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Perspectives

How, why and for whom does a basic income contribute to health and wellbeing: a systematic review

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Abstract

Ensuring that people have a sufficient income to meet their basic needs and that it keeps pace with costs of living are important when considering ways to reduce health inequities. Many have argued that providing a basic income is one way to do this. The aim of this review is to provide an overview of the existing peer reviewed evidence on the health and wellbeing impacts of basic income interventions. A systematic search of ten electronic databases was conducted in June 2022. Eligible publications examined any effect on health and wellbeing from unconditional cash transfers. All study designs were included, and no limitations were placed on duration of cash transfer trials, location of study, study population or on amount of money provided through the cash transfer. Ten studies were included in this review. Studies employed a range of methods. All studies reported on a trial of Universal Basic Income in either a region or a town. Studies explored a range of health and wellbeing related outcomes including crime, quality of life, employment, subjective wellbeing, tuberculosis and hospitalization. Basic income programs can mitigate poverty in a time of economic upheaval and have the potential to become a powerful policy tool to act upon the determinants of health and reduce health inequality. This review found a small number of trials indicating a positive impact on health and wellbeing. More trials which track recipients over a longer period are needed to provide more robust evidence for the impact of basic income programs.

Keywords: Universal Basic Income, universal credit, health promotion, wellbeing

INTRODUCTION

Major global disruptions in the past two decades have contributed to increases in wealth inequality. Events such as the Great Recession (2007–2009), the Coronavirus pandemic (2020–2023), and the period of high inflation during 2022 and 2023, have disrupted many facets of society, though their biggest legacies have been their contribution to growing wealth inequality. According to Sumar (2023), ‘In every major region of the world outside of Europe, extreme wealth is becoming concentrated in just a handful of people’. It is estimated that the income held by the

highest 10% in the USA, UK, Canada and Australia is 30.8%, 26.7%, 25.3% and 26.6%, respectively (WorldBankWorldBank, 2023). Put simply, the rich are getting richer, and the poor are getting poorer: the World Inequality Report estimates that since 1995, the top 1% have accumulated nearly 20 times more global wealth than the bottom 50% (Chancel *et al.*, 2022). Inequality has increased such that there is focus on ‘the working poor’: employed people who live in households that fall below the poverty line (Torraco, 2016). While this group has predominantly been a consideration of researchers and policy makers in low- and middle-income countries, they are an increasing part

Contribution to Health Promotion

- A basic income is a universal and unconditional form of income that is provided to everyone without conditions or requirements.
- Research shows that providing people with a basic income can help people to meet their basic needs, especially in times of economic uncertainty.
- The findings of this review indicate that basic income programs can alleviate poverty in a time of economic upheaval and can have a positive impact on the factors that influence health, leading to a reduction in health inequality.

of the working population in high income countries where stagnate wage growth, increased cost of housing, and low rates of investment in social housing by governments are leading to increased costs of living and increasing inequalities. Once derided as a solution only proposed by the far left, the concept of a Universal Basic Income (UBI) is gaining traction in broader society as a response to these inequalities.

Income is an important social determinant of health. It is interconnected, interlinked, and influences other social determinants of health (Marmot, 2002; Ruckert *et al.*, 2017). Marmot (2002) describes both material deprivation and lack of social participation as influencing health and as linked to income. Material conditions that influence health include clean water and good sanitation, adequate nutrition and adequate housing and warmth. However, there may be still health inequalities related to opportunities for social participation, autonomy, and life satisfaction for people who live above the threshold of material deprivation—linking income to health in a less direct way. There is a vast literature that describes the links between health outcomes and income. For example, there is a relationship between oral health and income (Singh *et al.*, 2019), infant (Olson *et al.*, 2010) and child health (Cooper and Stewart, 2021) and household income, less use of preventative health care and increased use of inpatient care in individuals with low income (Hamada *et al.*, 2019), poorer mental health in those with low income (Sareen *et al.*, 2011) and in general, life expectancy is higher in populations with higher income (Chetty *et al.*, 2016).

A basic income is generally considered to be an income that is universal, that is, it is provided to everyone, and is unconditional, that is, with no strings attached, and that can be provided as an individual

and/or a periodic cash payment. Van Parijs (2004) proposes a basic income as ‘an income paid by a political community to all its members on an individual basis, without means test or work requirement’ (p 4). This is consistent with the work of the Basic Income Earth Network (2018) who suggest that basic income has five features related to when, to whom, and how the income is provided (see Box 1). However, as researchers and policy makers have sought to pragmatically implement practical trials and experiments of basic income ideas, definitions have changed, particularly when it comes to the group who are able to receive the income and the conditions that are placed on the provision of income. This has meant that over the last few decades, as the perimeters around the definition of UBI have changed, so too has the idea gone from being utopian and existing within a constrained framework, to an increasingly feasible policy proposal and potentially a way to promote health and wellbeing (García, 2022).

