# Investing in the health of girls and women: a best buy for sustainable development 

Human rights, theory, evidence, and common sense all suggest that greater investment in women's health could be among the "best buys" for broader economic development and societal wellbeing, say Michelle Remme and colleagues

Investments in health are known to generate large social and economic benefits, in addition to saving lives and improving quality of life. ${ }^{1}$ Yet given the 2030 global development agenda and its broad set of priorities, resources need to be targeted to interventions with the greatest impacts. The disproportionate impact on economic development of investments in women's education and economic participation is well known, but it is less well understood that programmes that improve women's health could have substantial and disproportionately higher economic and social returns, compared with other uses of social resources. ${ }^{23}$

Meeting women's health needs and eliminating gender inequality are moral imperatives and fundamental human rights, and investment in women's health

## KEY MESSAGES

- Investing in women's health could redress violations in women's rights and gender inequities, as well as generating disproportionately large health, economic, social, and environmental gains
- Healthy women and girls tend to be more productive in both paid and unpaid work, have higher returns on educational investments, and contribute to positive intergenerational and community spillover effects and favourable demographics
- Better women's health can be a result of progress towards universal health coverage and a contributing factor
- Health systems often fail women because of fundamental biases in medicine and in the design of healthcare delivery and financing models
- Investments in women's health can and should be used for more gender transformative and multisectoral approaches to maximise benefits beyond health
should therefore not require justification. However, the case is also compelling beyond the immediate health benefits. ${ }^{45}$ Although women live longer than men, they have specific unmet health needs and higher morbidity. ${ }^{6}$ In addition, women's biological and social roles make them central to intergenerational transfers and demographic and development effects. Moreover, women not only provide most of the informal care in homes and communities, they also represent $70 \%$ of the global health workforce, making them central to overall population health. ${ }^{7}$ By considering only the direct health benefits of investments in women's health, we risk undervaluing the broader societal benefits and underinvesting in programmes to improve it.

We summarise the latest evidence on the impact of investing in women's and girls' health for the health, wealth, cohesiveness, and wellbeing of society in low, middle, and high income countries. We include evidence on sources of benefit embedded in a sustainable development framework ${ }^{8}$ that considers the standalone and interconnected goals of gender equality, ${ }^{9}$ human development, economic development, universal health coverage, political stability, and environmental sustainability.

## Gender equality and women's empowerment

Women's access to healthcare and their ability to achieve good health are measures of gender equality and the realisation of women's human rights. This entails social norms that value women and girls' health; availability of quality healthcare options; and autonomy and informed choice for women and girls, free of coercion, discrimination, and violence.

Yet, in certain settings-for example, in India and Ethiopia-healthcare seeking and immunisation coverage are lower for girls, irrespective of socioeconomic factors, owing to son preference. ${ }^{1011}$ Moreover, women receive less evidence based clinical care than men, because
the male body remains the reference in medicine and biomedical research, with significantly fewer women in clinical trials and fewer females in animal studies. ${ }^{12}$ This gender bias limits the realisation of women's right to health and is evidenced by more side effects from treatment, fewer accurate diagnoses, and less treatment that is evidence based or adherent to guidelines. ${ }^{13-15}$ For example, women in the United States and the United Kingdom are $25 \%$ and $50 \%$ more likely than men to be misdiagnosed for a stroke or heart attack, respectively. ${ }^{16}$

Investing in women's health can improve both health outcomes and gender equality (box 1). The literature has tended to investigate the enabling role of women's empowerment for health service uptake and health outcomes. ${ }^{17}$ Evidence suggests a strong association between women's use of family planning and their empowerment and agency, although the direction of effect is unclear. Yet, evidence also suggests that rights based, gender responsive health interventions and health systems can promote gender equity and women's rights. ${ }^{18}$ For example, overcoming bias in medical research and clinical practice can increase the efficiency and equity of healthcare. This has been found in the US, where cardiovascular mortality among women has declined dramatically in the past decade, partly as a result of a greater focus on women's specific unmet needs and better adherence to treatment guidelines. ${ }^{19}$ While many women experience mistreatment and abuse during facility based childbirth (including physical abuse; non-consented, non-confidential, or undignified care; discrimination; abandonment; and detention), respectful maternity care policies could reduce these violations in women's rights and improve quality of care, and service uptake. ${ }^{20}$
Ensuring that women are healthier also requires approaches to reduce sexual and physical violence, which one in three women experience in their lifetime. ${ }^{21}$ Evidence suggests that effective

