GENDER INEQUALITY IN LABOUR FORCE PARTICIPATION AND LIFE EXPECTANCY IN SUB-SAHARAN AFRICA

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Abstract

This study examined the effect of gender inequality in labour force participation on life expectancy in sub-Saharan Africa. Using panel data for 14 countries from 1990 to 2019, the study employed the feasible generalized least squares estimator. The results showed that female to male labour participation had a positive and significant effect on life expectancy. This implies that a decline in gender inequality significantly improved life expectancy. Thus, as more females participate in the labour force, life expectancy at birth increased. A sensitivity analysis was also conducted for robustness check using a sub-sample of countries. The result was consistent with that of the aggregate sample. Therefore, it is important that labour market policies should provide incentives towards women empowerment and increase female earning opportunities. This will improve child health and maternal health spendings thus contributing to greater life expectancy. This implies that intentional policy efforts towards improving population health should ensure that increases in credit access to investors in the health sector are substantial enough towards improving life expectancy.

Keywords: Gender Inequality, Labour Force Participation, Life Expectancy, Sub-Saharan Africa.

JEL Classification: I15, J21, J22

1. Introduction

Despite some gains or increase in life expectancy, SSA is still referred to as the region with the highest mortality (UN, 2019). The poor health indicators in the region including the relatively low life expectancy, makes human development a challenge. This emphasizes the need to achieve the sustainable development goals including the third goal of good health and well-being. Life expectancy at birth shows the number of years that a newborn baby is expected to live if the patterns of mortality that is prevailing at the time of his or her birth were to remain constant throughout his/her life (World Bank, 2023). Life expectancy at birth was 60 years for SSA in 2021. Specifically, it was 53 for Nigeria and Lesotho, 57 for Eswatini and 59 for Cot D'Ivoire, Guinea and Mali amongst others. A few other countries have as high as 70 years and above including Mauritius, Cabo Verde and Seychelles (World Development Indicators, 2021).

The status of health indicators in the sub-Saharan Africa region is worrisome as it has implications on population health and longevity. According to the UNDP (2018), sub-Saharan Africa's adolescent birth rate is 101 per 1,000 live births, which is more than twice the world average of 44 per 1,000 live births. This is followed by Latin America and the Caribbean with 62 per 1,000 live births. This is a hindrance to improvements in life expectancy because high adolescent birth rates, early motherhood, and poor and unequal access to pre- and post-natal health services result in a high maternal mortality ratio. It is therefore not surprising that sub-Saharan Africa's maternal mortality ratio is 549 deaths per 100,000 live births. This has negative implications on female life expectancy at birth. Life expectancy at birth in SSA is quite low with most countries having below 60 years.

Gender inequality is shown by the ratio of female to male participation in the labour force. The lower the ratio, the greater the level of inequality. More participation of women in labour activities could substantially contribute to increasing national income as well as household access to healthcare due to more female contribution to household expenditures. However, is this the case for developing countries in SSA? Women empowerment is therefore pertinent inorder to increase household income and thus the standard of living of households. This has a macro implication of leading to an increase in output or national income and consequently per capita income. Especially for a region with a substantial proportion of female population, the potential contribution of the female labour force cannot be overemphasized.

Several studies have examined the health effect of labour market variables such as labour force participation (Roffia *et al.,* 2023; Byaro *et al.* 2023; Chetty *et al.,* 2016) and unemployment (Blazquez-Fernandez 2017, Bayati *et al.* 2013), A two-way relationship between life expectancy at birth and labour force participation have been shown in the literature. Studies have shown that life expectancy affects labour force participation while the reverse has also been established although there are few efforts in this regard, emphasizing the need for more evidence. Although employment generally improves demand for commodities, the role of female employment in determining health demand has been uniquely emphasized in theoretical literature for instance, Becker (1960). This study therefore examined the effect of gender inequality in labour force participation (measured as female to male labour force participation) on life expectancy at birth in SSA. A sensitivity analysis was also conducted for robustness check using a sub-sample of \countries.

