (HIC). People received cash as UCT and CCT, disability benefit, earned income tax credit or guaranteed minimum income. One document looked at the behaviour of people after the CCT had been stopped for one year and another one reported about the behaviour of poor households (HHs) who were not eligible for CCT but they lived in the same place where others received CCTs. The non-recipients might have benefitted indirectly from these CCTs. Both documents were excluded from this analysis.

The objective of the document analysis is to identify health-related resources which have been obtained with the cash. As described in the section 'Health and Basic Income' the definition of health of this paper includes the salutogenic perspective of health promotion and spiritual health. Therefore the analysis considers all resources which may assist a person to successfully cope with the stressors of human existence. Moreover I ask the question whether these resources can be provided by UBS or UBI in the UK context. Table 4 presents the reports with relevant findings for the analysis, while a summary of all studies can be found in annex 2. The categories of health-related resources have been developed based on existing and proposed UBS and areas which are frequently mentioned in CT studies. The 'other' category includes many items and areas which do not fit easily into a specific category but are nevertheless important for health as a concept of comprehensive well-being. The author has categorized items as spiritual resources, if they contributed to a sense of fulfilment, meaning and social belonging of the recipients.

More than half of the cash recipients have bought items to improve their nutrition. Sufficient and adequate nutrition fits well with the GRR concept and helps people to move towards the health end of the ease-disease continuum. Only one report originated from a HIC, the USA, where the context in terms of income is similar to the UK. The recent increased use of food-banks of about 2.5 million people in the UK in 2020/21 indicates the enormous need (Statista, 2021). While this need could theoretically be satisfied with a UBS, this can hardly be described as dignified and desirable approach to address the issue of food poverty.

About one third of recipients used the CT for educational needs. These reports came from LIC and MIC. This is a typical area for UBS and most education in the UK is offered as a free public service.

There is clear room for improvement in the area of vocational training and university education to make education a truly free and universal public service.

Spiritual health is an important part of well-being. The information provided by CT recipients indicates its significance: Able to welcome visitors, For school trips and exam fees, Increased social activities. Parents who cannot pay for the school trips of their child and people who cannot participate in common social activities feel excluded from society and stigmatized. A Tribal CT recipient in the USA stated:

“Oh, my health, yeah it (the casino) does play a role in health because I’m able to provide...I’m able to take my kids places and show them things, pay for outings and what not. I mean, we’re able to buy better food.” (p 7, Kodish et al., 2016)

However the same study also highlighted the ambivalence of the situation, because the source of such basic income may contribute to the opposite effect

“That’s what the casino did to our people...it just made them move away from the spiritual walk and it made them start thinking more about the wrong things to really think about.”(p 7, Kodish et al., 2016)

About one third of reports indicate that the recipients used the CTs for healthcare services including the USA. This demonstrates that in many countries UBS of healthcare is still a goal waiting to be achieved. Even in the UK, as the example of England shows that not all services are truly free and this can pose an important barrier to people with financial problems.

Other health-related resources comprise clothing including shoes, hygiene products, transport and housing. While the latter two can be addressed through an appropriate social housing and public transport service, the former two are better dealt with through UBI in order to avoid a patronizing approach which puts citizens into the position of minors.

Table 4: Cash transfer and resources for health

| No of report | Target | Type of Cash Transfer | Health-related Resources | | | | | | | | | |
|--------------|---|------------------------------|--------------------------|-----------|-----------|---------------------|---------|--------------|-----------|-----------|-----|--------------|
| | | | Nutrition | Education | Spiritual | Healthcare services | Hygiene | Child health | Household | Transport | ICT | Other |
| 01 | Households (HHs) in extreme poverty | UCT | Y | Y | O | O | Y | Y | O | O | O | Y-I |
| 02 | Mothers poorest 20% HHs with children 0-17years | CCT | Y | Y (1) | O | Y - C | O | Y | O | O | O | O |
| 03 | Ultra-poor labour constrained HHs | UCT | Y | Y | Y (2) | O | Y | Y | O | O | O | Y-I |
| 04 | 40% poorest HHs | UCT | Y (3) | O | O | O | O | O | O | O | O | O |
| 06 | 5.29 million beneficiaries: female head of eligible HHs. poorest 25% population | UCT | Y | N (4) | O | O | O | O | Y | O | O | Y - I, S (5) |
| 08 | Poor HH in 3 poor districts | CCT | O | Y | O | Y | O | Y | O | O | O | Y - I, S, HI |
| 09 | Poor HHs with children, administrative assessment and also selected by members of their community as being the 'poorest of the poor'. Cash for nutritional and educational needs of children. | UCT | Y | Y | Y (6) | O | Y | Y | O | O | O | O |
| 10 | Poorest HHs with children below 36/12 and/or attending primary education, Condition: growth monitoring and school attendance | CCT | Y | ?Y | O | ?Y | O | O | O | O | O | O |
| 11 | HHs with children participating in Early Childhood Development (ECD) centers in Karamoja subregion | CCT and C Food Transfer (FT) | Y (7) | O | O | O | O | O | O | O | O | O |

