

Diseased females, Deprived Economy: A Study of Youth and Adult Female Population of South Africa and India

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Abstract

South Africa and India share a strong bond since ages. Female population is more in number in comparison to male in South Africa where as in India the number of females is less than male population. Female and male both are equally important for the growth and development of any country. To have an equal participation of female besides the other factors it is important that they should be healthy and disease free. The paper tries to investigate the types of diseases which are leading to death of female youth and adult falling in the age range of 15-39 years in South Africa and India. The purpose of investigating the causes of death is to propose a policy to mitigate the growing loss of human capital, as it can lead the economy towards deprivation. South Africa and India are facing huge loss of female human resources due to disease led death of young and adult female population. It is the most important reason why both the countries are not able to attain higher level of growth and development. South Africa and India need to strengthen the weak public health system. For this both the countries should invest more to health infrastructure so that "basket of health services" can be offered to the young and adult females freely or at an affordable charge.

Keywords: Female population, disease, death, human capital, deprivation

South Africa and India share a strong bond since ages. Female population is more in number in comparison to male in South Africa where as in India the number of females is less than male population. Female and male both are equally important for the growth and development of any country. To have an equal participation of female besides the other factors it is important that they should be healthy and disease free. The paper tries to investigate the top ten diseases which are leading to death of female youth and adult falling in the age range of 15-39 years in South Africa and India. This age group is of fundamental importance for the economic development

and growth of any country. The diseases will be analysed under communicable, non-communicable and injuries to understand which category is more prominent cause of deaths in females in South Africa and India. The purpose of investigating the causes of death is to propose a policy to mitigate the growing loss of human capital, as it can lead the economy towards deprivation.

Injuries are emerging as the major cause of deaths in youth and adult female population in South Africa and India. Hsiao, M., Malhotra et al; (2013), write that in India, Road traffic injuries cause a substantial number of deaths, particularly among pedestrians and other vulnerable road users. Interventions to prevent collisions and reduce injuries might address over half of the RTI deaths. Improved prehospital transport and hospital trauma care might address just over a third of the RTI deaths. Patra, S. (2016), finds that in India, due to the high prevalence of child marriage, most adolescent pregnancies occur within marriage.

Pregnancy and childbirth complications are among the leading causes of death in girls aged 15 to 19 years. Hence, adolescent pregnancy is a serious health threat to young women in India. Kahn, K. (2011) writes that South Africa has experienced a rapid and complex health transition over the past two decades. Mortality has worsened in virtually all age groups, driven largely by HIV and AIDS. The morbidity profile comprises coexisting infectious and non-communicable diseases – including new infections such as HIV and AIDS, and emerging conditions such as vascular illness and diabetes – together with persisting child diarrhoea and malnutrition, and high levels of interpersonal violence and accidents. Houle, B. et al; (2014), find that the HIV pandemic has led to dramatic increases and inequalities in adult mortality, and the diffusion of antiretroviral treatment, together with demographic and socioeconomic shifts in sub-Saharan Africa, has further changed mortality patterns. De Wet et.al., (2014) examine South Africa's mortality due to HIV/AIDS among the youth (15–34 years old). They find that South Africa has one of the highest HIV/AIDS prevalence rates in the world. It is estimated that 5.38 million South Africans are living with HIV/AIDS. In addition, new infections among adults aged 15+ were reportedly 316 900 in 2011. Mogale et.al., (2021) examine the influence of sociodemographic factors on causes of death among South African youth aged 15-34 years. They opine that youth mortality is a challenge in South Africa. They further add that on a daily basis a number of deaths are reported and are related to youth. De Wet (2016) This study shows that AIDS mortality is higher among females than males in South Africa. Males and females with secondary education have lower AIDS mortality than all males and females in the population, yet the rates are higher for females. Bekker et.al., (2015) believe that adolescents and young adults are at increased risk for HIV due to the many developmental, psychological, social, and structural transitions that converge in this period of the lifespan. Cooper et.al., (2016) feel that women's sexual and reproductive health and wellbeing is dependent on a complex array of socio-economic and