2. Literature Review

2.1 Theoretical Literature

Grossman (1972) theory of the demand for health explains that health is demanded for two reasons, first as a consumption good, which provides utility because being sick for days brings disutility to an individual. Secondly health is demanded for as an investment good because having good health increases the ability to participate in longer work hours thus earning more income. It also prevents loss of income because of days off work due to sickness. This explains the fact that working women will prefer to invest in their health and that of their family by increasing health expenditures to prevent loss of income due to being sick and away from work or prevent the need to reduce time spent working because they have to give care to a sick child or family member thereby reducing income earnings. The investment level of individuals in their health therefore depends on the availability of income and the price of health inputs. The theory thus presents the demand for health as a function of income and price amongst other factors.

The importance of female employment and increased female earning opportunities towards increasing household income and hence health expenditure per household member cannot be overemphasized. Becker (1960) theory of economic analysis of fertility explains that female employment implies an increase in female income earnings and this makes it possible to increase household consumption expenditure, one of which is the health expenditure per child. Therefore, for households that prefer the quality of children to the quantity of children, as income from employment increases, the demand for health will also increase.

Schultz (1984) theoretical model of health highlighted some major determinants of child health. The determinants extend beyond biological inputs to capture economic and community factors. It explains that a household's demand for goods and services to improve child health depends on some economic and community factors such as prices, health inputs, the environment and the household's ownership of factors of production such as labour also referred to as the household's labour endowments. The ability of household members to supply their labour services to firms increases household income earnings and thus the ability to meet child health needs towards improving child health.

2.2 Empirical Literature

Labour Force Participation and Life Expectancy

The literature has shown a two-way relationship between life expectancy at birth and labour force participation. Studies have shown that life expectancy affects labour force participation as discussed below. The reverse has also been established although there are few efforts in this regard, emphasizing the need for more evidence.

Using the generalized method of moments estimator, Novignon *et al.* (2015) found that an increase in life expectancy caused labour force participation to increase in 46 sub-Saharan countries. This was significant for both total and female labour force participation. Ofori *et al*. (2023) also employed the system GMM estimator for the case of 42 SSA countries for the period from 1996 to 2020 and found that in addition to trade openness and good governance, life expectancy at birth significantly determined female labour force participation. The results recorded more positive effects than negative effects across the various models estimated. Hazan (2009) explained although increased life expectancy cause people to increase their lifetime labour supply so that as people live longer, they would want to increase their investment in their human capital precisely their health, the results showed that this may not always be the case. Increased life expectancy could still be associated with higher retirement rates especially when individuals prefer to increase their leisure.

Greater income earning opportunities and labour participation has also been shown to determine life expectancy levels. Higher income was associated with grater longevity shown by longer life expectancy in the United States and this was obtained throughout the various income distribution (Chetty *et al.,* 2016). Byaro *et al.* (2023) found that unemployment significantly reducesd life expectancy in 48 SSA countries using the generalized quantile regression method. Being unemployed leaves a person poor and lacking income to meet basic needs including the necessary health expenditures required to improve her health status.

Blazquez-Fernandez (2017) also found unemployment to have a positive significant effect on life expectancy using the seemingly unrelated regression model and data for eight OECD Asia/Pacific countries. This is not surprising especially when unemployment social benefits exist for the unemployed to enable them meet their needs. Individuals can therefore find it beneficial and have preference for being unemployed. Bayati *et al.* (2013) found that employment rate significantly increased life expectancy in Malaysia. Although the

employment rate was highly significant among males, it was not the case for females. This is not surprising especially in a prevalently low female labour force participation economy. Roffia *et al.* (2023) found labour force participation to be positively correlated with life expectancy in 36 OECD countries.

Using panel data from 2000 to 2016 for 24 SSA countries, Sia *et al*. (2020) estimated the effect of gender inequality (measured using the gender inequality index which captured gender gaps between men and women related to reproductive health, empowerment and labour market participation) on HIV prevalence by employing the fixed effect estimator. Their findings revealed that an increase in gender inequality contributed to worsening health status by increasing the incidence of HIV in SSA. The study however did not consider the case for life expectancy at birth.

Other Determinants of Life Expectancy

Other factors have been shown to explain changes in life expectancy in SSA. For instance, (Shahbaz *et al.*, 2019) found financial development and economic growth to significantly increase life expectancy in 16 SSA countries using the structural nonparametric cointegrating regression and the granger causality test. The role of economic growth or income cannot be underestimated as shown by Rahman *et al*., (2022), Abubakari *et al*., (2019), Wang and Ren (2019), Bayati *et al.* (2013) which found economic growth, GDP per capita or income per capita to significantly increase life expectancy at birth. However, per capita income was not significant for the case of Nigeria as shown by Sede and Ohemeng (2015). Hence, having an income increase was not just enough but deliberately directing such income to health improvement projects was important.