| | | | | | | | | | | | | |
|----|--|---------------------------------------|--------|----|--------|--------|---|---|---|---|---|------------|
| 12 | Poor HH in coffee growing communities, Conditions: school attendance, health clinic visit, nutritional seminar | CCT | Y | O | O | O | O | O | O | O | O | O |
| 13 | Women of very poor HH with children or pregnant, Mexico, Honduras and Nicaragua geographical targeting based on census and survey with all HH in area eligible for CCT. Conditions: preventive healthcare visits, vaccination, health education. | CCT | Y (8) | O | O | Y (9) | O | O | O | O | O | O |
| 14 | HHs with orphans, vulnerable children. Ultra-poor belonging to the lowest expenditure quintile. | UCT | Y | Y | O | O | O | Y | O | O | O | O |
| 15 | Poor HHs covering 40% population. Only around 64% of them come from the two poorest expenditure quintiles. Around 15% are from the two richest quintiles, indicative of some mistargeting, leakage. | UCT, Coupon rather than cash provided | Y | O | O | O | O | O | O | O | O | O |
| 18 | Members of Indian tribal communities in California | Individual UCT | Y | O | Y | Y | O | O | O | Y | O | Y (10) |
| 19 | HHs in extreme poverty | CCT | Y (11) | O | O | Y (12) | O | O | O | O | O | O |
| 22 | Very poor HHs | CCT | O | Y | O | Y | O | O | O | O | O | O |
| 23 | Ultra-poor households with Orphan and Vulnerable Children (OVC), the elderly and the disabled | CCT | Y | Y | Y | Y | O | O | O | O | O | Y (13) |
| 25 | Girls aged 13–20 years enrolled in school grades 8–11, Condition: school attendance | CCT | O | O | O | O | O | O | O | O | O | Y (14) |
| 27 | Cash Assistance to poor HHs | ?UCT | O | O | Y (15) | O | O | O | O | O | O | Y - S |
| 28 | Poor HH in poor communities in six Mexican states | CCT | Y | Y | O | Y | O | O | O | O | O | O |
| 29 | Poor Women with young child | UCT | O | O | O | ?Y | O | O | O | O | O | O |
| 30 | Labour constrained and destitute households | UCT | N | Y | O | N | O | O | O | O | O | Y - I (16) |
| 32 | Supplement incomes low-wage workers | EITC | O | O | O | O | O | O | O | O | O | Y (17) |
| 33 | Temporary UCT to any poor HHs during economic crisis in 2005 and 2008. | UCT | Y | Y | O | Y | O | Y | O | Y | O | Y (18) |
| | Summary: 32 studies, Reported use of cash | | 17 | 11 | 5 | 9 | 3 | 7 | 1 | 2 | 0 | 11 |

| Explanations | |
|---------------------|---|
| (1) | For secondary education |
| (2) | Able to welcome visitors |
| (3) | Reduced food expenditure due to CT loss |
| (4) | No spending due to cost barrier of education |
| (5) | General increase of consumption such as better cooking fuel |
| (6) | For school trips and exam fees |
| (7) | Cash used for additional food |
| (8) | Except Honduras |
| (9) | Variation between countries |
| (10) | Financial stability and sport activities |
| (11) | Some studies |
| (12) | Most studies |
| (13) | Control over life and resources |
| (14) | Reduced intimate partner violence |
| (15) | Increased social activities |
| (16) | Change of paid Labour |
| (17) | Maternal employment and earnings |
| (18) | Child labour reduced, increased work, fuel spending |

| Abbreviations | |
|----------------------|---------------------------|
| C | Children |
| EITC | Earned Income Tax Credits |
| HH | Household |
| I | Investment |
| S | Savings |

Several reports indicate that CT recipients used the money for investment, savings and health insurance in order to improve their situation and be prepared for future contingencies. CTs provide financial stability and protect the mental health of recipients. The link between financial insecurity which leads to financial stress and mental health problems has been highlighted by many organisations and the academic literature (Gibson et al., 2020; Jones, 2021; Australia and New Zealand Mental Health Association, 2020; Mental Health Research, 2021; NHS, 2020; HealthDirect, 2020; Wei & Chen, 2014). CTs also offered the opportunity for the recipients to find better work and reduce child labour. These health promotion and protection functions of a UBI as demonstrated by CT studies cannot be provided by UBS.

4 Conclusions and Recommendation

UBI can offer important health functions, especially in the areas of health promotion and spiritual health. If we consider time autonomy as a key aspect of a healthy life, a sufficient basic income is the necessary tool to achieve this autonomy. UBS for health are mainly concerned with the cure and prevention of disease, the protection from risk factors of disease and the preparedness for public health emergencies. All of them are important for personal and population health. However, even in these areas a basic income can make an important contribution to improve people's access to access health services and their ability to deal with public emergencies.