While, in general, health care provision may be more available in high income countries, health inequalities exist in most countries, meaning that neighbouring populations with different income levels experience different health outcomes despite being above the material deprivation threshold (Braveman and Tarimo, 2002; Marmot, 2002; Hero *et al.*, 2017). In high income countries, poverty is generally not the reason for poor health, but rather health-related inequalities are a function of the social gradient. The social gradient suggests that those with the lowest social advantage are also those with the poorest health outcomes, with outcomes improving on a gradient as income increases (Marmot, 2010). Since describing this phenomenon in the original Whitehall study in the UK in the 1970s (Marmot *et al.*, 1978), Marmot and others have provided overwhelming evidence highlighting

Box 1: Defining features of a UBI (Basic Income Earth Network, 2018).

1. Periodic—It is paid at regular intervals (for example every month), not as a one-off grant.
2. Cash payment—It is paid in an appropriate medium of exchange, allowing those who receive it to decide what they spend it on. It is not, therefore, paid either in kind (such as food or services) or in vouchers dedicated to a specific use.
3. Individual—It is paid on an individual basis—and not, for instance, to households.
4. Universal—It is paid to all, without means test.
5. Unconditional—It is paid without a requirement to work or to demonstrate willingness-to-work.

the relationship between social standing and opportunity and health outcomes (Adler *et al.*, 1994; Orpana and Lemyre, 2004; Goldacre and Hood, 2022). The COVID-19 pandemic served to further highlight the health inequalities that persist all over the world leading to poorer health outcomes for those experiencing the most social disadvantage (Marmot and Allen, 2020).

One critical aspect of the social gradient is income equality (Kosteniuk and Dickinson, 2003; Theodossiou and Zangelidis, 2009). Ensuring that people have a sufficient income to meet their basic needs and that keeps pace with costs of living are important when considering ways to reduce health inequities, and many have argued that providing a basic income is one way to do this (Beck *et al.*, 2015; Painter, 2016; Bregman, 2018). Previous systematic reviews have sought to explore the impact of UBI on mental health, suggesting that, despite some limitations in the studies included in the review, there is some evidence for the purported positive mental health impacts of UBI (Wilson and McDaid, 2021). While narrative reviews have provided some information about the impact of basic income-like studies in high-income countries (Hoynes and Rothstein, 2019; de Paz-Báñez *et al.*, 2020; Gibson *et al.*, 2020) and low and middle income countries (Banerjee *et al.*, 2019), none have systematically searched for and extracted data that explored the impact of basic income on health and wellbeing outcomes. The aim of this review is to provide an overview of the existing peer reviewed evidence on the health and wellbeing impacts of basic income interventions. This will allow for a consideration of how, why, and for whom a basic income can contribute to health and wellbeing. Presented below is an overview of current and previous UBI experiments. This is presented to provide context to the results of this review, while also providing an overview of some of the largest and most studied basic income experiments.

Examples of current and previous UBI experiments

Recent reviews have provided some detail of what is currently known about basic income activities in high income countries (Hoynes and Rothstein, 2019) and in low and middle income countries (Banerjee *et al.*, 2019). These reviews have reported on a range of outcomes and provided detail of the impact of basic income from an economic perspective. These studies seek to grapple with some of the main questions about basic income, including the role of existing safety nets in high income countries, the role of economic growth in low- and middle-income countries, and the impact of basic incomes on labour markets. Presented here is an overview of some of the largest and most studied basic income experiments.

We seek here to present an overview of these studies, highlighting some of the key findings as well as demonstrating the scope of basic income experiments. This is not an exhaustive or detailed account of current or past basic income experiments. A good resource that maps basic income experiments is the [Stanford University Basic Income Lab \(2022\)](#) which is undertaking a project to map current and completed experiments.

Canada—Mincome

One of the most famous and well-studied basic income experiments was the Mincome experiment, the first large scale social experiment in Canada and the largest basic income experiment in the world to explore the mechanics of a social policy that ensured a basic standard of living to all (Calnitsky, 2016; Bregman, 2018). Debates in the 1960s and 1970s in Canada were focused on the various impact of poverty and potential solutions. At the time, the suggestion was to provide some basic income to the whole population, regardless of wages or means-tested social assistance, that guaranteed that no one fell below the poverty line (Forget, 2013b).