healthcare factors. Two decades after the advent of democracy, South Africa remains a highly unequal society socio-economically. Black South Africans continue to be economically disadvantaged, with females most disadvantaged: on average, women are 30% poorer than men. Sunitha & Gururaj (2014) find that the young people in the age group of 10-24 year in India constitutes one of the precious resources of India. Nearly 10-30 per cent of young people suffer from health impacting behaviours and conditions. Nutritional disorders (both malnutrition and over-nutrition), tobacco use, harmful alcohol use, other substance use, high risk sexual behaviours, stress, common mental disorders, and injuries (road traffic injuries, suicides, violence of different types) specifically affect this population and have long lasting impact.

Patel et.al., (2011) Chronic diseases (e.g., cardiovascular diseases, mental health disorders, diabetes, and cancer) and injuries are the leading causes of death and disability in India. Jha et.al., (2005) try to document not only the underlying cause of child and adult deaths but also key risk factors (behavioural, physical, environmental, and eventually, genetic). They find that over 75% of the annual estimated 9.5 million deaths in India occur in the home, and the large majority of these do not have a certified cause. Prabhakaran et.al., (2016) opine that with the turn of the century, cardiovascular diseases (CVDs) have become the leading cause of mortality in India. In comparison with the people of European ancestry, CVD affects Indians at least a decade earlier and in their most productive midlife years. Upadhyay (2012) find non-communicable disease as an important public health problem in India. They feel this type of disease responsible for major proportion of mortality and morbidity.

The young people in the age group of 15-39 year constitutes one of the precious resources of any country. This age group of South Africa and India is passing through the phase of vulnerability often influenced by several intrinsic and extrinsic factors that affect their health and safety. They suffer from multiple diseases which are impacting their overall health and work efficiency and ultimately hampering the growth and development of the country.

Table 1: Female deaths per 10,000 population due to top ten diseases grouped under Communicable, Non- Communicable and Injuries in South Africa and India in the age range of 15-39

Age Groups	2000				2010			
	communicable	Non-Cmmu nicable	Injuries	Total	communicable	Non-Cmmu nicable	Injuries	Total
15-19 SA	138.7	1.5	29.7	170	126.1	1.5	23.9	151.5
15-19 IND	102	7	42.3	151	61.5	5.2	29.3	96
20-24 SA	504	5.5	56.6	566	428.3	1.7	33.3	463.3
20-24 IND	144.5	13.8	50.4	209	88.9	11.1	37.2	137.2
25-29 SA	896	18.7	79.7	994	820.4	18.7	51.6	890.7
25-29 IND	145.4	18.8	42.1	206	78.3	16.9	36.2	131.4
30-34 SA	876.6	40.6	94.5	1012	973.5	94.8	38.6	1106.9
30-34 IND	153.8	27.6	29.1	211	91.2	25.9	22.7	139.8
35-39 SA	886	62.4	80.3	1029	1096.5	99.9	23.5	1219.9
35-39 IND	125.6	43.8	27	196	78	50.9	15.8	144.7

Source: World Health Organisation Report 2010. Data is derived from the report and analysed (Author's study)

Table 1 indicates female deaths per 10,000 population due to top ten diseases categorised under Communicable, Non- Communicable and Injuries in South Africa and India in the age range of 15-39. The types of these top ten diseases are already analysed in earlier tables. Here all those diseases are grouped under Communicable, Non- Communicable and Injuries to know the number of deaths taking place in each category.

The table shows that death due to communicable disease remained top reason in all the age groups in South Africa and India in the last two decades of deaths of females. Although it is showing a declining trend after 2010 but still the number is quite high in South Africa in comparison to India.

In above 25 age group non-communicable diseases are increasing faster in South Africa and India since 2000. In case of Injuries 25 to 35 age group is the most affected group as it shows a high number of deaths due to it.