The NHS in the UK is based on scientific evidence and universality of services which are supposed to be free at the point of use. This is mostly correct, but our analysis of NHS England has shown that some cash is needed to access certain services. There may be procedures to overcome these cash barriers for people on low or no income. However these procedures can be social barriers and add the risk of stigmatisation. CAM is not covered by the NHS because of lack of scientific evidence about its effectiveness. It may contribute to personal well-being and can be financed through a UBI.

The analysis of the CT reports has shown that UBI can help people to access and use important resources for health which are not provided by UBS. UBI can promote spiritual health, offer individual financial security, reduce financial stress and improve mental health.

The logical recommendation of these findings is the need to combine UBI and UBS as allied essential provisions for health in the UK and elsewhere. It is important to avoid an inappropriate either/or dichotomy.

5 Appendices

Annex 1: Details of analysed cash transfer reports

| No | Authors | Title | Year | Journal/ Website/Other Source | Country |
|----|--|---|------|--|------------|
| 01 | American Institutes for Research | Zambia's Multiple Category Targeting Grant. 36-month Impact Report. | 2016 | Report/ https://www.air.org/resource/zambia-s-multiple-category-targeting-grant-36-month-impact-report | Zambia |
| 02 | Orazio Attanasio, Erich Battistin Emla Fitzsimons, Alice Mesnard Marcos Vera-Hernández | How effective are conditional cash transfers? Evidence from Colombia | 2005 | The Institute for Fiscal Studies Briefing Note No. 54 | Colombia |
| 03 | Garima Bhallaa, Sudhanshu Handab, Gustavo Angelesc, David Seidenfeldd | The effect of cash transfers and household vulnerability on food security in Zimbabwe | 2018 | Food Policy | Zimbabwe |
| 04 | Thomas Buser, Hessel Oosterbeek, Erik Plug, Juan Ponce, and Jose Rosero | The Impact of Positive and Negative Income Changes on the Height and Weight of Young Children | 2017 | The World Bank Economic Review | Ecuador |
| 05 | Chang-Tai Hsieh | Do Consumers React to Anticipated Income Changes? Evidence from the Alaska Permanent Fund | 2003 | The American Economic Review | Alaska/USA |
| 06 | Iftikhar Cheema, Simon Hunt, Sarah Javeed, Tanya Lone, Sean O'Leary | Benazir Income Support Programme Final Impact Evaluation Report | 2016 | Oxford Policy Management | Pakistan |
| 07 | Damien de Walque, William H. Dow, Rose Nathan | Rewarding Safer Sex, Conditional Cash Transfers for HIV/STI Prevention | 2014 | Policy Research Working Paper 7099, World Bank Group | Tanzania |
| 08 | Evans, David K., Stephanie Hausladen, Katrina Kosec, and Natasha Reese. | Community-Based Conditional Cash Transfers in Tanzania Results from a Randomized Trial | 2014 | World Bank study | Tanzania |
| 09 | Andrew Kardan from OPM | Qualitative research and analyses of the economic impacts of cash transfer programmes in sub-Saharan Africa Lesotho Country Case Study Report | 2014 | Oxford Policy Management (OPM)/ FAO | Lesotho |

| No | Authors | Title | Year | Journal/ Website/Other Source | Country |
|----|--|--|------|---|---|
| 10 | Céline Ferré, Iffath Sharif | Can Conditional Cash Transfers Improve Education and Nutrition Outcomes for Poor Children in Bangladesh? Evidence from a Pilot Project | 2014 | World Bank Group Policy Research Working Paper 7077 | Bangladesh |
| 11 | Daniel O. Gilligan, Amy Margolies Esteban Quiñones, Shalini Roy | Impact Evaluation of Cash and Food Transfers at Early Childhood Development Centers in Karamoja, Uganda; Final Impact Report | 2013 | International Food Policy Research Institute WFP/UNICEF/IFPRI | Uganda |
| 12 | Seth R. Gitter and Natalia Caldés | Crisis, Food Security, and Conditional Cash Transfers in Nicaragua | 2010 | Towson University, Department of Economics, Working Paper Series, Working Paper No. 2010-07 | Nicaragua |
| 13 | Amanda Glassman, Jessica Todd and Marie Gaarder | Performance-Based Incentives for Health: Conditional Cash Transfer Programs in Latin America and the Caribbean | 2007 | Centre for Global Development CGD Working Paper #120 | Brazil, Colombia, Ecuador, Honduras, Jamaica, Mexico |
| 14 | Sudhanshu Handa, Amber Peterman, Carolyn Huang, Carolyn Halpern, Audrey Pettifor, Harsha Thirumurthy | Impact of the Kenya Cash Transfer for Orphans and Vulnerable Children on early pregnancy and marriage of adolescent girls | 2015 | Social Science & Medicine | Kenya |
| 15 | Rozana Himaz | Welfare Grants and Their Impact on Child Health: The Case of Sri Lanka | 2008 | World Development Vol. 36, No. 10, pp. 1843–1857 | Sri Lanka |
| 16 | Hilary Hoynes, Doug Miller, and David Simon | Income, the Earned Income Tax Credit, and Infant Health | 2015 | American Economic Journal: Economic Policy 2015, 7(1): 172–211 | USA |
| 17 | Maria C. Huerta | Child Health in Rural Mexico: Has Progresa Reduced Children's Morbidity Risks? | 2006 | Socia Policy & Administration | Mexico |
| 18 | Stephen R. Kodish1*, Joel Gittelsohn2, Vanessa M. Oddo2 and Jessica C. Jones-Smith2 | Impacts of casinos on key pathways to health: qualitative findings from American Indian gaming communities in California | 2016 | BMC Public Health | USA/ California |