In 1974, in collaboration with the province of Manitoba, the Canadian government implemented a guaranteed annual income experiment that was modelled on the negative income tax experiments from the USA (Forget, 2013a). The experiment was conducted in two sites. Participants in Winnipeg were randomized into several treatment groups, which received a variety of guaranteed annual income interventions and controls. The town of Dauphin was chosen as a saturation site (Calnitsky and Latner, 2017). Dauphin residents with no income were eligible to receive an annual payment set at 60% of Canada's low-income cut-off (Forget, 2013b); in effect, this meant that 30% of the population of Dauphin received a cheque from the government (for various amounts depending on family size and other income) that would bring them above the poverty line (Calnitsky, 2016; Bregman, 2018). Over the 4 years of the program, an average family in Dauphin was guaranteed an annual income of 16 000 Canadian dollars.

A change in the government and changing economic priorities meant that Mincome was ended early. While there was some early analysis of the data from the experiment on labour market impacts (Hum and Simpson, 1993a, 1993b), analysis that explored the impact of the experiment on marriages (Arvin and Choudhry, 2001; Gonalons-Pons and Calnitsky, 2022) and crime (Calnitsky and Gonalons-Pons, 2021), most data were warehoused until it was re-analysed in the late 2000s (RecordForget, 2011; Bregman, 2018). No research was published or made available about the health outcomes or on the Dauphin site until the data were found and re-analysed (Forget, 2013b).

Other locations have attempted to replicate the Mincome experiment with varying results (García, 2022). For example, the B-Mincome experiment in Barcelona found a reduction in severe material deprivation, a reduction in the number of people going to sleep hungry, in individual and familiar indebtedness, and in having mortgage or housing rental debts. Despite being called a basic income experiment, it was time limited and only available for some population groups (Bru and Merrill, 2021).

USA

Between 1968 and 1980, the USA conducted four randomized control trials (RCTs) that sought to evaluate the idea of a 'negative income tax', where those earning below a certain threshold received money from the government instead of paying taxes (Steensland, 2006). These RCTs were conducted at the same time as the Mincome trial in Canada described above and are generally considered to be the first RCTs in the area of social policy (Baldassarri and Abascal, 2017; Neuwinger, 2022). In these trials, the US government re-distributed income tax back to citizens whose income was under a pre-specified threshold. These trials have been said to have not led to any substantive policy change (Widerquist, 2005; Steensland, 2006). Most basic income trials conducted in the USA do not meet the criteria set out in Box 1. They are often conditional, precluding recipients from engaging in employment, and generally look more like typical welfare programs (Hoynes and Rothstein, 2019). There are, however, several examples of small basic income experiments that have been conducted in the USA that are illustrative and are outlined here.

Alaska Permanent Fund dividend

The Alaska Permanent Fund dividend is a cash transfer program that is universal, individual, non-conditional, uniform, regular and provided in cash (Jones and Marinescu, 2022). As a dividend, the cash payment fluctuates from year to year, in 2022 the value was 3284 American dollars, and may not be sufficient to alleviate poverty, and has a limited impact on employment and hours worked (Feinberg and Kuehn, 2018; Jones and Marinescu, 2022). The Fund was established in 1976 when oil production began from the Prudhoe Bay field, with the primary purpose of the fund to share the public revenues generated from a non-sustainable resource. There has not been extensive examination of the Fund, however, that research which does exist suggests that it has a modest, but positive, impact on newborn birth outcomes (Chung et al., 2016), and some positive social impacts (Goldsmith, 2012).

Eastern Band of the Cherokee basic income

In 1996, a casino opened on the Eastern Cherokee reservation in North Carolina. It was decided that a portion of the profits from the casino would be distributed every six months to all adult tribal members regardless of employment status, income, or other household characteristics (Akee et al., 2010). Each member receives on average averages between 4000 and 6000 American dollars each year. The universal nature of this basic income allowed researchers to observe the effect on households. A marked increase was noted in the number of native American households with incomes above \$30,000 after the disbursement of casino payments in 1997, with no change observed for non-native American households (Akee et al., 2010). Research exploring offending found that adolescent and parental offending decreased (Akee et al., 2010), however, accidental deaths in the period immediately after the payments increased (Bruckner et al., 2011).