## Box 1: Gender equality and equity

- Gender equality means "the absence of discrimination on the basis of a person's sex in opportunities, allocation of resources or benefits, and access to services." ${ }^{9}$
- Gender equity means "fairness and justice in the distribution of benefits, power, resources, and responsibilities between women and men. The concept recognises that women and men have different needs, power, and access to resources and that these differences should be identified and addressed in a manner that rectifies the imbalance between the sexes" (World Health Organization, 2002). ${ }^{9}$
- Gender equality in opportunities and rights is therefore used when referring to it as a goal or end outcome, while gender equity is used when referring to the fair distribution of, and access to, healthcare inputs as a means of achieving the goal.
investments to prevent violence against women combine interventions that tackle women's health needs, support their economic empowerment, and challenge inequitable gender norms and power dynamics in society. ${ }^{21}$ Such transformative approaches involving women and men have reduced the incidence of intimate partner violence by up to $50 \%$ and transformed gender norms within one to two years of intervention in a range of settings (including South Africa, Rwanda, Uganda, Tajikistan, Nepal, and Afghanistan). ${ }^{22}$


## Human and economic development

The ethical arguments and justifications for investing in the overall and reproductive health of women and girls are magnified by theory and evidence highlighting the value of health as a form of human capital that promotes economic wellbeing at the individual, familial, and societal levels. ${ }^{23}$ Human capital promotes income growth and poverty alleviation through five main pathways: labour; education; capital accumulation; intergenerational, familial, and community spillovers; and favourable demographics. While most of these pathways apply to men and boys as well, we focus on how healthier women and girls affect economic growth and development and where there is a differential impact.

## Labour

Healthy women tend to be more productive in the paid workforce and in their unpaid work, which includes contributions to fam-
ily economic activities and a disproportionate share of child rearing, care for elderly or sick family members, and domestic work. ${ }^{24}$ Globally, $76 \%$ of the 16.4 billion hours a day of unpaid care work is done by women. ${ }^{25}$ Although not equally valued in standard economic metrics, both paid and unpaid work are clearly vital to household and societal welfare. ${ }^{26}$
Healthy women also tend to miss fewer workdays owing to illness and be more productive when they work (provided the total hours worked do not exceed healthy levels). For example, multi-micronutrient supplementation among female tea pickers in India increased their productivity by $12 \% .{ }^{27}$ In the US, modelling suggests that reduced maternal mortality between 1920 and 1970 resulted in a $52 \%$ increase in labour force participation among women of reproductive age. ${ }^{27}$ Of course, these effects of health on economic wellbeing are mediated by legal, institutional, and cultural factors that influence women's economic freedom, access to and control over property, employment, pay, capital, and household decisions. ${ }^{28}$

## Education

The health of women and girls in utero, infancy, childhood, and adolescence is reflected in their records of school attendance, progression through the education system, cognitive function, and their experience of long term physical and mental impairments associated with illness and injury. ${ }^{29}$ Studies from Pakistan and Guatemala found that improved nutritional status among girls significantly increased their schooling (with less or no effect for boys). ${ }^{27}$ The improved health of women and girls thus increases the returns on educational investment and is linked to their lifetime earnings, mainly via stronger representation in the paid workforce, greater economic empowerment, increased productivity, and greater longevity. ${ }^{27}$

## Intergenerational, familial, and community spillover effects

Healthy women also promote economic wellbeing and progress by strengthening the environment-materially, emotionally, and socially-in which children are raised, in their nuclear and extended families and communities. Studies show that maternal health at birth, in childhood, and during pregnancy directly influences the health of children at birth, during their childhood, and into adulthood, with better maternal health reducing stunting and improving cognitive
development and later productivity. ${ }^{27}$ For example, studies from China and Nigeria found that fetal exposure to acute maternal malnutrition had negative impacts on risks of hypertension, literacy, and income in adulthood. ${ }^{27}$
In Romania, children born after the abortion ban in 1967 had worse educational and labour market achievements. ${ }^{27}$ In addition to affecting the health of her children, a mother's health is linked to her spouse's status in the labour market and earnings. ${ }^{30}$ Moreover, the larger the share of household income generated by women, the larger the share of spending on nutrition and the smaller that spent on tobacco and alcohol. ${ }^{31}$