Table 2: Female deaths per 10,000 population due to top ten diseases grouped under Communicable, Non- Communicable and Injuries in South Africa in the age range of 15-39

Age Groups	2000				2010			
	communicable	Non-Cmmu nicable	Injuries	Total	communicable	Non-Cmmu nicable	Injuries	Total
15-19 SA	138.7	1.5	29.7	170	126.1	1.5	23.9	152
20-24 SA	504	5.5	56.6	566	428.3	1.7	33.3	463
25-29 SA	896	18.7	79.7	994	820.4	18.7	51.6	891
30-34 SA	876.6	40.6	94.5	1012	973.5	94.8	38.6	1107
35-39 SA	886	62.4	80.3	1029	1096.5	99.9	23.5	1220
	3301.3	128.7	340.8	3771	3444.8	216.6	170.9	3832

Source: World Health Organisation Report 2010. Data is derived from the report and analysed (Author's study)

Table 2 highlights the fact that in South Africa communicable disease was the top reason for the deaths of young and adult females in 2000 and 2010. Injuries and non-communicable diseases remained the second and third cause of deaths in South Africa since 2000. All three increased in 2010 from 2000.

Table 3: Female deaths per 10,000 population due to top ten diseases grouped under Communicable, Non- Communicable and Injuries in India in the age range of 15-39

Age Groups	2000				2010			
	communicable	Non-Cmmu nicable	Injuries	Total	communicable	Non-Cmmu nicable	Injuries	Total
15-19 IND	102	7	42.3	151	61.5	5.2	29.3	96
20-24 IND	144.5	13.8	50.4	209	88.9	11.1	37.2	137
25-29 IND	145.4	18.8	42.1	206	78.3	16.9	36.2	131
30-34 IND	153.8	27.6	29.1	211	91.2	25.9	22.7	140
35-39 IND	125.6	43.8	27	196	78	50.9	15.8	145
	671.3	111	190.9	973	397.9	110	141.2	649

Source: World Health Organisation Report 2010. Data is derived from the report and analysed (Author's study)

Table 3 shows that in India communicable disease were the top reason of deaths from 15 to 39 age group. Injuries and non-communicable diseases were having second and third position. All three have exhibited a declining trend after 2000.

Table 4: Loss of Female human resource due to top ten disease-based deaths of female per 10,000 population in South Africa and India in the age range of 15-39



Microsoft Excel
97-2003 Worksheet

	South Africa		India	
	2000 SA	2010 SA	2000 IND	2010 IND
15-19	169.9	151.5	151.3	96
20-24	566.1	463.3	208.7	137.2
25-29	994.4	890.7	206.3	131.4
30-34	1011.7	1106.9	210.5	139.8
35-39	1028.7	1219.9	196.4	144.7
Total	3770.8	3832.3	973.2	649.1

Source: World Health Organisation Report 2010. Data is derived from the report and analysed (Author's study)

