# How are Women in African Parliaments influencing health outcomes?

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This paper examines the question of how women in parliament are impacting health outcomes in African countries. One of the basic functions of parliaments is budgeting and by evaluating the impact of female parliamentarians on public expenditure on health we can determine if their impact on health outcomes comes from this fiscal responsibility of parliament. The effect of percentage of women in parliament on health expenditure in the next year was analyzed using regression analyses while controlling for GDP, HIV rate and Maternal Mortality was determined. We conclude that women in parliament influence health outcomes by increasing budgetary allocation to health.

### INTRODUCTION

African countries and Scandinavian nations have the highest percentage of women in parliaments in the world. These high numbers in Scandinavian parliaments goes with having the highest quality of life indices in the world and they have these numbers are as a consequence of high levels of social and economic development. In contrast African countries have the high levels of women in parliament and low level of socio-economic development and their numbers results from an institution of quotas and other machinations of the political process rather than from an inherent change in the status of women in African countries. The goal of having significant number of women in African parliaments is not only for representation, it is also to accelerate development although it may have some other immediate effects such as encouraging girls to see themselves in leadership roles and such an effect has been shown in India (Beaman et al, 2012). Gilardi 2015 studying over 60 years of data on women's political participation in Switzerland found that having women run for elections encourages other women to run for office especially in situations of low female representation and this effect wanes as women's representation becomes the norm.

Studies looking at the effects of female parliamentary representation have looked almost exclusively at developed countries or included all countries (Krook, 2010, Stockemer, 2011, Stockemer, 2015) or all developing countries irrespective of continent (Swiss et al, 2012). Yoon (2004) studied Africa exclusively but only evaluated the impact of various explanatory variables on women parliamentary representation as her outcome variable although there is evidence that women's parliamentary representation cannot be explained by internal factors such as GDP and female education. The process of having high percentage of women in parliament in African countries can best be explained by understanding the contemporary political context of the African continent.

Withstanding how the issue of high female parliamentary representation came about, the hope is that it will accelerate development on the continent and this is based on findings such as Chattopadhya and Duflo 2004, where Indian female village leadership resulted in positive outcomes in health, education and the environment. This portends that women will be more effective in influencing positive sustainable developmental outcomes. This same focus of women on social outcomes has been found for women in parliament in developed countries (Swers, 2016). The studies using all regions have indicated that women improve health indicators (Swiss et al, 2012), reduce corruption (Stockemer 2011, Neudorfer, 2016) and reduce conflict in Africa (Hughes and Tripp, 2015). One of the consistent findings in the social sector has been the effect of women's parliamentary leadership on health indicators but no one has looked into how this outcome is generated (Belluz, 2016).

Given the unique circumstances and the rapid rise of percentage of women in African parliaments, there is an exceptional situation unfolding that no other region at such low levels of socio-economic and human development have had so many women in positions of determining legislation for their countries. Budgeting is a major and primary function of parliaments and no study has looked at how women affect budgetary allocation for any social sector including health where they seem to be influencing positive outcomes.

In this paper we describe what has occurred on African continent in female parliamentary representation to explain that it is independent of internal social factors and then evaluated the impact of increasing percentage of female parliamentarians on expenditure on health (calculated as percentage of GDP) in the next year.

### **How Did This All Start?**

Currently there are 13 countries in Africa with over 30% female representation in parliament (Table 1). Southern and Eastern African countries have been leading in putting women in parliament in Sub-Saharan Africa. From the Inter-parliamentary Union data which starts in 1997, South Africa and Mozambique had the highest percentages of women at 25% and 25.2% of females in parliament that year (Table 2). This is attributed to the liberation organizations, ANC and FRELIMO in both countries which transformed into political parties. Such organizations had to depend on women to carry out many activities during their struggles because women were less attacked and raised less suspicion in the powerful security forces and therefore were able to move freer and carryout pro-liberation activities extensively (Yolande 2005). After such parties attained political power it was important to find a place at the table for women who had played active roles towards liberation. Therefore, in both situations women quotas were included in the party constitutions from the start. The same can be said for South West African People's Organization (SWAPO) in Namibia which imposed female quotas on itself from the 1992 elections on. Eritrea which had a long struggle for liberation from Ethiopia was also at the top of the list of countries with high percentage of women in parliament in 1997. It therefore indicates that a long armed struggle for freedom leads to acceptance of leadership roles for women.