## Favourable demographics

Higher rates of infant and child survival more than offset reductions in fertility, allowing families and countries to escape from the heavy burden of youth dependency and enjoy the prospect of a demographic dividend. ${ }^{32}$ For example, economic modelling suggests that Kenya, Nigeria, and Senegal could increase national income per person by $31-65 \%$ if their unmet need for family planning was met. ${ }^{27}$ In Bangladesh, a drop in fertility rates was associated with increased earnings and assets for women. ${ }^{27}$ Indeed, in settings with low economic growth and high fertility, improved health in women tends to accelerate fertility decline and concomitant economic gains. Improved male health, however, often results in higher fertility and therefore delayed demographic transition and economic take-off to sustained growth. ${ }^{283334}$

## Environmental sustainability

Better reproductive health could have important implications for the environment through reduced population growth and mitigation of natural resource degradation. ${ }^{35-37}$ Indeed, countries responding to the effects of climate change have emphasised how rapid population growth is exacerbating the impact of climate change on their communities, pointing to the need to prioritise access to voluntary family planning. ${ }^{38}$ While the literature on how climate change affects women's and girls' health is growing, less empirical evidence is available on the impact of women's access to, and uptake of, family planning services on climate change and adaptation mechanisms. ${ }^{437}$ Interestingly, several studies identify opportunities to tackle health, family planning, and environment in an integrated manner to maximise their combined effect. ${ }^{3739}$

## Universal health coverage and financial protection

Universal health coverage means that everyone has access to essential health services that are of sufficient quality to be effective and which do not result in financial hardship for the individual or their household. ${ }^{4041}$ As countries progress towards universal health coverage, prioritising health services that predominantly affect women, including essential sexual and reproductive health services, will be key to achieving financial protection for the most vulnerable. ${ }^{42-46}$ Studies show that maternal complications, emergency obstetric care, maternal mortality, and female cancers often result in catastrophic health spending in low and middle income countries, especially among poorer households. ${ }^{4748}$ There is also greater income related inequity in access to women's health services, compared with access to child health services. ${ }^{424649}$

Moreover, the need for out-of-pocket payments has been found to constrain women's use of healthcare services, more than that of men, given women's limited access to and control over household financial resources. ${ }^{43}$ While spending on sexual and reproductive health services in low and middle income countries is particularly regressive, with the poorest households spending up to 10 times more of their income than wealthier households, ${ }^{50}$ similar trends are found for the growing burden of non-communicable diseases, where vulnerable households spend between $5 \%$ and $50 \%$ of their monthly income covering the costs of chronic illnesses. ${ }^{51}$ Although out-of-pocket spending is the most inequitable form of health financing, it does imply some access to health services, whereas women are more likely to forgo healthcare altogether for financial reasons or to access poorer quality healthcare. ${ }^{52}$ Older women are less likely to have been formally employed and built up a safety net or pension but also live longer than men, exposing them to a higher risk of catastrophic health expenditures. ${ }^{24}$ While we know more about the long term social, health, and economic consequences of maternal mortality for surviving infants, limited evidence is available on the social and economic burden of cancers in women and other deaths not related to child bearing. ${ }^{47}$

Because more than $35 \%$ of health expenditure is paid out of pocket as user fees, and 100 million people are pushed into poverty each year after catastrophic health expenditures, ${ }^{53}$ removing user
fees and ensuring equitable healthcare financing-a key tenet of universal health coverage - is one mechanism for reducing this burden. Another is reducing women's need for healthcare by improving their health and wellbeing across their life course. Investing in women's health services and promotion could lead to a cycle that improves women's health outcomes and in turn reduces the economic burden of utilising health services. For example, access to sexual and reproductive health services, better mental health, and fewer chronic conditions increase women's employment and thereby their ability to contribute to tax and income based universal health coverage schemes. ${ }^{54}$
Better women's health can be both a result of progress towards universal health coverage and a contributing factor, given that 165 million female healthcare providers form the backbone of health systems worldwide, delivering health services to five billion people and generating \$3tn (£2.3tn; €2.7tn) in global health. ${ }^{4}$ Even more women provide informal health and social care in households and the community. ${ }^{55}$ The health of healthcare professionals and caregivers is decisive for access to quality health services by those who need them. In addition, ensuring that women can perform their duties free from violence and harassment in the workplace is critical to uphold their rights, as well as sustaining universal health coverage, which increasingly relies on frontline workers. Nurses, for example, are three times more likely to experience violence compared with other professional groups and thus are more likely to leave their jobs. ${ }^{55}$