Using data from 1970 to 2004 for 119 less developed countries, the GDP per capita, adult literacy rate and nutritional status were found to strongly determine life expectancy initially but later declines over time (Lin *et al*., 2012). The availability of physicians, undernourishment and literacy rate of adults significantly explained life expectancy in 91 developing countries (Kabir, 2008) while socio-economic factors including per capita income, urbanization and health expenditure amongst others were insignificant. Fayissa and Gutema (2005), Blazquez-Fermandez (2017) as well as Azam *et al*. (2022) however found health expenditure to have a negative effect on life expectancy implying that just increasing health expenditures is not sufficient without ensuring efficiency and cost effectiveness.

Monsef and Mehrjardi (2015) found that unemployment and inflation reduced life expectancy while gross fixed capital formation and gross national income improved it for 136 countries for the period 2002 to 2010. Fayissa and Gutema (2005) showed that high illiteracy rate worsened life expectancy while food availability index improved it. Using the seemingly unrelated regression model and data for eight OECD Asia/Pacific countries, unemployment and the exchange rate were found to significantly improve life expectancy (Blazquez-Fernandez, 2017).

For the case of Pakistan, Azam *et al.* (2022) found that food production index, urbanization, infant mortality rate and education had a positive effect while per capita income, inflation and CO_2 emission had a negative effect on life expectancy after employing the panel ARDL model for data from 1975 to 2020. Using the fixed effect model and data for 21 Eastern Mediterranean countries, Bayati *et al.* (2013) found that income per capita, food availability, education index and employment ratio had a positive effect on life expectancy. Tafran *et al.* (2020) found that poverty, income and unemployment significantly determined life expectancy in Malaysia. Using a panel corrected standard error model and the feasible generalized least squares method for an unbalanced panel data for 31 world's most polluted countries from 2000 to 2017, Rahman *et al*., (2022) found that economic growth, health expenditure, clean water and improved sanitation significantly increased life expectancy while environmental degradation (CO_2 emission) had a negative effect.

Barlow and Vissandjée (1999) found that per capita income, literacy and access to safe water supplies are positive and significant determinants of life expectancy. However, fertility and residing in a tropical location had a significantly negative effect while per capita food consumption of animal products showed an inverted-U relationship with life expectancy. Gilligan and Skrepnek (2015) also found GDP, vaccination averages and urbanization as positive and significant predictors of life expectancy. Dobis *et al* (2020) also showed that community characteristics are important in determining life expectancy.

Using the system generalized method of moment estimator, Immurana *et al* (2021) found that financial inclusion (increase in ATMs, number of bank branches, and increase in the number of borrowers) significantly improved life expectancy but reduced the death rate in 33 African countries for the period from 2004 to 2018. Chireshe and Okran (2020) examined the effect of the access to (number of ATMs, commercial bank branches per 1000,000 people) and depth of (broad money supply, bank credit to private sector to GDP ratio) the dimensions of financial development on child health outcomes and life expectancy in 46 SSA countries from 1995 to 2014. The study employed the random effect, fixed effect and the two stage least square estimation methods. Financial development was found to reduce under five mortality rate and

increase life expectancy. The real GDP had a negative and significant effect on child health outcomes.

3. Methodology

3.1 The Model

The model of the study is based on the Grossman (1972) theory of health demand. If health is demanded for as an investment good then as individuals earn income, they will prefer to invest in their health and their children inorder to ensure that they are healthy and available for work for more hours thereby earning more income for the household. The theory presents health as a function of income and price. The model of the study used real gross domestic product (GDP) per capita as a measure for income and price is measured using inflation The effect of gender inequality in labour force participation was captured in the study by extending the model to include the ratio of female to male labour force participation. Control variables such as financial sector development measured as domestic credit to the private sector was also included in the model.