| No | Authors | Title | Year | Journal/ Website/Other Source | Country |
|----|---|--|------|--|--------------------|
| 19 | Lagarde M, Haines A, Palmer N | The impact of conditional cash transfers on health outcomes and use of health services in low and middle income countries (Review) | 2010 | Cochrane Database of Systematic Reviews | LIC and MIC |
| 20 | Christian Lehmann | Benefiting Without Receiving Money? Externalities of Conditional Cash Transfer Programmes on Schooling, Health and the Village Economy | 2010 | International Policy Research Brief No 13 | Mexico and unknown |
| 21 | Mauricio León & Stephen D. Younger | Transfer payments, mothers' income and child health in Ecuador | 2007 | The Journal of Development Studies | Ecuador |
| 22 | Héctor Lamadrid-Figueroa, Gustavo Ángeles, Thomas Mroz, José Urquieta-Salomón, Bernardo Hernández-Prado, Aurelio Cruz-Valdez, Martha Ma. Téllez-Rojo | Impact of Oportunidades on Contraceptive Methods Use In Adolescent and Young Adult Women Living In Rural Areas, 1997-2000 | 2008 | Measure Evaluation Working Paper Series WP-08-109 | Mexico |
| 23 | Ebenezerowusu-Addo | Perceived impact of Ghana's conditional cash transfer on child health | 2014 | Health Promotion International, 31 (1) doi:10.1093/heapro/dau069 | Ghana |
| 24 | Tia Palermo, Sudhanshu Handa, Amber Peterman, Leah Prencipe, David Seidenfeld on behalf of the Zambia CGP Evaluation Team | Unconditional government social cash transfer in Africa does not increase fertility | 2016 | J Popul Econ | Zambia |
| 25 | A Pettifor, C MacPhail, JP Hughes, A Selin, J Wang, FX Gómez-Olivé, SH Eshleman, RG Wagner, W Mabuza, N Khoza, Chirayath Suchindran, Immitrude Mokoena, Rhian Twine, Philip Andrew, Ellen Townley, Oliver Laeyendecker, Yaw Agyei, Stephen Tollman, Kathleen Kahn | The effect of a conditional cash transfer on HIV incidence in young women in rural South Africa (HPTN 068): a phase 3, randomised controlled trial | 2016 | Lancet Glob Health 2016; 4: e978–88 | South Africa |

| No | Authors | Title | Year | Journal/ Website/Other Source | Country |
|----|--|---|------|---|-----------------------------|
| 26 | David J. Pricey and Jae Songz | The Long-Term Effects of Cash Assistance | 2018 | Working Paper #621, Princeton University, Industrial Relations Section | USA |
| 27 | Mohtar Rasyid, Elan Satriawan | Impact of Public Transfer on Rotating Savings and Credit Associations (ROSCAS): The Indonesia Household Case | 2014 | Proceedings of the Australian Academy of Business and Social Sciences Conference 2014 | Indonesia |
| 28 | Juan A. Rivera, Daniela Sotres-Alvarez, Jean-Pierre Habicht, Teresa Shamah, Salvador Villalpando | Impact of the Mexican Program for Education, Health, and Nutrition (Progresa) on Rates of Growth and Anemia in Infants and Young Children. A Randomized Effectiveness Study | 2004 | JAMA | Mexico |
| 29 | Rosenberg M, Pettifor A, Nguyen N, Westreich D, Bor J, Bärnighausen T, et al. | Relationship between Receipt of a Social Protection Grant for a Child and Second Pregnancy Rates among South African Women: A Cohort Study | 2015 | PLOS One, 10(9): e0137352. doi:10.1371/journal.pone.0137352 | South Africa |
| 30 | David Seidenfeld, Sudhanshu Handa | Results of the Three Year Impact Evaluation of Zambia's Cash Transfer Program in Monze District Final Report | 2011 | American Institutes for Research, Final report | Zambia |
| 31 | Guy Stecklov, Paul Winters, Jessica Todd and Ferdinando Regalia | Unintended Effects of Poverty Programmes on Childbearing in Less Developed Countries: Experimental Evidence from Latin America | 2007 | Population Studies , Jul., 2007, Vol. 61, No. 2 (Jul., 2007), pp. 125-140 | Mexico, Honduras, Nicaragua |
| 32 | Kate W. Strully, David H. Rehkopf, Ziming Xuan | Effects of Prenatal Poverty on Infant Health: State Earned Income Tax Credits and Birth Weight | 2010 | Am Sociol Rev. 2010 August 11; 75(4): 534–562. doi:10.1177/0003122410374086 | USA |
| 33 | The World Bank | BLT Temporary Unconditional Cash Transfer. Social Assistance Program and Public Expenditure Review 2 | 2012 | The World Bank, Jakarta Office | Indonesia |