Currently in progress basic income experiments

There are a number of small experiments currently in operation across the USA. The [Stanford Basic Income Lab \(2022\)](#), has been tracking these experiments and provides a snapshot of current basic income activity in the USA. These experiments are yet to produce results and are not true basic income trials in that they are generally conditional on the recipient being low-income and are often small, with around 100 participants, but they are worth noting here. The first is the *Compton Pledge*, a pilot program operating in Compton Los Angeles, that intends to provide cash relief (between 300 and 600 American dollars each month) to low-income Compton residents over two years ([Compton Pledge, 2022](#); [Vesoulis and Abrams, 2022](#)). The intention of this program is to ensure that recipients do not fall below the poverty line. *Baby's First Years* is a basic income project operating across several states, targeting low-income mothers with newborns. This experiment enrolled 1000 low-income mothers of newborns who received a monthly unconditional cash gift of 3996 American dollars each year for the first several years of their children's lives ([Noble et al., 2021](#)). Preliminary findings of this study suggest that the cash transfers are not having an impact on maternal alcohol or drug use ([Yoo et al., 2022](#)), but are having a positive impact on child development ([Troller-Renfree et al., 2022](#)). The *Minneapolis Guaranteed Basic Income Pilot (2022)* is providing low-income families with a cash payment of 500 American dollars each month for two years. This experiment began in 2022 with the intention of assisting residents to become financially secure.

Finland basic income experiment

Finland recently conducted a thorough two-year basic income experiment with a treatment group of 2000 randomly selected, initially unemployed people. Those in the experimental group received a guaranteed, unconditional, and automatic cash payment of 560 Euros each month, however, albeit an amount below the incomes of most Finnish households (De Wispelaere *et al.*, 2019; KangasKangas, 2021). All other unemployed people continued to receive standard benefits and functioned as the control group (De Wispelaere *et al.*, 2019).

The findings suggest that in the first year, employment was largely unchanged (Verho *et al.*, 2022). However, overall, basic income in Finland led to a small increase in employment, significantly boosted multiple measures of the recipient's well-being including reductions in mental strain (Henley, 2020), and reinforced positive individual and societal feedback loops (Kangas *et al.*, 2019).

GiveDirectly Kenya

Kenya has recently been involved in a large-scale experiment to test a basic income on a rural region (FlowersFlowers, 2016). The experiment was to provide over 10 000 households who have received some type of cash transfer, distributed by the NGO GiveDirectly, and financially supported by a range of philanthrocapitalists (Eikenberry and Mirabella, 2018; Schmidt, 2022). Findings suggest that each dollar from cash transfers increased local economic activity by \$2.60, impacting both households that received the transfer and those that did not (Egger *et al.*, 2019). Haushofer and Shapiro found a short term (2016) and long term (2018) increase in food security and subjective wellbeing, with no significant findings indicating an increase in alcohol or tobacco use.

Interestingly, there were a number of households who declined to participate. Schmidt (2022) suggests that this was related to uncertainty from villagers around the requirements and obligations related to the transfers. Such a reluctance by local people intended to be a part of the experiment may limit the findings or at least have an impact on their generalisability.

Given this breath of basic income experiments, and the increased interest from a range of countries, governments and philanthropy in the potential of basic income to address income inequalities, there is a need to explore the role of basic income on health and wellbeing outcomes. This review seeks to provide an overview of the evidence surrounding the impact of basic income on health and wellbeing outcomes. The findings of this review can be used to inform government departments, non-government organizations, and philanthropy agencies regarding the impact of a basic income on health and wellbeing.

METHOD

The aim of this review was to provide an overview of the impact of basic income interventions on health and wellbeing. The selection, analysis, and reporting of study results were conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (McInnes *et al.*, 2018). The search strategy was registered online with PROSPERO in May 2022 (CRD42022332386).

Eligibility criteria

Eligible publications were those that examined any effect on health and wellbeing from unconditional cash transfers. All study designs were included, and no limitations were placed on duration of cash transfer trials, location of study, study population, or on amount of money provided through the cash transfer.

Studies were excluded if they did not examine the effect of the cash transfer on the health or wellbeing of the beneficiaries. Non-English language papers were excluded. Non-empirical studies (those that do not collect data), such as editorials, theses and reviews were excluded. Conference abstracts were excluded.

Search strategy

As unconditional cash transfers can be described in the literature in a variety of ways (including unconditional cash transfers, guaranteed annual income, or UBI) all ways of referring to cash transfers were included in the search strategy. The two overarching search terms ('health and wellbeing' and 'cash transfers') were combined with the operator 'AND'. Within the broader search terms, specific search terms were combined with the operator 'OR'. Medline specific search terms included health and wellbeing (health*, 'well being', wellbeing, well-being) and cash transfer ('basic income guarantee', 'universal cash transfer', 'unconditional basic income', 'universal basic income'). Boolean search operators were adjusted for each database searched, as required. Reference list of included articles were also scanned for additional studies. The search was conducted in June 2022.

The search strategy was allied to the following electronic databases: Medline, Embase, CINAHL, Global Health, Scopus, APA PsycInfo, SocINDEX, Informit Health Collection, Econlit and Business Source Complete, and Health Policy Reference Center.