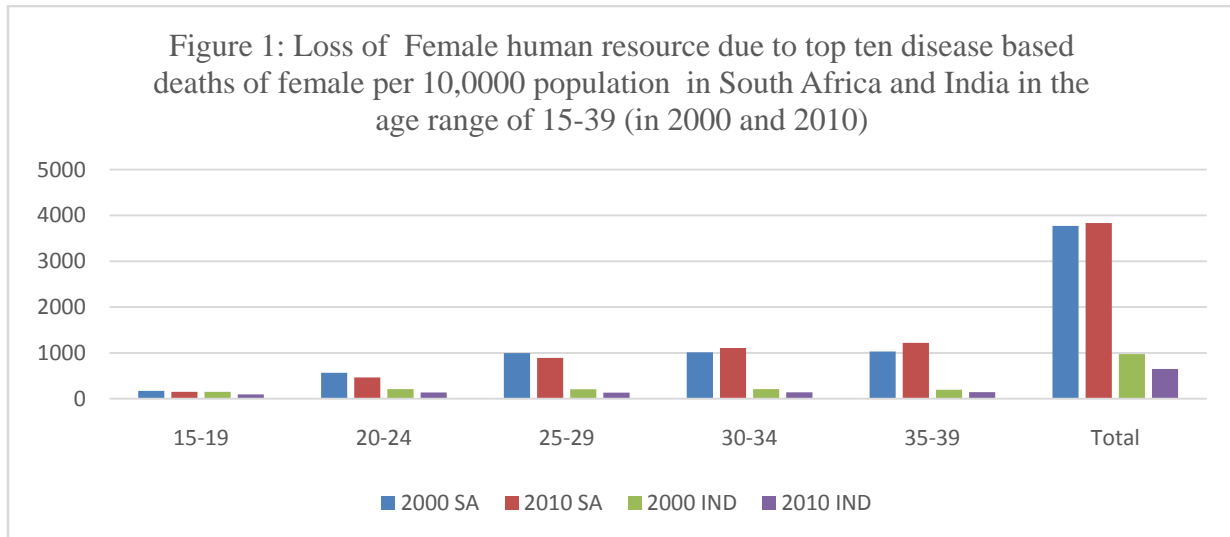


Table 4 and figure 1 highlight the total number of deaths due to all three types of diseases in the age groups of 15-39. South Africa lost 3770.8 lives in 2000 which increased to 3832.2 in 2010. In the case of India, it was 973.2 in 2000 and 649.1 in 2010.

ECONOMIC INDICATORS OF SOUTH AFRICA AND INDIA

Table 5: Annual GDP growth rate in South Africa and India

Year	India	South Africa
2000	3.840991	4.200003476
2001	4.823966	2.699994567
2002	3.803975	3.700382352
2003	7.860381	2.949079137
2004	7.922937	4.554552745
2005	7.923431	5.277056312
2006	8.060733	5.603797657
2007	7.660815	5.360475891
2008	3.086698	3.191046741
2009	7.861889	-1.538089334
2010	8.497585	3.039730814
2011	5.241345	3.284168142
2012	5.456359	2.213354808
2013	6.386106	2.4852005
2014	7.410228	1.846991604
2015	7.996253	1.193732801
2016	8.256306	0.39908793

Source: Source: Data from database: World Development Indicators

Table 5 presents Annual GDP growth rate of South Africa and India. Such macroeconomic indicator shows the economic growth of any country. In the span of nineteen years India experienced lowest annual growth rate of 3% in 2008, the year of global economic crisis and highest of 8.49% in 2010. Chaudhary and Verick (2014) opine that the participation of women in the labour market varies greatly across countries, reflecting differences in economic development.