| No | Authors | Title | Year | Journal/ Website/Other Source | Country |
|----|--|---|------|--|-----------------------------------|
| 34 | G.H. Vázquez, F. Kapczinski , P.V. Magalhaes , R. Córdoba, C. Lopez Jaramillo, A.R. Rosa, M. Sanchez de Carmona, M. Tohen | Stigma and functioning in patients with bipolar disorder | 2010 | Journal of Affective Disorders 130 (2011) 323–327 | Argentina, Brazil, Colombia |

Annex 2: CT reports with identified health-related resources

| No | Target | Type of Cash Transfer | Health-related Resources | | | | | | | | | |
|----|---|------------------------------|--------------------------|-----------|-----------|---------------------|---------|---------------|-----------|---------|-----|--------------|
| | | | Nutrition | Education | Spiritual | Healthcare services | Hygiene | Child hinging | Household | Terrans | ICT | Other |
| 01 | Households (HHs) in extreme poverty | UCT | Y | Y | O | O | Y | Y | O | O | O | Y-I |
| 02 | Mothers poorest 20% HHs with children 0-17years | CCT | Y | Y (1) | O | Y - C | O | Y | O | O | O | O |
| 03 | Ultra-poor labour constrained HHs | UCT | Y | Y | Y (2) | O | Y | Y | O | O | O | Y-I |
| 04 | 40% poorest HHs | UCT | Y (3) | O | O | O | O | O | O | O | O | O |
| 05 | Individual Alaskan residents | UCT | O | O | O | O | O | O | O | O | O | O |
| 06 | 5.29 million beneficiaries: female head of eligible HHs. poorest 25% population | UCT | Y | N (4) | O | O | O | O | Y | O | O | Y - I, S (5) |
| 07 | Young people, male and female, who are at high risk of HIV infection | Discontinued CCT for 1 year | O | O | O | O | O | O | O | O | O | O |
| 08 | Poor HH in 3 poor districts | CCT | O | Y | O | Y | O | Y | O | O | O | Y - I, S, HI |
| 09 | Poor HHs with children, administrative assessment and also selected by members of their community as being the 'poorest of the poor'. Cash for nutritional and educational needs of children. | UCT | Y | Y | Y (6) | O | Y | Y | O | O | O | O |
| 10 | Poorest HHs with children below 36/12 and/or attending primary education, Condition: growth monitoring and school attendance | CCT | Y | ?Y | O | ?Y | O | O | O | O | O | O |
| 11 | HHs with children participating in Early Childhood Development (ECD) centers in Karamoja subregion | CCT and C Food Transfer (FT) | Y (7) | O | O | O | O | O | O | O | O | O |

| | | | | | | | | | | | | |
|----|--|--|--------|---|---|--------|---|---|---|---|---|--------|
| 12 | Poor HH in coffee growing communities, Conditions: school attendance, health clinic visit, nutritional seminar | CCT | Y | O | O | O | O | O | O | O | O | O |
| 13 | Women of very poor HH with children or pregnant, Mexico, Honduras and Nicaragua geographical targeting based on census and survey with all HH in area eligible for CCT. Conditions: preventive healthcare visits, vaccination, health education. | CCT | Y (8) | O | O | Y (9) | O | O | O | O | O | O |
| 14 | HHs with orphans and vulnerable children. Ultra-poor defined as belonging to the lowest expenditure quintile. | UCT | Y | Y | O | O | O | Y | O | O | O | O |
| 15 | Poor HHs covering 40% population. Only around 64% of them come from the two poorest expenditure quintiles. Around 15% are from the two richest quintiles, indicative of some mistargeting, leakage. | UCT, Coupon rather than cash provided | Y | O | O | O | O | O | O | O | O | O |
| 16 | Earned Income Tax Credit (EITC) reached 25 million families | Earned income tax credit | O | O | O | O | O | O | O | O | O | O |
| 17 | Poor HHs with small children all over Mexico. | CCT | O | O | O | O | O | O | O | O | O | O |
| 18 | Members of Indian tribal communities in California | Individual UCT | Y | O | Y | Y | O | O | O | Y | O | Y (10) |
| 19 | HHs in extreme poverty | CCT | Y (11) | O | O | Y (12) | O | O | O | O | O | O |
| 20 | Poor HHs not eligible for CCT | None | Y | Y | O | O | O | O | O | O | O | O |
| 21 | Mothers of non-adult children, the handicapped and the elderly meeting certain eligibility | UCT | O | O | O | O | O | O | O | O | O | O |
| 22 | Very poor HHs | CCT | O | Y | O | Y | O | O | O | O | O | O |
| 23 | Ultra-poor households with Orphan and Vulnerable Children (OVC), the elderly and the disabled | CCT | Y | Y | Y | Y | O | O | O | O | O | Y (13) |
| 24 | HH with child under age 5, given to female adult | UCT | O | O | O | O | O | O | O | O | O | O |
| 25 | Girls aged 13–20 years enrolled in school grades 8–11, Condition: school attendance | CCT | O | O | O | O | O | O | O | O | O | Y (14) |

