Self-Care
SOCIO-ECONOMIC
RESEARCH

The Global Social and Economic Value of Self-Care

INTRODUCTION

Demographic changes, medical advances and political instability are placing considerable pressure on healthcare systems. COVID-19 has highlighted how stretched the capacities of national healthcare systems are, emphasizing the need to maintain essential health services| to individuals through alternative forms of care.

YEARLY CURRENT SAVINGS THROUGH SELF-CARE

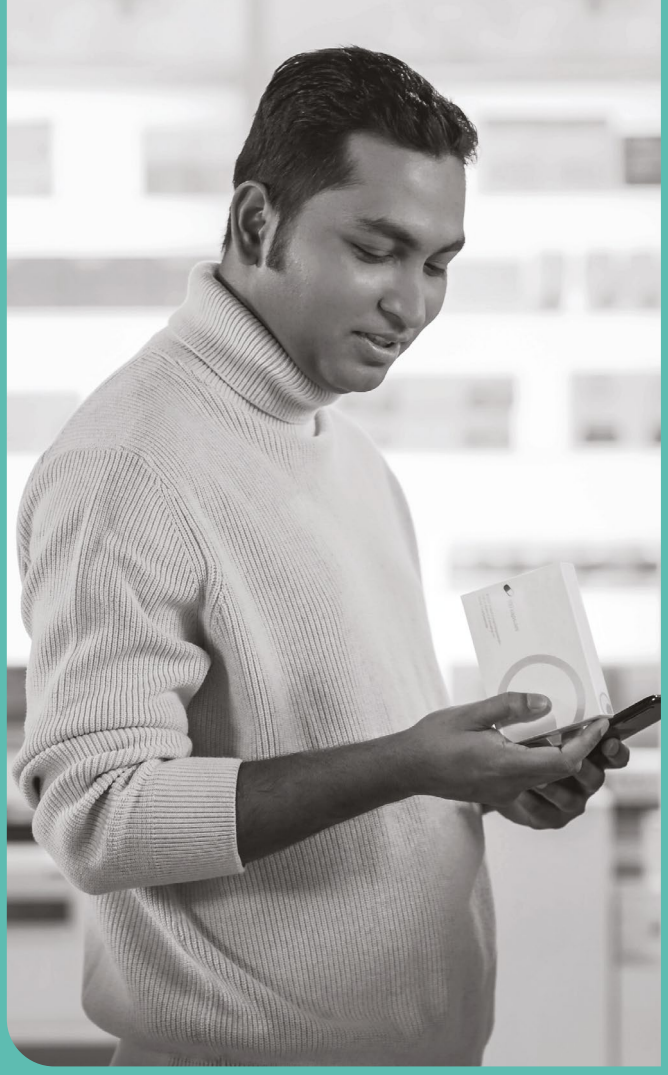
COST CONTAINMENT($)	119 bn Current	INDIVIDUAL TIME SAVING (HOURS)	11 bn Current	PHYSICIAN TIME SAVING (HOURS)	1.8 bn Current
PRODUCTIVITY (DAYS)	40.8 bn Current	WELFARE ($)	1.9 tn Current	QUALITY OF LIFE (QALYS)	22 mn Current

AIMS & OBJECTIVES

This research study "The Global Social and Economic Value of Self-Care" aims to distinguish self-care as a key contributor to the health of individuals and healthcare systems worldwide. It also enriches the evidence-base to further support the economic, political and legislative framework in which individuals, healthcare professionals and all other stakeholders and the industry operate.

The global social and economic value of self-care is assessed based on the following objectives:

- **Quantify the current economic and social value** that use of self-care products generates for individuals, health systems and society globally with a specific focus on regions where data is currently lacking: Sub-Saharan Africa, East & South Asia, Latin America
- **Quantify the economic and social value of self-care** should more products be available without prescription and if there is increased access to available products



METHODOLOGY

This study is based on scientific evidence identified through two structured literature reviews:

TARGETED REGIONAL LITERATURE REVIEW

Explores the scope of self-care worldwide

SYSTEMATIC LITERATURE REVIEW

Identifies health economic studies on self-care

Both literature reviews focus on the qualitative analysis of the methodologies and results of peer-reviewed and grey literature.