The study therefore presents a health model where population health measured as life expectancy is a function of income measured as the real GDP per capita, ratio of female to male labour force participation, price indicated by inflation, and financial sector development measured as domestic credit to the private sector,

The model is therefore presented as:

$$LEB = (rgdppc, flp/mlp, infl, dcpsbk) \quad (1)$$

$$LEB_{it} = \beta_0 + \beta_1 rgdppc_{it} + \beta_2 flp/mlp_{it} + \beta_3 infl_{it} + \beta_4 dcpsbk_{it} + e_{it} \quad (2)$$

Income is expected to have a positive effect on life expectancy because individuals with higher income can increase their investment demand for health by increasing their expenditure on health inputs. Higher inflation is expected to have a negative effect since it reduces the purchasing power of individuals. The availability of credit for private investment will enable an individual generate additional income through investment which is expected to improve their overall condition. Based on some pre-estimation tests, the model equation was estimated using the feasible generalized least squares estimation method iorder to control for cross section dependence bias.

3.2 Data

Data for this study was for 14 sub-Saharan African countries, obtained from the World Development Indicators (WDI) for 2022 based on data availability. The data covered the period from 1990 to 2019. The data used are life expectancy at birth, female to male labour force participation rate, real GDP per capita, inflation rate and domestic credit to the private sector by banks. The countries considered include Botswana, Cameroon, Central African Republic, Congo Democratic Republic, Cote D'Ivoire, Ghana, Kenya, Mali, Niger, South Africa, Tanzania, Gabon, Sudan and Togo.

4. Results and Discussion

4.1 Descriptive Statistics and Correlation Analysis

The descriptive statistics of the data is presented in Table 1. The mean of life expectancy is 54.99 years showing a generally low life span or longevity among the countries. The maximum value of life expectancy is 69.6 years, which reveals a dire need for improvement. This is because it is an indicator of population health since it showed the highest life span or longevity experienced during the period of the study. This is too low when compared with several developed countries with greater life expectancy. The mean female to male labour force participation rate is 77.9 percent. This implies that female labour participants are less than the male and there is no equal participation. The real GDP per capita has a mean value of 0.872. Domestic credit to the private sector by banks has a mean value of 16.36.

Table 4.1 Descriptive Statistics

Variable	**Mean**	**Std. Dev.**	**Minimum**	**Maximum**
LEB	54.988	5.519	43.538	69.592
FMLP	0.779	0.155	0.306	0.999
INF	92.063	1189.366	-11.686	23773.13
RGDPPC	0.872	4.341	-36.557	12.427
DCPSBK	16.362	14.490	0.007	70.382
Observations				

Source: Computed by Author (2024)

The correlation coefficients are comfortably low enough to dispel the possibility of multicolinearity bias amongst the variables. The highest correlation coefficient is 42.6 percent between domestic credit to the private sector and life expectancy. There is no high level correlation among the variables as shown in the correlation analysis results reported on Table 2. There is therefore no correlation bias.

Table 4.2 Correlation Analysis

Variable	LEB	FMLP	INF	RGDPPC	DCPSBK
LEB	1.0000				
FMLP	0.1790	1.0000			
INF	-0.0724	0.0862	1.0000		
RGDPPC	0.1504	-0.0642	-0.1535	1.0000	
DCPSBK	0.4264	-0.0162	-0.0748	0.0168	1.0000

Source: Computed by Author (2024)

4.2 Unit Root Test

The estimation of the panel regression model began with a unit root test using the Levin, Lin & Chu test and the Im, Pesaran and Shin methods. The results in Table 4.3 show a mixed order of integration based on the Im, Pesaran and Shin test method. All variables are stationary at levels except for female to male labour force participation, which is stationary at first difference.

Table 4.3 Unit Root Test Results

Variable	Levin, Lin & Chu Statistic	Order of Integration	Im, Pesaran and Shin W-Statistic	Order of Integration
LEB	(13.583)*	I(0)	(19.960)*	I(0)

FMLP	(3.093)*	I(0)	(3.022)*	I(1)
RGDPPC	(4.536)*	I(0)	(6.705)*	I(0)
INF	(6.235)*	I(0)	(6.630)*	I(0)
DCPSBK	(14.077)*	I(0)	(6.568)*	I(0)

* and ** denote significance at 1% and 5% respectively

4.3 Cointegration Test

The study employed two methods, which are the Kao residual cointegration test and the Pedroni residual cointegration test. The cointegration test was conducted to determine whether a long run relationship among the variables exist.

4.3.1 Kao Residual Cointegration Test

Examining the cointegration among life expectancy at birth, female to male labour force participation rate, real GDP per capita, inflation rate and domestic credit to the private sector by banks, the study employed the Kao residual cointegration test, which is Engel Granger, based. The null hypothesis of no cointegration was not rejected since the t-statistic value of -1.153 was not significant at 5 percent as shown in Table 4.4. The study concluded that there was no cointegration among the variables.