Following the literature search, all identified citations were uploaded into Covidence (VeritasVeritas Health Innovation, 2022), a web-based software platform designed to simplify and expedite the research review process. Duplicate search results were then removed. Titles and abstracts were independently

screened by two authors. Full texts were screened by the first author and additionally by the last author. Disagreement between authors regarding study inclusion were resolved through discussion to meet consensus.

Data extraction

Data were extracted from included studies. Using a standardized data extraction template, the following data were extracted: study type, problem trying to be solved, country, population/beneficiaries, cash amount, length of trial, context, mechanism and outcomes. Findings were narratively synthesized and reported according to country, intention of the intervention, with information about level of cash provided, participant characteristics, and length of time noted where necessary. The PRISMA2020 checklist (Page *et al.*, 2021) was employed to cross-check the criteria with the complete manuscript.

Risk of bias and applicability

The quality of included randomized controlled and cohort studies was assessed using the Critical Appraisal Skills Programme (CASP) checklists (CASPCASP, 2022). The quality of included cross sectional studies was assessed using the Joanna Briggs Institute critical appraisal tools (JBI Institute, 2020). The appropriate method of appraisal was selected based on study design. Both methods of appraisal evaluate study methodology to determine whether a study is good or poor quality. The JBI appraisal tool determines a 'good' quality study to be one which only has 'yes' or 'not applicable' ratings (Shi *et al.*, 2021). A score of 8 or more on the CASP checklists determines a study to be 'high' quality (Dawson *et al.*, 2014).

RESULTS

Following the exclusion of duplicate records, 998 publications were included for title and abstract screening. After title and abstract screening, 909 publications were excluded, leaving 89 publications for full text review to determine eligibility. The most common reasons for exclusion at the full text screening stage were that the studies were not empirical ($n = 63$), that the study was not in English ($n = 6$), or that there was no health or wellbeing outcome ($n = 5$). The PRISMA (Page *et al.*, 2021) flow diagram (Figure 1) presents the flowchart of the screening process and identification of the eligible publications.

The final selection of eligible publications ($n = 10$) included four randomized control studies (Haushofer and Shapiro, 2016, 2018; Calnitsky *et al.*, 2019), two quasi experimental studies (RecordForget, 2011, 2013b), two cross sectional studies (McDowell and

Ferdosi, 2021; Bähr *et al.*, 2022), one longitudinal study (Watson *et al.*, 2020), one retrospective cohort study (Dave and Rupani, 2022), and one observational study (Ferdosi and McDowell, 2020), see Table 1 for an overview of the studies included in this review. Seven of the studies were found via the systematic search and three were identified through hand searching of reference lists (Forget, 2013b; Haushofer and Shapiro, 2016, 2018). Half of the studies were conducted in Canada (RecordForget, 2011, 2013b; Calnitsky *et al.*, 2019; Ferdosi and McDowell, 2020; McDowell and Ferdosi, 2021), two in Kenya (Haushofer and Shapiro, 2016, 2018), and one each from Germany (Bähr *et al.*, 2022), India (Dave and Rupani, 2022) and the USA (Watson *et al.*, 2020). All studies reported on a trial of UBI in either a region or a town, with data reporting on trials ranging from six months (Bähr *et al.*, 2022; Dave and Rupani, 2022) to 16 years (Watson *et al.*, 2020). Studies explored a range of health and wellbeing related outcomes including crime (Watson *et al.*, 2020), quality of life (Ferdosi and McDowell, 2020; McDowell and Ferdosi, 2021), employment (Calnitsky *et al.*, 2019; Ferdosi and McDowell, 2020), subjective wellbeing (Haushofer and Shapiro, 2016, 2018; Bähr *et al.*, 2022), tuberculosis (Dave and Rupani, 2022) and hospitalization (RecordForget, 2011, 2013b).

Synthesis of studies

The three studies that reported on the MINCOME experiment were focused on the hospitalization rate, as well as other health and social outcomes (RecordForget, 2011, 2013b) and on the secondary impacts of changes to the labour force (Calnitsky *et al.*, 2019). In a re-analysis of historical data from the Mincome experiment in Dauphin, a rural community in western Manitoba, RecordForget (2011); Forget (2013b) explored hospitalization rates as a proxy indicator of health, considered more accurate than contact with primary care as people often have less control over hospitalization. The findings of these studies suggest that while the rate of hospitalization was high at the beginning of the experiment, the rate dropped lower than the control group by the end of the period. Calnitsky *et al.* (2019) reported on the impact of the Mincome experiment on the labour force, and what happens when people voluntarily leave the labour force. They found that care activities and education, particularly for women, increased, as did self-employment activities. Both studies have limitations in that they are re-analysing data which was, at the time of re-analysis, already decades old, and do not consider societal changes that have occurred in the proceeding years. Despite the age of these studies there may be findings relevant for today, especially around women's agency and ability to make choices