In the next step, a theoretical approach including a decision tree was used to estimate consumer and economic modelling behavior in the case of a self-treatable condition (STC) [2,3]. The current and future values of self-care are quantified using the current use rate of OTC products. The global value of self-care is calculated by aggregating the value of self-care products used in the seven world regions as classified by the World Bank. Countries in these regions are further classified in three groups based on the homogeneity of data for healthcare accessibility and affordability and economic development (e.g. GDP) [4]. To overcome data gaps, the statistical method of multiple imputations is applied [5].

METHODOLOGY

The study evaluates the value of self-care as savings in monetary cost, physician time and individuals' time as well as gains in welfare, productivity and quality of life. The level of significance of these value categories for self-care varies across global regions due to differences in economic standards, healthcare infrastructure and individuals' needs.

These differences also contribute to variations in the practice of self-care, leading to the emergence of two main self-care concepts that can be identified around the world:

"Self-Care as the first treatment option" (FT) which refers to the practice of self-care as opposed to visiting a primary care physician

"Self-Care as the only treatment option" (OT) which refers to the practice of self-care instead of doing nothing

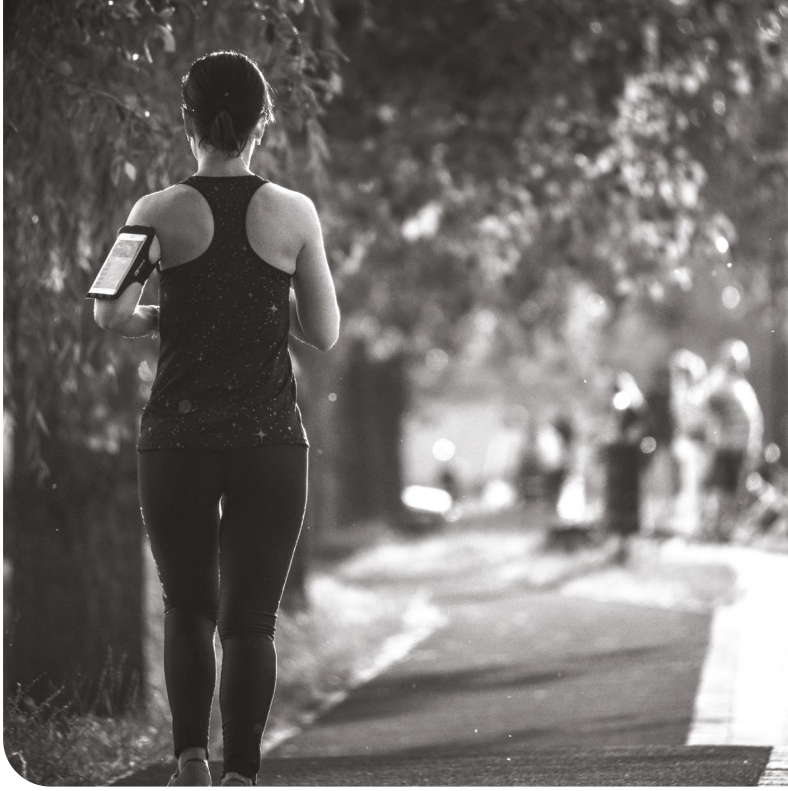
It should be noted that preventative and health promoting behavior of self-care can significantly contribute to health outcomes. Measurement of these different self-care modalities can be difficult to assess and the remit of this study focuses on OTCs and self-care.

Data on national healthcare system coverage, healthcare expenditure and healthcare provider density, for example, indicates variations in healthcare infrastructure and economic development across countries located in the same geographic region. The study classifies 155 countries into:

- **Country Group A**
- **Country Group B**
- **Country Group C**

prompted by a need to group countries according to relevant parameters that reflect healthcare accessibility and affordability.