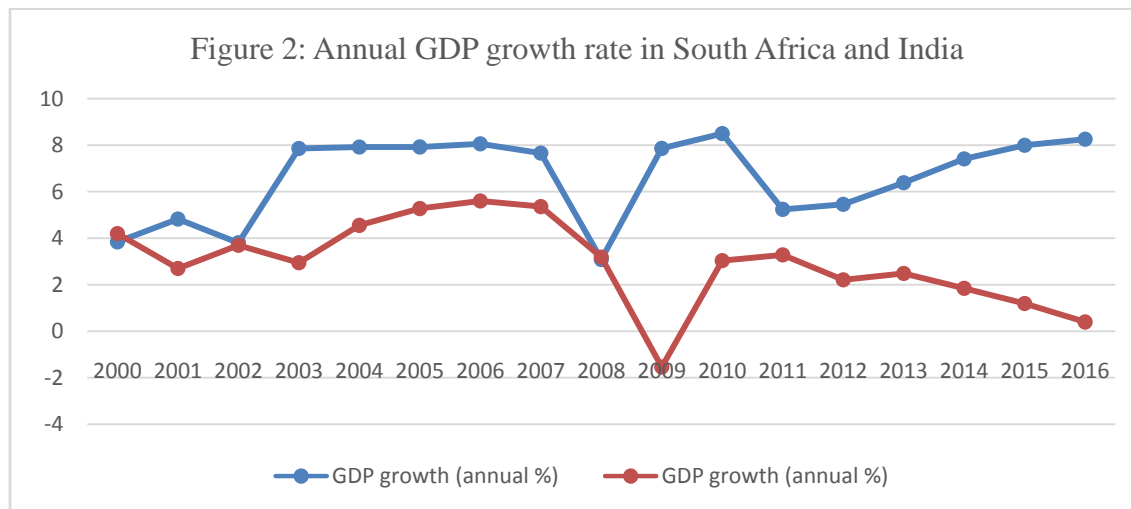


Table 6: Annual GNI growth rate in South Africa and India

Year	India	South Africa
2000	3.55899	4.202567356
2001	5.017136	1.955793244
2002	3.992642	4.301012977
2003	7.78782	2.711000406
2004	7.960062	5.307888325
2005	7.896682	5.238033291
2006	7.991366	5.580996929
2007	8.038364	3.885583105
2008	2.90162	3.380373788
2009	7.863704	-0.682495115
2010	7.964982	3.118589608
2011	5.447409	2.794488427
2012	5.137323	2.067574424
2013	6.31279	2.598647088
2014	7.494875	1.807260716
2015	8.018964	1.367630683
2016	7.299469	0.086558694

Source: Data from database: World Development Indicators

Table 6 shows Annual GNI growth rate of South Africa and India. The trend remained volatile for both the countries since 2000 to 2016 but still India is in a better position as it never reduced to the negative growth rate. There is a good gap between both the countries in terms of GNI growth rate. It is especially visible in 2009 and 2016.

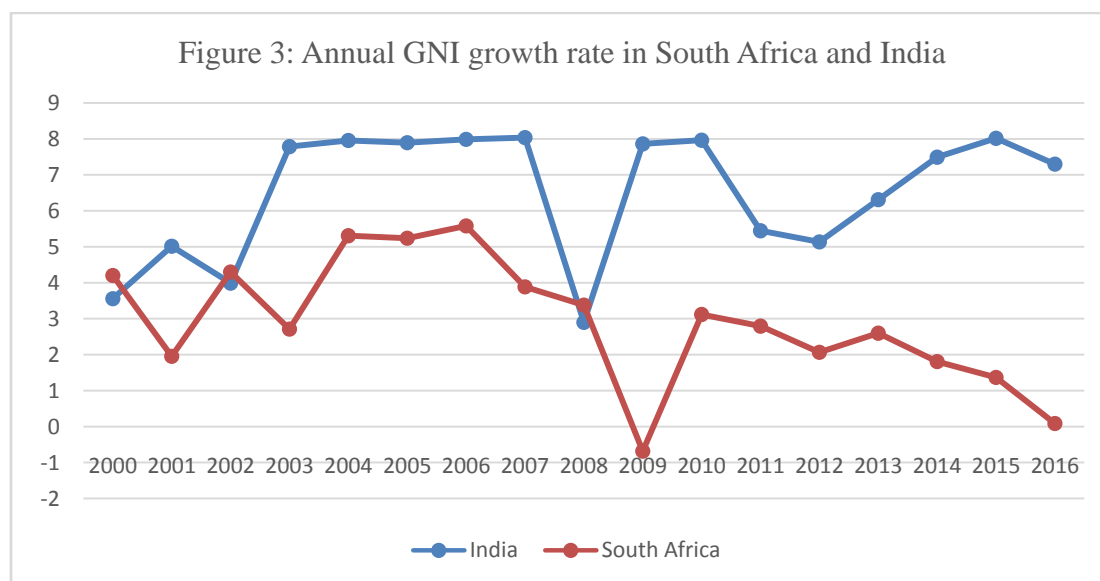


Table 7: Female labour force participation rate in South Africa and its neighbouring countries