Table 4.4 Kao Residual Cointegration Test

Variables	**t-statistic**	**Probability**
Life Expectancy at Birth		
LEB, FMLP, RGDPPC, INF, DCPSBK	-1.153	0.1245

Source: Computed by Author (2024)

4.3.2 Pedroni Residual Cointegration Test

The Pedroni Residual Cointegration Test was also employed to examine the long run relationship among the variables. The result is presented in Table 4.5. The null hypothesis of

no cointegration was not rejected since all of the 4 test statistics were not significant at 5%. This supports the Kao residual cointegration test result of no cointegration.

Table 4.5 Pedroni Residual Cointegration Test

	Statistic	**Probability**	**Weighted Statistic**	**Probability**
Panel PP-Statistic	1.396	0.9186	3.596	0.9998
Panel ADF-Statistic	1.266	0.8973	3.479	0.9997
Group PP-Statistic	3.694	0.9999	-	-
Group ADF-Statistic	3.381	0.9996	-	-

Source: Computed by Author (2024)

4.4 Test for Cross Section Dependence

The cross-section dependence test was conducted to test for the presence of cross section dependence among the 14 countries used in the study. Based on the 3-test statistic presented in Table 4.6, the study rejected the null hypothesis of no cross-section dependence in the residuals. Therefore, the study found the presence of cross section dependence.

Table 4.6 Cross Section Dependence Test

Test	**Statistic**	**Probability**
Breusch-Pagan LM	1387.082	0.0000
Pesaran scaled LM	96.072	0.0000
Pesaran CD	25.410	0.0000

Source: Computed by Author (2024)

4.5 Effect of Gender Inequality in the Labour Force on Life Expectancy

The effect of gender inequality in the labour force on LEB was estimated using the feasible generalized least squares estimator in order to control for the cross-section dependence bias.

The results are presented in Table 4.7 and they reveal that female to male labour force participation rate had a positive significant effect on life expectancy at birth. Thus, an increase in the female to male labour force participation rate (which implies a reduction in gender inequality) improved life expectancy. Thus, reducing gender inequality in labour force participation significantly improved population health. Gender equality in the labour force participation rate also implies that there is greater women participation in the labour market which increases women empowerment due to their income earnings. Women can therefore contribute substantially to household expenditures including health expenditures. Such increased health expenditures in households could improve health status and consequently life expectancy. Therefore policy efforts towards achieving gender inequality reduction is important towards improving population health status.

The real GDP per capita had a positive and significant effect on life expectancy at birth. This implies that life expectancy improves as income increases. This is consistent with Grossman (1972) health demand theory, which states that as income increases, health status improves. Since individuals and households have more income, they can meet their basic needs of food, clothing and shelter as well as other health production inputs towards improving their health status. This result is similar to studies such as Rahman *et al*. (2022), Tafran *et al.* (2020), Abubakari *et al*. (2019) and Bayati *et al.* (2013). It is however contrary to Sede and Ohemeng (2015) and Jafrin et al. (2021) which found the GDP to be insignificant.

Inflation had a negative and significant effect on life expectancy. Therefore as the general price level increases, it becomes difficult for individuals to afford their original consumption bundle of good and services including health services. They therefore cut down on consumption including the use of health services and other health inputs. This will ultimately worsen their health status thus resulting in lower life expectancy. This is also consistent with Grossman (1972) health demand theory, which states that price has a reduction effect on health status. The result is consistent with Monsef and Mehrjardi (2015) which, found that inflation reduced life expectancy. Domestic credit to the private sector had a positive significant effect on life expectancy at birth. This is similar to Shahbaz *et al.* (2019), which found financial development to significantly increase life expectancy.