The effects of self-care in Group A countries are primarily based on FT while the effects of self-care in Group C countries are primarily based on OT. The effects of self-care in Group B countries are generated based on a mixture of the two.



GROUP A

Includes the wealthiest countries, distinguished by their high levels of GDP and household incomes, with the best access to healthcare among the countries included in this study.

GROUP B

Comprises countries with moderate levels of GDP and household incomes as well as moderate access to healthcare.

GROUP C

Represents countries with the lowest levels of GDP and household incomes as well as the most limited access to healthcare.

RESULTS

At the global level, current self-care activities are generating substantial monetary savings as well as healthcare workforce savings, totaling approximately $119 billion

These resources would otherwise have been spent on avoidable physician visits and prescription medicines for self-treatable conditions that could alternatively be managed with OTC products. Most importantly, **self-care relieves the burden on healthcare providers by saving physicians' time, currently saving 1.8 billion physician hours** to attend to more severe health conditions. Moreover, self-care allows individuals to continue their day-to-day activities, such as going to work, **saving around 11 billion patient hours worldwide**. This saved time would otherwise be spent on unnecessary waiting, travel and consultations in primary care or emergency department settings.

In addition, the analysis of the current value of self-care highlights gains in overall productivity, welfare and quality of life.

In South Asia, individuals can currently gain up-to 7 days of productivity per capita per year with use of OTC products for STCs

Approximately **40.8 billion productive days are achieved**, corresponding to a value of **$1,879 billion in welfare effects**. These effects are based on reductions in symptom duration and severity of STCs, which leads to increases in productivity among the global population. Quality of life is also improved and can be measured in terms of quality-adjusted life years (QALYs), which is a globally recognized instrument for measuring the value of health outcomes [6,7]. QALYs capture the effects of both length of life and health-related quality of life [7].

In Group A countries, currently self-care is making an indispensable contribution to relieving the burden on healthcare systems:

- Substantial monetary savings for healthcare systems
- Considerable savings of physician time capacities which can be used for treating more severe cases
- Self-care empowers individuals to manage their own health and saves individuals time

In Group C countries, currently self-care is making an important contribution to maintaining individuals' ability to work and improving welfare:

- Productivity gains are essential. They reflect the restoration of a person's functional ability to perform to their full potential, both in everyday tasks and in paid employment. Most importantly, especially in countries without sick leave benefits, this means that individuals are able to continue to work and earn income
- Improved health-related quality of life, especially when there is no access to a physician

Depending on their structure, the value of self-care in Group B countries is derived from a combination of the effects described above.

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Due to, for example, reduced impairment and improved health status identified in this study, **a gain of approximately 22 million QALYs is estimated worldwide.**

The future potential of self-care is influenced by changes in economic welfare (e.g. increasing incomes) and demographics (e.g. ageing populations and population growth or decline). Additionally, self-care policy measures play a significant role in unlocking the future potential of self-care. To maximise their benefits, they should be adapted to the needs of populations on the regional and country levels, as well as to diverse political and health structures.

The more the OTC use increases, the greater the individual and societal benefits that can be realized through self-care. In this study, the volume of the future OTC market in 2030 was calculated by forecasting population and economic welfare. These effects are based on fixed forecasts from the Global Burden of Disease Health Financing Collaborator Network and the United Nations. The additional benefits of supportive self-care policies were also calculated based on expert knowledge, and the targeted and systematic literature reviews. The benefits of self-care for the forecast period were estimated based on the calculated size of the OTC market in 2030.

In Latin America & the Caribbean practice of self-care and use of OTC products leads to current welfare savings of $123 per capita per year

These calculations produce values which highlight the **considerable incremental potential of self-care between 2019 and 2030**, driven by economic growth, demographic changes and improved self-care policy measures. **The cost containment effect is estimated to be approximately $178.8 billion per annum in the future compared to current $119.0 billion.**

Time savings of:

- **17.9 billion individual hours**
- **2.8 billion physician hours can also be saved**.