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Namibia	47.949	48.426	48.872	49.295	49.707	50.12	50.623	51.115	51.601	52.088	52.585	53.182	53.791	58.116	57.445	56.347	55.306
Botswana	49.666	50.667	51.689	52.717	53.734	54.729	55.724	55.991	56.257	56.536	53.798	57.664	61.331	64.752	64.843	64.93	65.028
Zimbabwe	72.103	73.487	74.774	75.971	77.11	77.064	77.098	77.139	77.189	77.24	77.288	77.437	77.519	77.651	77.755	77.839	77.925
Mozambique	87.547	87.638	87.681	87.682	87.138	86.552	85.905	85.21	84.465	83.671	82.826	81.93	80.978	79.967	78.895	77.757	77.69
Swaziland (E Swatini)	43.993	44.189	44.362	44.532	44.691	44.818	44.968	45.097	45.234	45.371	45.515	45.851	46.2	46.519	46.794	46.983	47.535
South Africa	44.954	45.28	45.643	46.045	46.452	46.856	47.172	47.486	47.804	46.307	44.898	45.477	45.829	46.919	47.252	48.571	48.655

Source: ILO modelled estimates, 2016

Table 7 (fig. 4) shows the percentage of female labour force participation rate in the neighbouring countries of South Africa with which it shares the land borders. Since the year 2000 the percentage of Female participating in the labour force in South Africa was just above than Swaziland, rest in all the other neighbouring countries the participation rate was higher than South Africa. Mozambique deteriorated and other countries such as Namibia, Botswana and Zimbabwe have shown consistent rise in Female labour force participation rate since 2000 till 2016.