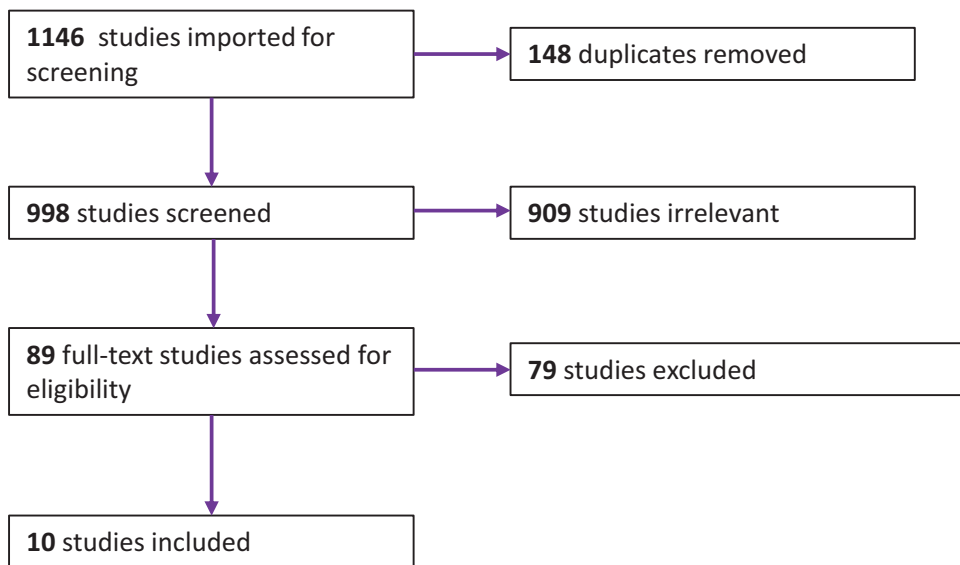


Fig. 1: PRISMA flow diagram pertaining to the screening process and identification of the eligible publications (Page *et al.*, 2021).

about how they spend their time, as well as how people make health decisions when less financially constrained.

Two studies reported on the outcomes of the Ontario Basic Income Pilot. These studies employed both qualitative interviews (McDowell and Ferdosi, 2021), as well as surveys (Ferdosi and McDowell, 2020; McDowell and Ferdosi, 2021) of current and past recipients of basic income in the Hamilton -Brantford region of Ontario, Canada. Ferdosi and McDowell (2020) surveyed 147 people and interviewed 40, finding that physical health improved during the pilot for both those who were continuously employed or unemployed, the same was reported for depressive symptoms, with most people feeling less depressed during the basic income pilot. Participants reported engaging with healthcare less often as, thanks to the additional income, they were able to manage their chronic health problems and as a result, required less primary or emergency care, while most respondents reported improved diet and increased consumption of nutritious foods. Finally, most respondents reported spending more time socializing with friends, family, and community members. The same authors, McDowell and Ferdosi (2021), in a different study, reported that most participants of the pilot had improved health outcomes, including improved physical activity and increased access to prescription drugs and counselling services. Most respondents reported better mental health and increased social relations. Both publications report challenges with interpreting the results as the pilot was ended prematurely, impacting the data that was able to be collected.

Two studies reported on the GiveDirectly Kenya experiment. These studies were both RCTs with one reporting on the short-term (nine months after the transfer began) (Haushofer and Shapiro, 2016) and long-term (three years after the transfer began) (Haushofer and Shapiro, 2018) impacts of the experiment. Both studies included the same sample population (503 households in remote Kenya) and explored the impact of a range of different indicators including frequency of payment, recipient of payment (female or male household member), and the impact of providing a lump-sum or instalment over several months. Short-term impacts of this basic income trial suggested that monthly transfers were more likely than lump-sum transfers to improve food security; when provided a lump-sum transfer, participants were more likely to spend the money on durable items. No overall effect was found on levels of cortisol (a stress hormone). Long term, recipients were found to have a higher level of asset holdings, consumption, food security and psychological well-being relative to non-recipients in the same village. The effect size for these findings were similar to those found in the study reporting on short-term findings.