# TABLE 1 AFRICAN COUNTRIES ATTAINING OVER 30% FEMALE PARLIAMENTARY **REPRESENTATION FROM 1997 TO 2015**

Year	Number of Countries with female parliamentary representation above 30%	Country
1997	0	No Country had 30% women in Parliament, Mozambique and South Africa were at 25%.
1998	0	As Above
1999	2	South Africa and Mozambique went to 30% from their June and Dec elections
2003	3	Rwanda's 2003 election made it's numbers go to 48.8%
2004	3	In elections that year, South Africa and Mozambique increase their percentages slightly to 32.8 and 34.8 respectively.
2005	5	Elections in July and Dec move Burundi and Tanzania over 30%. Namibia moves from 25 to 26.9% from parliamentary elections.
2006	6	Rwanda, Mozambique, South Africa, Burundi, Tanzania, Uganda joins in Feb 2006 with elections leading to 30%.
2007	6	Rwanda, Mozambique, South Africa, Burundi, Tanzania, Uganda
2008	7	Angola joins with elections in Sept 2008 moving its percentage from 15 to 37.3.
2009	7	Rwanda, Angola, Mozambique, South Africa, Uganda, Burundi, Tanzania
2010	7	Tunisia moves to 27.6 from its post-Arab Spring elections
2011	8	Libya from post Arab spring parliament moves to 31.1% for 2 years no parliament.
2012	8	Rwanda, South Africa, Mozambique, Angola, Tanzania, Uganda, Libya and Burundi
2013	9	Rwanda, Senegal (from 2012 elections), Mozambique, Tanzania, Uganda, Angola, Algeria (post Arab Spring elections), Burundi
2014	11	Rwanda, South Africa, Senegal, Mozambique, Angola, Tanzania, Uganda, Algeria, Burundi Zimbabwe, Cameroon (Both Zimbabwe and Cameroon elections were under elections where the incumbent was thought to have won but suspected of dictatorship tendencies)
2015	13	Rwanda, South Africa, Senegal, Namibia, Mozambique, Angola, Tanzania, Uganda, Algeria, Zimbabwe, Cameroon, Tunisia, Burundi

TABLE 2
AFRICAN COUNTRIES WITH THE HIGHEST PERCENTAGE OF WOMEN IN
PARLIAMENT IN FOR 1997 AND 2016

Country	Percentage	Country	Percentage
Mozambique	25.2	Rwanda	63.8
South Africa	25.0	Senegal	42.7
Eritrea	21.0	South Africa	42.0
Namibia	18.1	Namibia	41.3
Uganda	18.1	Mozambique	39.6
Tanzania	17.5	Ethiopia	38.8
Chad	17.3	Angola	36.8
Rwanda	17.1	Tanzania	36.6
Zimbabwe	14.7	Burundi	36.4
Cameroon	12.2	Uganda	35.0

There seems to be a diffusion effect from the South-Eastern coast of Africa where countries were the last to go through liberation struggles and that these liberation struggles were severe enough to upturn normal roles for women in the region. Next to have an aberrant situation, was Rwanda where the genocide affected men more than women and dissipated the number of educated men available to fill positions in parliament and governance and therefore female quotas in the constitution for a minimum of 30% was acceptable. And with that minimum in place with every election, the number of women in Rwandan parliament has risen, to now a rate of 63.8 in the lower parliament, a redistribution of more women in parliament than men that has never occurred before in any country in the world. Table 3 shows the system used by 11 countries in Sub-Saharan Africa to increase the numbers of women in parliament.