| | | | | | | | | | | | | |
|----|--|---------------------------|---|---|--------|----|---|---|---|---|---|----------|
| 26 | Families below minimum income | guaranteed minimum income | O | O | O | O | O | O | O | O | O | O |
| 27 | Cash Assistance to poor HHs | ?UCT, | O | O | Y (15) | O | O | O | O | O | O | Y - S |
| 28 | Poor HH in poor communities in six Mexican states | CCT | Y | Y | O | Y | O | O | O | O | O | O |
| 29 | Poor Women with young child | UCT | O | O | O | ?Y | O | O | O | O | O | O |
| 30 | Labour constrained and destitute households | UCT | N | Y | O | N | O | O | O | O | O | Y-I (16) |
| 31 | HH, poor HH and poor HH with children | CCT | O | O | O | O | O | O | O | O | O | O |
| 32 | Supplement incomes low-wage workers | EITC | O | O | O | O | O | O | O | O | O | Y (17) |
| 33 | Temporary UCT to any poor HHs during economic crisis in 2005 and 2008. | UCT | Y | Y | O | Y | O | Y | O | Y | O | Y (18) |
| 34 | Patients with bipolar disorder | Disability benefit | O | O | O | O | O | O | O | O | O | O |

| Abbreviations | | Explanations | |
|---------------|---------------------------|--------------|---|
| HH | Household | (1) | For secondary education |
| C | Children | (2) | Able to welcome visitors |
| I | Investment | (3) | Reduced food expenditure due to CT loss |
| S | Savings | (4) | No spending due to cost barrier of education |
| EITC | Earned Income Tax Credits | (5) | General increase of consumption such as better cooking fuel |
| | | (6) | For school trips and exam fees |
| | | (7) | Cash used for additional food |
| | | (8) | Except Honduras |
| | | (9) | Variation between countries |
| | | (10) | Financial stability and sport activities |
| | | (11) | Some studies |
| | | (12) | Most studies |
| | | (13) | Control over life and resources |

6 References

- Antonovsky, A. (1996) The salutogenic model as a theory to guide health promotion. *Health Promotion International*; 1 (1) 11-18.
- Australia and New Zealand Mental Health Association (2020, 3 December) *How Financial Stress Impacts Mental Health*. 3 December 2020.
<https://anzmh.asn.au/blog/stress/financial-stress-impacts-mental-health> (Accessed 06/08/2021)
- Birnbaum, S. (2011) Should surfers be ostracized? Basic income, liberal neutrality, and the work ethos. *Politics Philosophy Economics*, 10, 396-419. DOI: 10.1177/1470594X10386569
- Büchs, M. (2021) Sustainable welfare: How do universal basic income and universal basic services compare? *Ecological Economics*, 189, 107152, DOI: <https://doi.org/10.1016/j.ecolecon.2021.107152>
- Constitution of the World Health Organization (1948)
<https://www.who.int/about/governance/constitution> (Accessed 20/07/2021)
- Coote, A. & Percy, A. (2020) *The Case for Universal Basic Services*. Cambridge: Polity.
- 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 (CSDH).
<https://www.who.int/publications/i/item/WHO-IER-CSDH-08.1> (Accessed 23/09/2021)
- De Wispelaere, J. & Morales, L. (2021) Emergency Basic Income during the Pandemic. *Cambridge Quarterly of Healthcare Ethics*, 30, 248–254.
<https://www.cambridge.org/core/journals/cambridge-quarterly-of-healthcare-ethics/article/emergency-basic-income-during-the-pandemic/396D4A7DA6356A9FEA963E07F351FB06#> (Accessed 22/07/2021)
- Deba, A., Thornton, J.D., Sambamoorthi, U., & Innes, K. (2017) Direct and indirect cost of managing alzheimer’s disease and related dementias in the United States. *Expert Rev Pharmacoecon Outcomes Res*, 17(2), 189–202. DOI: 10.1080/14737167.2017.1313118
- Declaration of Alma-Ata. (1978, 6-12 September) *International Conference on Primary Health Care, Alma-Ata, USSR*. <https://www.who.int/teams/social-determinants-of-health/declaration-of-alma-ata> (Accessed 20/07/2021)
- Dee, A., Kearns K, O’Neill, C., Sharp, L., Staines, A., O’Dwyer, V., Fitzgerald S. & Ivan J Perry, I.J. (2014) The direct and indirect costs of both overweight and obesity: a systematic review. *BMC Research Notes*, 7:242. <http://www.biomedcentral.com/1756-0500/7/242>
- Evans, D.K. & Popova, A. (2014) *Cash Transfers and Temptation Goods - A Review of Global Evidence*. Policy Research Working Paper 688. The World Bank Africa Region.
<https://documents1.worldbank.org/curated/en/617631468001808739/pdf/WPS6886.pdf> (Accessed 08/08/2021)
- Forget, E.L. (2011) *The Town With No Poverty: Using Health Administration Data to Revisit Outcomes of a Canadian Guaranteed Annual Income Field Experiment*. Canada: University of