Two studies explored the impact of UBI on specific health conditions; one on the impact of subjective wellbeing during the COVID-19 pandemic in Germany (Bähr *et al.*, 2022), and another that explored the impact of direct transfers on people with tuberculosis in India (Dave and Rupani, 2022). Bähr *et al.* (2022) Results of the analysis of Bähr *et al.* suggest that while the pandemic lowered subjective wellbeing, the size of the impact was no different

Table 1: Summary of studies included in review

Author	Year	Country	Aim	Health condition under investigation	Study design	Data source	Population description	Time of UBI	Amount	Mechanism	Outcomes
Forget, EL	2011	Canada	To assess the impact of MINCOM on hospitalization	Hospitalization and physician contacts	quasi-experimental design	Population Health Research Data Repository	Dauphin, Manitoba	6 years (1974 to 1979)	Not reported	Not reported	No increase in fertility, family dissolution rates, or improved birth out comes. A relatively modest basic income can improve population health
Forget EL	2013	Canada	To assess if a guaranteed annual income reduces hospitalization rates?	Hospitalization rates	quasi-experimental design	Population Health Research Data Repository	Dauphin, Manitoba	6 years (1974 to 1979)	Not reported	Not reported	Hospital separations declined relative to controls. Accident and injury codes and mental health codes were most responsible for the decline.
Haushofer J, Shapiro J.	2016	Kenya	To assess the relative impacts of three design features of unconditional cash transfers on economic and other outcomes	Wellbeing	RCT	Surveys, Biomarkers, and Anthropometrics	503 households in rural Kenya	Up to 9 months	Up to 1500 USD depending on treatment assigned	Lump sum or monthly	Increase in household monthly consumption from nine months after the transfer began. Transfer recipients experience large increases in psychological well-being.
Haushofer J, Shapiro J.	2018	Kenya	To assess the impacts of broadly targeted unconditional cash transfers	Wellbeing	RCT	Survey	503 households in rural Kenya	Up to 9 months	Up to 1500 USD depending on treatment assigned	Lump sum or monthly	Most positive effects persist until at least three years after transfers, cash transfers have sustained benefits, households do not “consume away” the transfers but invest in livestock and metal roofs.

Table 1. Continued

Calnitisk, D, Latner, JP, Forget, L.	2019	Canada	To assess the impact of the Mincome experiment on employment outcomes	Employment	RCT (re-analysed)	Baseline survey and longitudinal panel survey	609 treatment group	3 years	3800–5800 in 1974 dollars	Monthly	Growth in care work activities and education, especially among women, moderate growth in self-employment, relatively strong growth in the portion of men and women reporting they did not want to work, and the strongest growth in nonemployment connected to dissatisfaction with work/job conditions.
Ferdosi, M McDowell, T	2020	Canada	To assess the effects of OBIP in the Hamilton-Brantford site; how did basic income impact recipients.	Physical and mental health and employment	Observational	Quantitative survey	147 OBIP recipients	3 years	singles received up to \$1415.75; Individuals with disabilities received up to \$1915.75	monthly	Continuously employed reported greater improvements in their wellbeing and mental wellbeing
Watson, B, Guettab, M Reimer, M	2020	USA – Alaska	To assess the impact of UBI on crime	Community crime	Longitudinal time series analysis	Police incident reports	Anchorage, Alaska	16 years 2000–2016	1600	Yearly (October)	Increase in the number of substance abuse incidents and a decrease in the number of property crimes in the weeks immediately following distribution

Table 1. Continued

	McDowell, T Ferdosi, M	2021	Canada	To assess the extent the basic income impacted peoples' living and/or working conditions	Quality of life	Cross sectional mixed methods	Quantitative survey of 217 residents of Hamilton, Ontario	2 years April 2018 to April 2020	Not reported	Not reported	Small decline in labour market participation, but improvements on a variety of quality-of-life measurements, physical health; improved mental health state; improved social health.
Bähr, S, Frodermann, C, Kohlruss, J, Patzina, A, Stegmaier, J, Trappmann, M		2022	Germany	To assess if pre-existing social inequalities in subjective well-being between BIS recipients and non-recipients were exacerbated or equalized during the first wave of the COVID-19 pandemic in Germany	Subjective wellbeing	Repeated cross sectional (panel); Data comes from the Labour Market and Social Security (PASS) study	Household panel survey	6 months (interview months)	446 euros per month	Monthly	While the pandemic lowered subjective well-being in Germany – the size of this adverse effect does not differ between basic income recipients and other residents of Germany.
Dave, JD Rupani, MP		2022	India	To assess if non-receipt of basic income associated with unfavourable treatment outcomes among patients with TB	Tuberculosis	Retrospective cohort	Treatment outcomes and in-depth interviews	6 months	INR 500	Not reported	Basic income improved the treatment completion rates among patients with TB

in recipients of the income, considered to be more disadvantaged and those who were not in receipt of a basic income [Bähr *et al.* \(2022\)](#). In their exploration of the impact of UBI on health outcomes and the dual impacts of tuberculosis and malnutrition, [Dave and Rupani \(2022\)](#) found that the provision of the direct transfers improved treatment completion rates. Despite positive outcomes of the study, there were concerns that patients received the payments late, impacting the ability to use the funds to purchase needed food.