TABLE 3
SELECTED AFRICAN COUNTRIES WITH THE DATE OF ADOPTION AND SYSTEM USED
TO INCREASE PERCENTAGE OF WOMEN IN PARLIAMENT

Country	Date	Post Conflict or Not	System used
Tanzania	1985	Not (Socialism)	Party Constitution (one party
			state)-Reserved Seats
Uganda	1989	Post Conflict (civil wars)	Country Constitution-Quotas
Namibia	1992	Post Conflict	Party Constitution (SWAPO)
		(Liberation/Independence)	
Eritrea	1993	Post Conflict (Independence from	Party Constitution (One party
		Ethiopia)	State)
Mozambique	1994	Post Conflict	Party Constitution
		(Liberation/Independence)	(FRELIMO)
South Africa	1994	Post Conflict (Post- Apartheid)	Party Constitution (ANC)
Rwanda	2003	Post Conflict (Post Genocide)	Country Constitution-Quotas
Angola	2008	Not (Extension of Socialistic norms)	Party Constitution (MPLA)
Zimbabwe	2013	Post Conflict (Post election crises)	Party Lists (30%)
Kenya	2013	Post Conflict (Post election crises)	Party Lists (30%)
Senegal	2014	Not (Minor crises as Abdoulaye	Party Lists (50%)
		Wade ran for a third term but was	
		defeated and opportunity to change	
		constitution opened up)	

Today all the African countries at the top of the percentage of women in parliament are in Southern and Eastern Africa with the exception of Senegal in West Africa. Table 4 shows the average percentage of women in parliament and range for four regional zones, indicating that West Africa has the least percentage. Senegal's percentage of women in parliament rose with each election from 1998 onwards. By the 2002 elections it was at 19.2 percent and Senegal but the dramatic shift came in the 2012 election when the electoral laws mandated each party slate in the parliamentary system to have 50% women. This catapulted Senegal to the country with the second highest percentage of women in parliament in Africa, and at the next elections in 2017 with the same quota system still in place it can be expected that the percentage will even be higher than the current 42.7%, following the trend in other countries. Reaching parity in parliamentary representation is obviously a great achievement, not only because of the motivational benefits it gives girls but also because of the socioeconomic benefits of having increased numbers of women in parliament. Increasing percentage of women in parliaments have been found to improve maternal and child health and reduce conflict and corruption (Chattopadhya and Duflo, 2004, Neudorfer, 2016, Swiss et al, 2012, Hughes and Tripp, 2015). The case can therefore be made that one of the best way to accelerate development is to increase percentages of women in parliament in countries at low levels of socio-economic development.

**TABLE 4** AVERAGE PERCENTAGE OF WOMEN IN AFRICAN PARLIAMENT BY REGION (2017)

East	30% (63.8 Rwanda to 19.7 Kenya)
South	24% (41.3 Namibia to 6.2 Swaziland)
Central	18% (31.1 Cameroon to 7.4 Congo Rep)
West	15% (42.7 Senegal to 5.6 Nigeria)

## What Creates the Opportunity for Intervention to Increase Percentage of Women in Parliaments?

Krook 2010 found that electoral system played a role in European countries having high representation of women in parliaments, with parliamentary proportional representation having significant effect, in Sub-Saharan Africa she found institution of quotas and post-conflict to be of significance. Stockemer 2011, also found Parliamentary proportional representation to be significant factor for countries to have higher female representation in parliament and that Islam and percentage of women in workforce had no effect. He also found that democracies have fewer women in parliament than non-democracies and that containment of corruption was associated with having higher percentages of women in parliament. Given the preponderance of party lists as means of effecting increases in women representation in parliament and the high numbers of countries implementing systems post-conflict; and the number of countries who implemented these changes during one party states (Table 3), this descriptive analyses corresponds to their findings. The effect of Islam as unimportant can be deciphered from the data for Libya, Algeria and Tunisia, who all got a post-conflict (or post crises) bump after the Arab Spring. There was no parliament in Libya prior to 2006 and the one then was under a dictatorship with 7.7% women. This number shot up to 31.1% in the immediate post Arab Spring parliament which lasted only 2 years before the number went down to 16% in the chaotic situation that unfolded in Libya. In Algeria, the percentage of women in parliament rose with each election from 3.2% in 1997 to 2012 in 2011 leading the Arab spring. And in the post Arab spring election of 2012 the percentage went up dramatically to 31.6% again indicating the post conflict effect. Tunisia had a steady rise from 6.7% in 1997 to 11.5% in 2000 and then 22.8% in 2005, the post Arab Spring election increased the percentage slightly to 31.1% currently. It seems how liberal the democracy was and Arab Spring are the two factors most important in the Muslim countries of North Africa. Senegal a country of about 99% Muslim currently is second on the list of countries having the highest numbers of women in parliament in Africa and Mauritania another overwhelmingly Islamic population in West Africa is at 25.7% and has the second highest percentage of women in parliament while countries such as Ghana and Nigeria tending towards