Productivity gains of:

- **71.9 billion productive days**

Annual growth in welfare effects of:

- **about $2,830 billion**

Self-care also has the potential to significantly improve quality of life, achieving **39 million QALYs in the future** potential scenario.

Future welfare gains of $22 are estimated for Sub-Saharan Africa per capita per year

Self-care policies can lead to gains between 16-25% (conservative estimation) for individuals and health systems. In future, implementation of fit for purpose self-care policies have the potential for higher monetary savings for healthcare systems and national economies. These additional gains rely on factors such as readiness or willingness of individuals, healthcare providers, and other relevant stakeholders to adopt them.

	Estimated gains through self-care policies	
Cost Containment	$19.5 billion	+16%
Individual Time Savings	2.2 billion hours	+20%
Physician Time Savings	0.3 billion hours	+18%
Productivity	10.1 billion days	+25%
Welfare	$312.2 billion	+17%
Quality of Life	5.5 million QALYs	+25%

In Group A countries, self-care policy measures should focus on creating incentives to enable FT, for example Rx to OTC switches

In Group C countries, the main self-care policy challenge is to ensure that the population has the widest possible access to self-care products and information.

CONCLUSIONS

So far, scientific studies on the value of self-care have mainly focused on high-income countries with advanced healthcare systems. This applies in particular to Australia and countries in North America and Europe. In these countries, the individual's convenient and time-saving access to treatment is seen as the main advantage of self-care. On a societal level, the benefits of self-care result from relieving the burden on healthcare systems. In principle, **self-care is seen as an alternative to the use of existing healthcare system facilities**. The corresponding benefits, therefore, result from the responsible use of OTC products instead of consuming scarce resources, particularly physician time, in these healthcare systems.

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In the course of this global study, it became apparent that health economic and pharmacoeconomic approaches usually applied to assess the value of self-care cannot be transferred to lower-income regions. This is due to differing conditions, particularly regarding health-related infrastructure and the prevailing socio-economic factors. Hence, in some of these regions, such as Sub-Saharan Africa and South-East Asia, self-care is not an alternative care option, but rather the only possible access to treatment for most individuals. This is in contrast to wealthier countries, where there is usually wider access to more health care.

A consequence of this finding was the development of new conceptual approaches within the study, which reflect these different concepts of self-care. These scientific approaches are based on specific behavioural patterns as well as on the benefits associated with the respective concept of self-care. In this context, especially in countries with low income levels and limited access to healthcare, the positive effects on productivity, welfare and quality of life have proven to be outstanding parameters for measuring the benefits of self-care. This is in contrast to the cost and time savings that form the core of the quantifiable benefits of self-care in high income countries.

From the authors' perspectives, the most significant contribution of the present research project consists in this new conceptual approach and in the quantification of the various corresponding benefits of self-care. This approach enabled insights regarding the benefits of self-care to be obtained for regions that had previously been "white spots" on the world self-care map in this context.

The relevance of these findings is particularly significant because they create a database for promoting the topic of self-care at the global and local level. Given the proven benefits and efficiency gains that have been and can be achieved through self-care, an increased focus on improving self-care policy provides an opportunity for significant health, social and economic benefits to be more fully realized.

Self-care is still not perceived as an essential pillar of a comprehensive healthcare system. There is a lack of targeted policy measures that provide incentives at the individual and collective level to promote self-care as a substitute for physician visits wherever appropriate.

The research results indicate that, especially for countries with lower income levels and poorer access to health care, self-care must be regarded as a much higher priority.