## Political participation and stability

Healthy, educated, income generating, and empowered women are likely to assume more prominent and active roles in a community and to show less tolerance for gender inequality, lack of transparency, and lack of responsive political leadership. ${ }^{2}$ While societies in which women are more politically active would conceivably be more stable politically, evidence for this is limited. Women's health issues play a key part in voter preferences, and associations have been found between women's health status (reduced mortality) and political participation, but it is primarily thought that better political participation leads to investments and improvements in women's health, rather than vice versa. ${ }^{456}$ One modelling study found that US health aid (partly focused on women's health) had
positive effects on state stability in subSaharan Africa. ${ }^{57}$

## Conclusions

Investing in women's health could redress violations in women's rights and gender inequities, as well as generating disproportionately large health, economic, social, and environmental gains. Given the ambitious 2030 sustainable development goal agenda and its $\$ 3.9$ tn annual price tag, identifying and prioritising "accelerators" that have multiple impacts across development targets is vital to achieve these goals. ${ }^{58}$ Women's health programmes could be particularly critical entry points for integrated programming across sectors and development objectives, such as combining sexual and reproductive health services with interventions that challenge gender inequitable norms or support climate change mitigation. Indeed, investments in women's health should be used for more gender transformative and multisectoral approaches to maximise benefits beyond health.
Nonetheless, several key gaps exist in the evidence base. Firstly, considerably more literature examines how non-health factors and other development outcomes influence women's health than the bi-directionality of this relation and how improvements in women's health affect broader sustainable development, including universal health coverage, political participation, and environmental sustainability. Moreover, few studies have considered the impact of women's health beyond reproductive health and across the life course. ${ }^{459}$ The evidence around universal health coverage provides a limited understanding of the differential gendered effects of different financing mechanisms or differences in out-of-pocket expenditures, catastrophic expenditures, and economic household burden from a woman's or man's ill health. ${ }^{43}$
With the expected development gains from investments in women's health, elements of healthcare systems need to be re-engineered to respond better to the needs of women. Despite calls for patient centred healthcare, health systems often fail women because of fundamental biases in medicine and in the design of healthcare delivery and financing models. For example, women are three times more likely to die from a serious heart attack owing to unequal treatment. ${ }^{15}$ Furthermore, health financing schemes based on formal employment and civil service were established in Europe in
the 19th century to keep men healthy for battle and work in rapidly industrialising economies, yet they are still actively promoted across the world despite large informal work sectors being dominated by women. ${ }^{43}$ Additionally, the most vulnerable women typically receive healthcare from the most under-resourced, undertrained, and undervalued health workers in the health system (community health workers, traditional birth attendants, and relatives). ${ }^{4}$

Moreover, while many countries have developed primary healthcare systems around maternal and child health, we need to recognise that women's health is more than maternal and reproductive health ${ }^{4}$ and that its impact on development extends beyond their reproductive role. For example, as primary caregivers and healthcare providers, women are in a key position to alter non-communicable disease risk factors at home and are central in responding to non-communicable diseases across the world, especially in resource limited settings where health systems cannot absorb and respond to the growing needs of chronic conditions.

The global landscape and political climate are areas of disinvestment in women's health, and women's sexual and reproductive health and rights in particular. ${ }^{60}$ Health for all at all ages is a fundamental human right and the ambition of the sustainable development goals for health. ${ }^{61}$ Recent evidence and thinking on the value to society of good health justify greater investment in health overall, in addition to increasing the amount spent on women and girls. ${ }^{133}$ In the context of constrained healthcare resources and limited development budgets, we need to prioritise health interventions that maximise health gains, increase health equity, and optimise other development goals. Human rights, theory, evidence, and common sense all suggest that greater investment in women's health could be among the "best buys" for broader economic development and societal wellbeing.
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