50% Muslim have percentages less than 10% of women in parliament; buttressing the lack of effect of Islam in limiting percentage of women in parliament.

Most countries seem to have had some post conflict situation (Table 3) that created the entry way for instituting change. Most of the countries have either used party constitutions or party lists, which is only possible in parliamentary system of governance. Ingelhart and Norris (2003) indicated that it easier to increase female legislative numbers in parliamentary system of governance versus presidential ones. The post conflict norms cannot be generalized since several countries in West Africa were also in crises and conflict in the late 20<sup>th</sup> century with resolutions occurring early in this century; countries such as Liberia, Sierra Leone and Guinea. None of these countries adopted pro-women constitution to elect members to parliament. Liberia which elected the first woman in Sub-Saharan Africa, did so with only 12.5% of the parliament being women and that figure lowered slightly in the next elections to 11%. The same effects of crises leading to increases in percentage of women in parliament, does not seem to be working in West and Central Africa.

There seems to be two issues at work simultaneously, one is post-conflict opportunity and the other is a regional norm that occurs by diffusion or contagion. Norms of increasing percentage of women in parliaments started from the post liberation countries of southern Africa, then spreading to Eastern African. In Eastern Africa, Kenya the largest country by population and economy was a laggard in adopting changes to effect increasing percentage of women in parliament. As its neighbors Tanzania and Uganda adopted such changes early in late 1980's, Kenya did not change. And it would have stayed with the status quo except for the electoral crises of 2007 election which led to the drafting of a new constitution. Kenya adopted having 30% of party parliamentary lists be women in its 2013 elections and its female parliamentary percentage rose from never above 10% to 19% in one election. Tanzania and Uganda were early adopters but could not influence Kenya. The reasons for early adoption differ; Tanzania was an early adopter because of the communist approach to governance by its first President, Julius Nyerere with his Ujamaa doctrine of equality for all which led to adoption of reserved seats for women as early as 1985 (Mkilanya, 2011). Uganda on the other hand followed the path of instituting more women in parliament at the end of conflicts such that, as its raging civil war in 1980's was ending, the first constitution to end the war in 1989, had quotas for women.

The main impetus for improving the number of women in Eastern and Southern Africa has been crises either thorough a long drawn out liberation struggle or conflict surrounding the countries leadership as occurred in Rwanda, Kenya and Uganda. Given that West African countries have not adopted profemale constitutions or put in other machinations to improve female percentages in parliament even after periods of conflict; what is the best way to push countries in the zone towards a critical mass or parity? It is significant to note that the largest country in population and economy by far in West Africa is Nigeria and at 5.6% women, in its lower parliament it has the lowest percentage of women in Sub-Saharan Africa. Nigeria will most likely turn out to be more like Kenya, the leading economy in its region but a laggard in adopting progressive policies on female representation. Liberian parliament recently started the constitutional process to increase female representation therefore making it likely that more countries in the region will also follow.