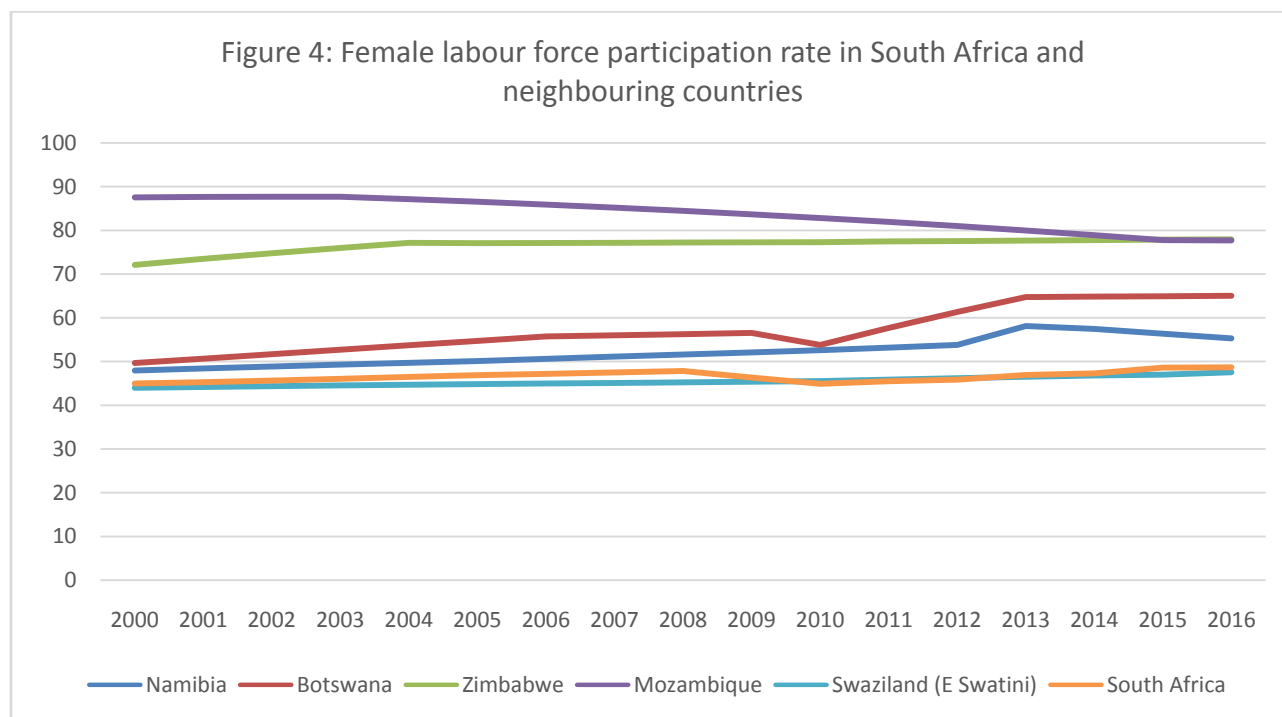
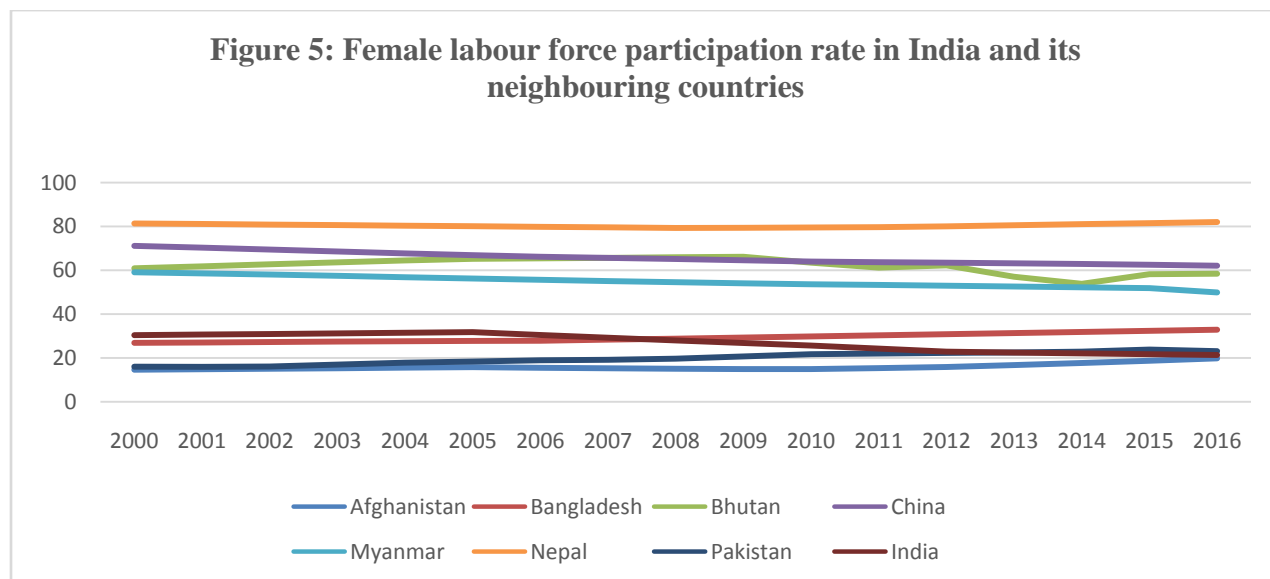


Table 8: Female labour force participation rate in India and its neighbouring countries