Table 4.7 Estimates from the Aggregate Sample

Variable	Coefficient	t-statistic
FMLP	6.997	24.012*
RGDPPC	0.103	11.275*
INF	-0.0001	-1.637
DCPSBK	0.156	52.436*
Constant	46.985	233.896*
Adjusted R-squared	0.921	
F-statistic(Prob)	1203.36(0.0000)	

* and ** denote significance at 1% and 5% respectively

4.4 Sensitivity Analysis

The study conducted some robustness check using a sensitivity analysis, which involved carrying out a sub-sample estimation of the life expectancy model. The sub sample consisted of eleven countries selected at random, which gives each country equal representation inorder to determine whether the results obtained is sensitive to or determined by the sample of country used. If this is the situation, then the results cannot be easily generalized. Employing the feasible generalized least squares estimator, the results in Table 4.8 showed that female to male labour force participation had a significantly positive effect on life expectancy. This result is similar to the result obtained using the aggregate sample. Therefore, the result is not sensitive to the sample used and it is consistent. Therefore, as the female to male labour force participation increased, life expectancy also improved. This implies that a reduction in gender inequality in labour force participation was significantly instrumental to improving population health as shown by the life expectancy at birth in SSA. Thus, a reduction in female participation in the labour market contributed to poor population health. This emphasizes the importance of women participation in the labour market inorder to earn income to be able to meet their healthcare needs as well as that of their children and other household members. The real GDP per capita and domestic credit to the private sector also had a significantly increasing effect on life expectancy as obtained in the aggregate sample. Thus, an increase in income and access to

fund enables more individuals and households to afford more goods and services as well as healthcare inputs which are important towards improving health status. Inflation had a negative significant effect on life expectancy as in the case of the aggregate sample. This could still be attributed to the decreasing effect of price increase on consumption of both general and health related goods.

Table 4.8 Estimates from the Sub-Sample

Variable	Coefficient	t-statistic
FMLP	14.224	28.107*
RGDPPC	0.154	8.9999*
INF	-0.0001	-1.417
DCPSBK	0.183	36.090*
Constant	39.821	98.630*
Adjusted R-Squared	0.890	
F-statistic(Prob)	592.436(0.0000)	

* and ** denote significance at 1% and 5% respectively

5. Conclusion and Recommendation

5.1 Conclusion

This study examined the effect of gender inequality in labour force participation on life expectancy in sub-Saharan Africa. Using panel data for 14 countries from 1990 to 2019, the study employed the feasible generalized least squares estimator. The results showed that female to male labour participation had a positive significant effect on life expectancy. This implies that an increase in female to male labour participation (which is a decline in gender inequality) helped improve life expectancy. Thus, as more females participate in the labour force, population health as shown by the life expectancy at birth increased. For further robustness, a sensitivity analysis was also conducted using a sub-sample of eleven countries. The results obtained were consistent with that of the aggregate sample. An increasing female and maternal labour participation implies that more women get empowered by earning income to meet their

healthcare and other needs as well as that of their children and other household members, thus ultimately improving life expectancy. The granger causality test also showed the presence of a unidirectional causality running from female to male labour force participation to life expectancy. Therefore, it is important that labour market policies should be free from gender bias and encourage more female participation in order to improve health outcomes, precisely the life expectancy at birth. Domestic credit to the private sector was positively significant to explain life expectancy and there was also a unidirectional causality from domestic credit to the private sector to life expectancy. This implies that intentional policy efforts towards substantially increasing credit funding to health sector investors is necessary for a significant change in life expectancy. The real GDP per capita had a significant effect on life expectancy therefore a recommendation for policy is that more efforts towards improving the income of individuals and households is important for better population health. In addition, strategic investments from the national income should be deliberately directed to the health sector towards increasing healthcare provision and quality services which could directly improve population health. However, these efforts should not be allowed to be counteracted by a situation of increasing inflation.

5.2 Recommendation

Based on the result that female to male labour participation significantly improved life expectancy, it is important that labour market policies should be free from gender bias and encourage more female participation in order to improve health outcomes, precisely the life expectancy at birth. This is because as more women get earning opportunities, total household income increases thus equipping households to spend more on consumption demand including the healthcare needs of the family. Domestic credit to the private sector was positively significant to explain life expectancy and there was also a unidirectional causality from domestic credit to the private sector to life expectancy. This implies that intentional policy efforts towards substantially increasing credit funding to health sector investors is necessary for a significant change in life expectancy. The real GDP per capita had a significant effect on life expectancy therefore a recommendation for policy is that more efforts towards improving the income of individuals and households is important for better population health. In addition, strategic investments from the national income should be deliberately directed to the health sector towards increasing healthcare provision and quality services, which could directly improve population health. However, these efforts should not be allowed to be counteracted by a situation of increasing inflation.

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