## **REGRESSION ANALYSES**

Since having large percentage of women in parliaments was not triggered by socio-economic level, it is important to know what effect women are having on socio-economic indicators. Panel data from 47 countries in sub-Saharan Africa was used in this analyses. The percentage of women in lower houses of parliament or single houses of parliament from 1997 to 2015 as presented by the Inter-parliamentary Union website was used in regression analyses as the input (independent) variable with percentage of GDP spent on health in the next year (1998 to 2016) as the outcome variable (dependent variable). We added HIV rate in women 15 -49 years as a control variable because countries with higher HIV rates will tend to allocate and spend more on health. Maternal mortality was also used as a control variable for

overall health status of the country. All data except percentage of women in parliament was obtained from World Bank data site (http://data.worldbank.org/).

When we run a regression at country level, in a model including only percentage of women in the parliament in the previous year (variable women11) as an explanatory variable for health expenditure, we find that for every unit of increase in the number of women percentage, the percentage of health expenditure in the budget increases by 0.02 percent and this is a highly significant correlation as p-value is 0.000 (Table 5).

TABLE 5 **RESULTS OF REGRESSION ANALYSES** 

Health	Coeff. (Std. Err)	Z	P> z	[95% Conf. Interval]
womenl1	.0231036 (.0058587)	3.94	0.000	[.0116208 .0345864]
$\alpha + \beta \%$ of Wom	en in Parliament (lagged or	<u> </u> ne vear) + β, HIV	rate = % budget alloca	 ited to Health
Health	Coeff. (Std. Err)	Z	P> z	[95% Conf. Interval]
womenl1	.0208948 (.0061179)	3.42	0.001	[.008904 .0328857]
whiv	.0683409 (.0205035)	3.33	0.001	[.0281549 .108527]
Health	Coeff. (Std. Err)	Z	P> z	[95% Conf. Interval]
Health	Coeff. (Std. Err)	Z	P> z	[95% Conf. Interval]
whiv	.0182857 (.0061121) .0640967	3.01	0.003	[.0063062 .0302652]
wniv	(.0212703)	3.01	0.003	[.0224078 .1057856]
	(.0212703)			[.1037630]
matmort	0008752 (.0002506)	-3.49	0.000	[0013664 000384]
	0008752			[0013664
matmort t+β% of Wome matmort	0008752 (.0002506)			[0013664 000384]
$\alpha + \beta$ % of Wome	0008752 (.0002506) en in Parliament (lagged on	e year) = Matern	al Mortality	[0013664 000384]
$x + \beta$ % of Wome matmort women 11	0008752 (.0002506) en in Parliament (lagged on Coeff. (Std. Err)	e year) = Matern. z -4.56	al Mortality  P> z	[0013664 000384] [95% Conf. Interval]
α+β% of Wome matmort womenl1	0008752 (.0002506) en in Parliament (lagged on Coeff. (Std. Err) -1.568736 (.3439892)	e year) = Matern. z -4.56	al Mortality  P> z	[0013664 000384] [95% Conf. Interval]

We next examined variables that could potentially be responsible for the level of health expenditure for each country. One of them is maternal mortality and the other is HIV rate among women 15-49 years. First we investigated effect of the HIV rate and number of women in the parliament on budgetary allocation and found that both variables are highly significant in explaining health budget allocation, and the effect of percentage of women stays equally as significant as it was alone, when HIV level is added as a control variable (Table 5).

Finally, we included maternal mortality in our model to control for health level in the country and still observed that the percentage of women in the parliament is still highly significant (p-level=0.003) in the model.

As we investigated the influence of women in parliament on health expenditure we would also like to see if there is any relationship with the number of women in the parliament and actual health outcomes in the following year. Indeed, we observed that for one-unit increase in the women in parliament the maternal mortality rate decreased by 1.5 units and this impact is statistically highly significant. When we regressed percentage budget allocated to health to the outcome of maternal mortality, it was significant with maternal mortality decreasing by 9.7 units with each percentage increase in budget allocated to health. This indicates that the association between health budget and maternal mortality is much stronger than between women in parliament and maternal mortality. Given these results we deduct that women in parliament are influencing health outcomes by increasing budgetary allocation to health. Results of all the regression analyses is in Table 5.