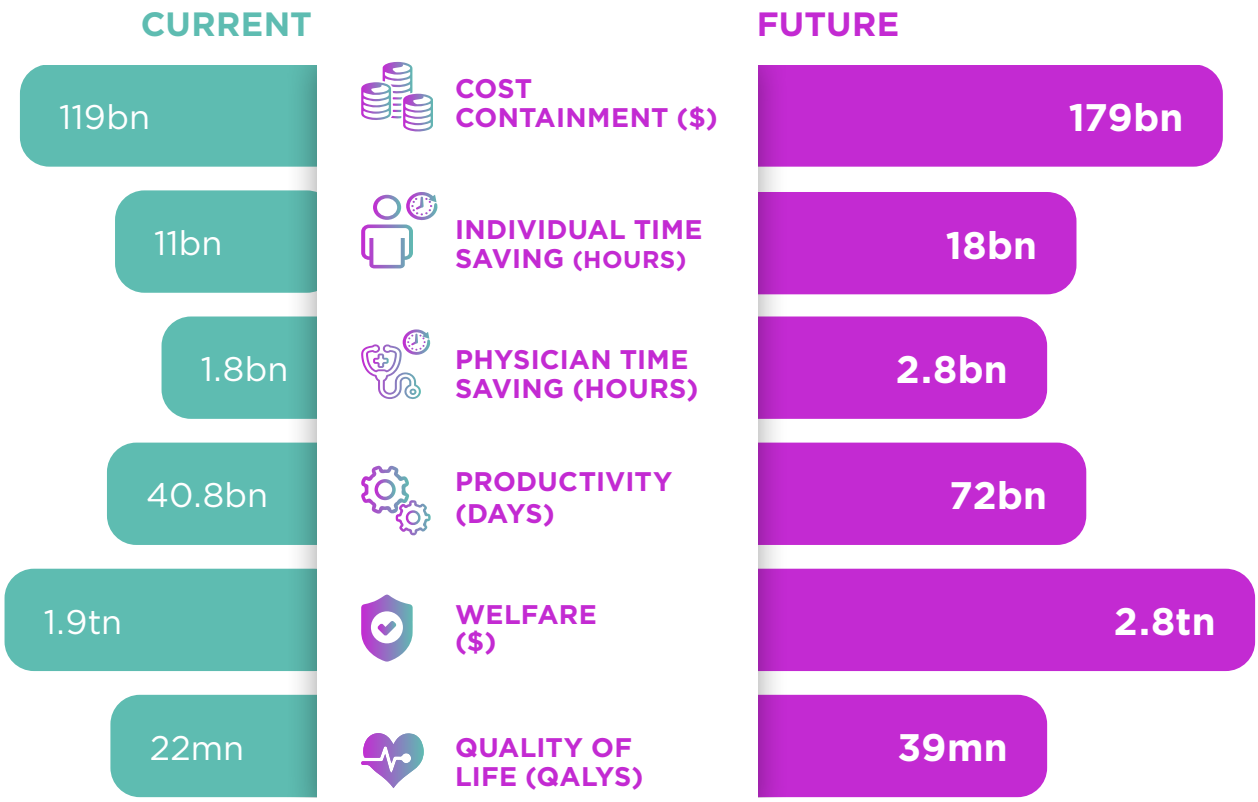
The actual relevance of the findings for health policy results from the fact that **adequate self-care policy can significantly expand the benefits associated with self-care for individuals and society.** This applies to health policymakers at national, regional and global levels. Although demographic and economic development as external factors contribute to this expansion, there is also considerable room for improvement through targeted self-care policies. Neglecting to consider the additional positive effects of self-care from a policy perspective would result in foregoing potential advances in the efficiency and quality of healthcare. Ultimately, gains in welfare and quality of life for individuals, especially in low-income countries, could be realised through suitable self-care policies.

The results of this study clearly demonstrate that self-care delivers both social and economic benefits on a global scale, regardless of the country health system and demographic status. There is also great potential for increased benefits to be delivered to individuals and health systems with an increased uptake of self-care.

We recommend

- **Coherent healthcare policy and regulation supporting self-care is required.**
- **Accountability and collective action is required from all stakeholders to ensure that self-care is a key driver in accelerating the delivery of Universal Health Coverage.**
- **Health literacy to be recognised as a fundamental catalyst for change, ensuring individuals understand and act upon credible health information to become active self-managers of their health.**
- **Self-care to be understood as a multi-faceted and multidimensional concept which includes a variety of health-related practices. There needs to be a greater recognition of these elements and the benefits of self-care from all key stakeholders.**

YEARLY SAVINGS THROUGH SELF-CARE



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