Manitoba. http://nccdh.ca/images/uploads/comments/forget-cea_%282%29.pdf (Accessed 29/07/2021)

Gentilini, G. (WB), Almenfi, M. (WB), Blomquist, J. (WB), Dale, P. (UNICEF), Flor Giuffra, L. De la (WB), Desai, V. (WB), Fontenez, M.B. (WB), Galicia, G. (WB), Lopez, V. (WB), Marin, G. (WB), Mujica, I.V. (WB), Natarajan, H. (WB), Newhouse, D. (WB), Palacios, R. (WB), Quiroz, A.P. (WB), Alas, C.R. (WB), Sabharwal, G. (WB) & Weber, M. (WB). (2021, May 14) *Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures - A “living paper”* (version 15). World Bank. <https://openknowledge.worldbank.org/handle/10986/33635> (Accessed 18/06/2021)

Gibson, M., Hearty, W. & Craig, P. (2020) The public health effects of interventions similar to basic income: a scoping review. *The Lancet Public Health* 5(3), e165–e176. DOI: [https://doi.org/10.1016/S2468-2667\(20\)30005-0](https://doi.org/10.1016/S2468-2667(20)30005-0)

Gough, I. (2021, 19 January) *Move the debate from Universal Basic Income to Universal Basic Services*. <https://en.unesco.org/inclusivepolicylab/analytics/move-debate-universal-basic-income-universal-basic-services> (Accessed 20/07/2021)

Government of Canada. (1986, November 17-21) *Ottawa Charter for Health Promotion: An International Conference on Health Promotion*. Ottawa, Ontario, Canada. <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)

Greenhalgh, T. & Peacock R. (2005) Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources. *British Medical Journal*, 331, 1064–5. <https://www.bmj.com/content/331/7524/1064> (Accessed 20/07/2021)

Haagh, L. & 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. http://www.euro.who.int/__data/assets/pdf_file/0008/404387/20190606-h1015-ubi-policies-en.pdf (Accessed 29/07/2021)

Hasdell, R. (2020) *What we know about Universal Basic Income: A cross-synthesis of reviews*. Stanford, CA: Basic Income Lab. <https://basicincome.stanford.edu/research/papers/what-we-know-about-universal-basic-income/> (Accessed 20/07/2021)

HealthDirect (2020, December) *Financial stress and your health*. <https://www.healthdirect.gov.au/financial-stress> (Accessed 06/08/2021)

Huss, R. (1994) Economic justice for sustainable health. *Scandinavian Journal of Development Alternatives*, 13, 1&2, 135-154.

Huss, R., Fouksman, L., Köylüoğlu, A.M., Linares, L., Regehr, S.J. & Miller, A. (2021, 18-21 August) *How has the Covid-19 pandemic affected policy-making and policy-discourse around UBI?*

Findings of a global survey. [Conference presentation]. Basic Income Earth Network Congress - Glasgow.

International Drug Policy Consortium (2018) *Taking Stock: A decade of drug policy – A civil society shadow report*.

<https://idpc.net/publications/2018/10/taking-stock-a-decade-of-drug-policy-a-civil-society-shadow-report> (Accessed 21/07/2021)

Johnson, M., Degerman, D. & Geyer R. (2019) Exploring the Health Case for Universal Basic Income: Evidence from GPs Working with Precarious Groups. *Basic Income Studies*. doi:

<https://doi.org/10.1515/bis-2019-0008>

Jones, A. (2021) *A basic income to improve population health and well-being in Wales?* Cardiff: Public Health Wales NHS Trust.

<https://phw.nhs.wales/publications/publications1/a-basic-income-to-improve-population-health-and-well-being-in-wales/> (Accessed 29/07/2021)

Kodish, S.R., Gittelsohn, J., Oddo, V.M. & Jones-Smith, J.C. (2016) Impacts of casinos on key pathways to health: qualitative findings from American Indian gaming communities in California. *BMC Public Health* 16:621. DOI 10.1186/s12889-016-3279-3

Laurence, Y.V., Griffiths, U.K. & Vassall, A. (2015) Costs to Health Services and the Patient of Treating Tuberculosis: A Systematic Literature Review. *PharmacoEconomics*, 33, 939–955. DOI: 10.1007/s40273-015-0279-6

Lindstrom, B. (2020, 01 December). *Salutogenesis: an introduction*. Local Government Association, <https://www.local.gov.uk/salutogenesis-introduction> (Accessed 11/04/2021)