## **DISCUSSION**

There have only been two female presidents on the continent and only one that was duly elected, Ellen Sirleaf Johnson of Liberia and the other Joyce Banda of Malawi, got the position when the President she was Vice-President to, died in office. It is interesting that the first female President was elected at the first elections after a devastating civil war. There is the belief that societies allow women to rise after conflict as a rejection of the masochist tendencies that create and perpetuate war. This same scenario played out in Rwanda which placed high quotas for women in its post genocide constitution. Whether female numbers in parliaments and female leadership of a country ignites development is still debatable but several studies have documented the human development value of having women in governance (Chattopadhya and Duflo, 2012, Swers, 2016).

Yoon (2004) found no significant association between economic development and women's representation in African parliaments and also that quotas were the main way numbers of women in parliaments increased. She also showed that levels of education of women in society and the level of participation of women in the formal labor sector were not relevant to the number of women in parliament. Thus indicating a diversion from how female leadership and power has accrued in other parts of the world. Africa is therefore the prime situation to analyze the effect of women on developmental trajectory given that their numbers are not based on socio-economic development. Studies of the effect of having women randomly assigned as village heads in India, showed that women concentrated on issues that affect human development such as education and health, while male village heads worked mostly on projects that would be perceived to create economic development such as building projects and roads (Chattopadhya and Duflo, 2004). Political positions carry highly visible status and prestige and can help booster the image of women as leaders in society at large (Kunovich and Paxton, 2005) and is important for encouraging girls into leadership and changing the ways society views the role of women. Invariably female elites are the first beneficiaries of the push for female political representation. As in most prevalent in Asia, such elite representation also comes significantly from women from political lineages and families. There is discourse whether this represents enough change to allow female authentic leadership to arise. If female leaders serve to encourage girls into leadership and also improve health indices, then pushing women into parliament even if the initial push favors elites, is still a valuable goal for society. In South Africa and Mozambique with the ANC and Frelimo; organizations which actively participated in pro-liberation activities that ultimately led to electoral success, instituted female quotas was part of their initiatives upon getting to power. Such organizations had to depend on women to carry out many activities during their struggles since women were less attacked and seen as more benign by the powerful establishments they were fighting (Yolande, 2005). In these situation women seem to be able to attain power through grass-root work but otherwise there is a proliferation of women from elite

households as occurs in many developed countries. Barriers to women's political participation in Africa are well known and similar to those across other regions, namely; lack of money, lack of education, child bearing and rearing as well as domestic responsibilities. In addition, fear of harassment and intimidation, are factors not seen as much in the west but pervades the lives of female politicians in developing countries (Yolande, 2005, Gouws, 2008). This results in only women from families that can offer some security leaning in to leadership.

Another phenomenon unique to Africa is the first-lady usurping social projects and women's programs that are supposed to be carried out by public institutions (Vainola, 1997). This phenomenon occurs also with wives of leaders of legislatures, with wives getting prominent roles visible in public domains and this further emphasizes to girls to try and attain wife roles than to attain leadership in their own right. The intimidation of women in the political sphere also goes with public relation campaigns questioning their morality.

Women face many obstacles to gaining real political power in Africa and this needs to be recognized and programmatic strategies to help them overcome them should be as important as strategies to get women into parliaments (Longwe, 2000). The grass-root work on alleviating the conditions of women in society should continue. Having more women in parliaments seems to be useful in pushing human development goals and may also serve to reduce corruption and rent seeking behavior since monies spent for these items are not available for capital projects which tend to be associated more with corrupt practices (Neudorfer, 2016). Supporting women to get into parliament is important but also making sure they stay in parliaments in order to achieve leadership is just as important. Power in parliaments accrue through longevity and making sure women attain leadership positions within the institutions and use that power on human development projects is necessary. O'Brien (2015) found that in western democracies women's leadership of political parties results when parties are losing seats in parliaments and that when women are in party leadership they easily lose their seats when their party is doing badly but men in such situations tend to retain their positions. This fits into the phenomenon of last in, first out noted in the first two post-apartheid parliaments in South Africa (Britton, 2005).