[Watson *et al.* \(2020\)](#) undertook an analysis of Alaska's Universal Permanent Fund Dividend on the impact of community crime. Looking at policing incidents over a 16-year period, the aim of their exploration was to investigate the impact of the universal fund on incident report data. Findings suggest that property crime showed a reduction in the immediate period after the funds were released, while substance use crime and medical assistance calls increased.

Risk of bias assessment

Using the JBI ([Moola *et al.*, 2020](#)) and CASP checklists ([CASP, 2022](#)), reviewers assessed criteria over the ten publications (see [Supplementary Table 1](#)). Five papers were considered positive quality studies that adequately addressed the majority of the validity questions, including the four essential criteria ([Ferdosi and McDowell, 2020](#); [Watson *et al.*, 2020](#); [McDowell and Ferdosi, 2021](#); [Dave and Rupani, 2022](#)). Three papers received a fair rating due to inadequately fulfilling essential criteria regarding either subject selection, comparable groups, intervention description, or valid measurement of outcome ([Haushofer and Shapiro, 2016, 2018](#); [Calnitsky *et al.*, 2019](#)). Two studies received a poor rating due to inadequately addressing the validity criteria ([RecordForget, 2011](#); [Bähr *et al.*, 2022](#)).

DISCUSSION

Income is a powerful determinant of health, with evidence strongly indicating that income inequality affects population health and wellbeing ([Pickett and Wilkinson, 2015](#)). While there are limitations on the studies included in this review, findings suggest that basic income programs can have a positive influence on health and wellbeing. This review sought to explore the impact of introducing a basic income program on health and wellbeing outcomes, with studies included reporting on the impact on working conditions, hospitalization and crime. While care needs to be taken in generalizing the findings, the findings overall suggesting improvements in health and wellbeing and a decreased crime.

UBI programs are receiving renewed attention as a possible response to recent the disruptions in the global economy. While governments have an array of income supplements for citizens, these often place people below the poverty line ([McKenzie *et al.*, 2023](#)), forcing people to rely on charity and into activities that are unorthodox or undesirable ([Watson *et al.*, 2022](#)). Governments can play a powerful role in lifting people out of poverty and in addressing socio-economic inequality. Evidence from a number of countries demonstrated that increased welfare payments during the pandemic not only prevented people from entering poverty, but that this money went back into the economy ([Li *et al.*, 2020](#); [Béland *et al.*, 2022](#)). Child poverty in the USA fell to its lowest levels on record in 2021, due to the expansion of anti-poverty programs during the pandemic ([Burns *et al.*, 2022](#)). However, government policies can also have unintended consequences. Trials of income management, sometimes called 'cashless welfare' in Australia, designed to assist people to make healthy choices by limiting the amount of money that can be spent on tobacco, gambling, or alcohol have been found to have limited impact on the targeted behaviours, leading to increased spending on less healthy foods ([Greenacre *et al.*, 2023](#)).

There are strong arguments in opposition and support of basic income programs. Opponents cite high cost, concern that they may adversely affect the economy, that they may encourage people not to work, and that they weaken the 'public contract' that is built into our social safety nets ([Widerquist, 2013](#); [Afscharian *et al.*, 2022](#)). There are, however, strong arguments that basic income programs can act as an upstream intervention that reduces poverty and addresses health inequality ([Johnson *et al.*, 2021](#); [Wright and Przegalińska, 2022](#)). Those living in poverty may never have had the opportunity to make decisions or considerations beyond the immediate or short-term; a basic income has the potential to enable stability, allowing people the opportunity to plan longer into the future. Greater understanding of the trajectories of recipients' lives over time, and the financial and health decisions they make once they have a stable income, is essential to inform better policy decisions around basic income. As this review highlights, only a small number of basic income trials that focus on health and wellbeing outcomes have been conducted, with most having been conducted over a relatively short period, some using historical data, and only half of the studies evaluated were deemed to be of good quality. Without long term and large-scale exploration of basic income programs and their impact on health and wellbeing, much of the evidence for these programs will continue to be theoretical, short term, of limited scope or with limited rigorous research to back up claims.

CONCLUSION

Basic income programs may be a way of mitigating poverty in a time of economic upheaval and uncertainty and have the potential to become a powerful policy tool to act upon the determinants of health and reduce health inequality. This review found a small number of trials which, despite their differences, generally indicate a positive impact on health and wellbeing. More trials which track recipients over a longer period are needed to provide more robust evidence for the impact of basic income programs.

SUPPLEMENTARY MATERIAL

Supplementary material is available at *Health Promotion International* online.

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