Martin-Moreno, J.M., Harris, M., Jakubowski, E. & Kluge, H. (2016) Defining and Assessing Public Health Functions: A Global Analysis. *Annual Review of Public Health*, 37, 335–55. DOI:

<10.1146/annurev-publhealth-032315-021429>

Mc Evoy, C. & Hideg G. (2017) *Global Violent Deaths 2017 - Time to Decide*. Geneva: Small Arms Survey 2017. <http://www.smallarmssurvey.org/publications/by-type/reports.html> (Accessed 21/07/2021)

Mental Health Research (2021) *Stress and our mental health – what is the impact & how can we tackle it?* <https://www.mqmentalhealth.org/stress-and-mental-health/> (Accessed 06/08/2021)

National Library of New Zealand. (2004-2021) *Health and wellbeing (hauora)*. Where can I find information about hauora - health and wellbeing?

https://anyquestions.govt.nz/many_answers/health-and-well-being-hauora (Accessed 11/04/2021)

NHS (2018, 11 December) *Alternative and complementary medicine*.

<https://www.nhs.uk/conditions/complementary-and-alternative-medicine/> (Accessed 26/07/2021)

NHS (2020, 2 April) *Coping with financial worries*.

<https://www.nhs.uk/mental-health/advice-for-life-situations-and-events/how-to-cope-with-financial-worries/> (Accessed 06/08/2021)

- NHS (2021a, 31 March) *NHS services*. Website: <https://www.nhs.uk/nhs-services/> (Accessed 24/07/2021)
- NHS (2021b, 28 January) *Earwax build-up*. Website: <https://www.nhs.uk/conditions/earwax-build-up/> (Accessed 24/07/2021)
- Ostrom, E. (1990) *Governing the Commons: The Evolution of Institutions for Collective Action* (Political Economy of Institutions and Decisions). Cambridge: Cambridge University Press.
- Painter, A. (2016) A universal basic income: the answer to poverty, insecurity, and health inequality? *British Medical Journal* 355: i6743. DOI: <https://doi.org/10.1136/bmj.i6473>
- Peters, R. & Huss, R. (2021, 18-21 August) *Basic Income, its health effects, and the theory of Salutogenesis*. [Conference presentation]. Basic Income Earth Network Congress - Glasgow.
- Schor, J. (2004) *Sustainable Consumption and Worktime Reduction*, Working Paper, No. 0406, Johannes Kepler University of Linz, Department of Economics, Linz. <http://www.econ.jku.at/papers/2004/wp0406.pdf> (Accessed 11/04/2021)
- Social Prosperity Network at the IGP with Portes, J., Reed, H. & Percy, A. (2017) *Social prosperity for the future: A proposal for Universal Basic Services*. University College London / Institute for Global Prosperity 2017. <https://ubshub.files.wordpress.com/2018/03/social-prosperity-network-ubs.pdf> (Accessed 18/06/2021)
- Statista (2021, 20 May) *Number of people receiving three days' worth of emergency food by Trussell Trust foodbanks in the United Kingdom from 2008/09 to 2020/21*. <https://www.statista.com/statistics/382695/uk-foodbank-users/> (Accessed 06/08/2021)
- Svalastog AL, Donev D, Kristoffersen NJ & Gajović S. (2017) Concepts and definitions of health and health-related values in the knowledge landscapes of the digital society. *Croatian Medical Journal*, 58, 431-5. <https://doi.org/10.3325/cmj.2017.58.431>
- Tajima-Pozo, K., de Castro Oller, M.J., Lewczuk, A. & Montañes-Rada, F. (2015) Understanding the direct and indirect costs of patients with schizophrenia. *F1000Research*, 4:182. DOI: 10.12688/f1000research.6699.2
- WHO (2018) Essential public health functions, health systems and health security: developing conceptual clarity and a WHO roadmap for action. Geneva: World Health Organization; Licence: CC BY-NC-SA 3.0 IGO. Website: <https://apps.who.int/iris/handle/10665/272597> (Accessed 22/07/2021)
- WHO (2019) *WHO global report on traditional and complementary medicine 2019*. Geneva: World Health Organization; Licence: CC BY-NC-SA 3.0 IGO. <https://apps.who.int/iris/bitstream/handle/10665/312342/9789241515436-eng.pdf?sequence=1&isAllowed=y> (Accessed 24/07/2021)
- WHO (2021) *The Global Health Observatory. Life expectancy at birth (years)*. <https://www.who.int/data/gho/data/themes/topics/indicator-groups/indicator-group-details/GHO/life-expectancy-and-healthy-life-expectancy> (Accessed 21/07/2021)

Wei, H.-S. & Chen J.-K. (2014) The Relationships Between Family Financial Stress, Mental Health Problems, Child Rearing Practice, and School Involvement Among Taiwanese Parents with School-Aged Children. *Journal of Child and Family Studies*, 23, 1145–1154. DOI 10.1007/s10826-013-9772-8