In western countries, women became viable politicians only after significant social and economic development was attained. A reversal of that order of events is taking place in Africa. Many countries have high numbers of women in parliament while social and economic development is lacking and it was not known whether women will be able to achieve change within parliaments when the patriarchal norms are still in play in the general society. Gouws (2008) concluded that while women are generally more progressive in their values and can contribute to make political decisions that benefit women and society at large.

Women in parliaments especially those getting seats through quotas are thought not to be given the opportunity to create change in parliaments and seen more as illegitimate and usurpers by their male counterparts. Women who win elections on the same basis as men tend to get more respect but their numbers are usually small to create effective change. This initial look at the effect of women in African parliaments indicates that percentage of women in parliament matters and how they got there may not be significant in curbing the influence they exhibit. Murray (2010) found that implementation of quotas in the French parliament was effective in increasing female representation without reduction in quality of output. Given that studies have indicated that more public spending on health and education impacts outcomes then having more women in parliament who tend to allocate money into social sectors will have positive impact while reducing monies available for rent seeking (Gupta et al, 2002, Baldacci et al, 2003, Bokhari et al, 2007). Changing constitutions to include quotas for women is significant in improving health indicators, Swiss et al 2012, found improvements in child health at the level of having 20% women in parliament. Bratton (2005) studying state legislative houses in the US found that actual numbers did not matter and that having more women in legislative houses even a few, brought about changes in policy output that reflected the interest of women such as in healthcare. Anyanwu and Erhijakpor (2009) looking specifically in African countries found that higher government spending on health was associated with better health outcomes. Given the strong association between health sector budget and maternal mortality in our data, we are assuming that a significant amount of budget allocated is disbursed, and therefore

having impact, but this may not be the case. There may be other factors such as higher international aid and international NGO spending along with higher government health expenditure mediating the effect on maternal mortality.

The fundamental responsibility of parliament is allocation of funding for different sectors. Budgeting affects development and has been found to be one of the issues contributing to underdevelopment in African countries (McKie and van de Walle 2010). A transparent and efficient process of budgeting promotes development and is linked to the priorities and goals of governments. African countries spend disproportionately high on defense based on their socio-economic levels and continue to spend on defense even in times of declared austerity measures and lowered income (Gyimah-Brempong, 1992). Having women parliamentarians whose interests are more on social issues and thereby move resources into health will expedite changes in this sector where African countries are severely lagging the rest of the world. This paper is the first to show that women parliamentarians have an impact on government health expenditure, and since budgeting is one of the primary role of parliament then their effect on health outcomes is influenced by this fiscal responsibility.

Having higher percentages of women in parliaments is having its desired effect of improving health indicators through influencing budgetary allocation and what is further needed is documentation on what committees and bills African women parliamentarians have worked on and are working on. What has worked in making their participation effective and are they moving into parliamentary leadership position where power accrues in parliaments and from which they can make significant changes to national development agendas?

### **CONCLUSION**

A unique experiment is taking place in Africa where women parliamentary representation has slowly increased to some of the highest in the world, starting while the countries are still at low levels of socio-economic development. These changes were brought about mainly after conflict resolution and by diffusion; and party constitutions and country constitutional changes are the means of implementation. Evaluating the effect these women are having on one of the basic function of parliament as it affects health and other social sectors, is important. African women parliamentarians are accomplishing improved health outcomes by increasing budgetary allocation to health. It is not known if this means there are more women on health committees or chairing health committee as their percentage rises, but it is logical to think that many women in parliament gravitate towards health committees given the fact that women tend to interact with the health sector more as in during childbirth and for health care for their children and are therefore have higher motivation to see improvement in this sector. A repository of the work of African women in parliaments at the individual level needs to be compiled to document the effect they are having and changes they are creating. This is especially important to influence countries that have not adopted schemes to increase the percentages of women in parliament.

This study supports the findings from studies that have looked at world-wide data that increasing female parliamentary representation improves health outcomes but confirms it specifically for African countries. It also looks at how women in parliament achieve this outcome and it seems that women act through parliamentary budget allocation to health. There is a need to confirm this finding and support it with data on what women do at parliamentary committee level.

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