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Afghanistan	14.634	14.82	15.064	15.323	15.57	15.801	15.53	15.268	15.057	14.938	14.935	15.339	15.85	16.765	17.735	18.76	19.84
Bangladesh	26.962	27.142	27.327	27.509	27.684	27.856	27.909	28.383	28.866	29.357	29.853	30.343	30.839	31.343	31.854	32.371	32.882
Bhutan	60.948	61.839	62.761	63.665	64.496	65.229	65.466	65.707	65.949	66.183	63.517	61.231	62.242	57.05	53.857	58.24	58.471
China	71.126	70.327	69.452	68.54	67.668	66.888	66.202	65.629	65.119	64.587	63.981	63.719	63.458	63.182	62.865	62.504	62.084
Myanmar	59.113	58.612	58.078	57.467	56.862	56.254	55.64	55.074	54.579	54.084	53.628	53.329	52.975	52.587	52.21	51.858	49.891
Nepal	81.407	81.158	80.907	80.652	80.393	80.127	79.877	79.615	79.339	79.413	79.528	79.726	80.088	80.564	81.062	81.519	82.042
Pakistan	16.067	15.965	16.091	16.961	17.879	18.379	18.926	19.21	19.671	20.734	21.718	22.068	22.314	22.578	22.916	23.861	23.099
India	30.413	30.674	30.942	31.218	31.501	31.792	30.482	29.219	27.999	26.821	25.68	24.253	22.893	22.478	22.087	21.717	21.364

Source: ILO modelled estimates, 2016 (%)

Table 8(fig. 5) shows the percentage of female labour force participation rate in the neighbouring countries of India with which it shares the land borders. Female Labour force Participation rate is rising in Afghanistan, Bangladesh, Nepal and Pakistan but it is declining in Bhutan, China, Myanmar and India. The trend of increase in participation is faster in Afghanistan and Pakistan. The fastest decline is in China, Myanmar and India. In the recent years this decline is faster.



Findings and Interpretation:

HIV pandemic has led to dramatic increases and inequalities in female youth and adult mortality in South Africa. TB deaths remained at high levels in females under age 39 in South Africa and India. Deaths due to injuries remained an important mortality risk for females while deaths from noncommunicable diseases have increased, and both of these cause-categories show age inequalities in mortality in South Africa and India.

South Africa and India are facing huge loss of female human resources due to disease led death of young and adult female population. It is the most important reason why both the countries are not able to attain higher level of growth and development. The position of both the countries in terms of female labour force participation in respect of their neighbouring countries is disturbing.

Such loss needs to be checked urgently. It requires immediate attention of policy makers and public health professionals.

Conclusion:

South Africa and India need to strengthen the weak public health system. For this both the countries should invest more to health infrastructure so that “basket of health services” can be offered to the young and adult females freely or at an affordable charge. The number of deaths of young and adult females are still high. This may be due to negligence of health by young and adult female population. This can be reduced by educating them about the severity and consequences of the diseases. Spreading awareness through National prevention campaign about the diseases and its risk amongst the adult and youth should be the priority of Government, Public, private, voluntary and community-based agencies. South Africa and India seek locally constructed disease burden estimates comprising mortality and loss of health to aid priority setting for the prevention and treatment of diseases. Free and door to door services at a primary stage of the disease can save millions of young and adult lives in both the countries. Government of both the countries should provide strong leadership, and locally tailored strategies to combat the diseases. Priorities for action must be underpinned by a robust evidence base at all levels. Bekker et.al., (2015) opine that in order to achieve the global goals of zero infections, zero discrimination and zero deaths, a sustained focus on HIV research, policy and advocacy for Young Key Populations (YKPs) must occur. Cooper et.al., (2016) find that South African women have full legislative equality, but unequal gender power relations continue to undermine women’s sexual and reproductive health and rights (SRHR), particularly among teenagers and young women. Sunitha & Gururaj (2014) feel that healthy life-style and health promotion policies and programmes that are central for health of youth, driven by robust population-based studies are required in India which will also address the growing tide of NCDs and injuries.

India and South Africa urgently need reliable quantification of the causes of death to address the issue of mortality at rural as well as urban levels. India and South Africa need better surveillance and reporting systems given the rapidly changing disease burden, because surveillance data have the potential to make major contributions to shaping health policies and designing interventions. There is a huge shortage in the availability of trained human resources for health care. Improving the human resource capacity for the prevention and control of CVD should be a national priority, and efforts should be made to ensure equitable distribution of available resources in both rural and urban settings. Protecting the female health is protecting the country from deprivation as their role in countries economic growth and development is equally important.

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