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Relationship between Government Financial Grants, Internal Revenue and Maternal Mortality Rate in South Africa

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ABSTRACT

Funding of public hospitals and access to quality health care is a universal problem especially in developing countries. This paper aims to examine the relationship between government financial grants, internal revenue and maternal mortality rate**.** Previous literature has suggested that to achieve better health outcomes, multiple factors including but not limited to finance must be taken into consideration. Secondary data from audited annual health reports (2014/15-2018/19) of the nine South African Provinces was analyzed with the employ of panel data regression technique. Internal Government Revenue was statistically significant at a 5% level of significance ($P < 0.05$) and Government Financial Grant was not statistically significant ($P > 0.05$). Maternal mortality rate is therefore dependent on internal revenue and not on government financial grants**.** The findings change the ancient saying that maternal health outcomes shall improve when the government pumps more finances into the health system. Instead, the study reveals that internal revenue generation has an impact on the maternal mortality rate thus bringing in another approach in the fight against maternal mortality. The study adds value to the public health administration in that it brings a different perspective on the fight against the maternal mortality in South Africa.

Keywords*:* Financial Grants, Internal Generated Revenue, Public Health Management, Public Health Expenditure, Maternal Mortality Rate
JEL Classifications: H51; E62; H83; I11

1. INTRODUCTION

The primary intention of the study is to analyze the relationship between government financial grants, internal revenue and health service delivery in South Africa. This approach is inspired by the fact that funding of the health care system remains one of the essential tools for successful delivery of health care services across the globe, in underdeveloped countries in particular, and this becomes more essential in the realization of the sustainable development goals relating to health (Stenberg et al., 2017). According to the World Health Statistics (WHS), developing countries still spend lower than 8% of their Gross Domestic Product on health (WHS, 2016). This research therefore seeks to examine if health care financing (i.e. Government Financial Grants and Internal Revenue) has a relationship with the health care service delivery and if indeed the existing relationship will enable us, as a country, to reach the said goals in all South African provinces within the prescribed timelines. Financial grants are non-repayable funds given by the government with no expectation of repayment or accrual of interest, and may have strict guidelines for usage (Entrepreneur, 2016). In an attempt to expedite and improve the health care service delivery in line with the South African developmental plan and global sustainable development goals, government has introduced numerous conditional financial grants in addition to the annual health budgets. However, the National Tertiary Services Grant (NTSG) and Health Professions Training and Development (HPTD) grant aims to improve the health care services at the tertiary hospitals and the training of more specialist medical practitioners respectively. These are structured in such a manner that provinces that are inherently under-resourced and struggling to attract more medical specialists, will always receive fewer grants and thereby worsening the service delivery in such provinces, as well as the quality of training of more specialists. Riman (2012) and Akpan (2012) examine how the Nigerian health

care outcome relates to the health care financing and health facility utilization with the focus on the childbearing women. The study found that health care financing in Nigeria inadequate for effective running of clinics.

Quality health care provision primarily relies on the availability of, amongst others, sufficient funding. Borghi et al. (2006) indicate that: for a country to provide quality maternal health care services, adequate funding for pharmaceutical products (i.e. drugs and consumables) medical supplies, human resource and food for patients are necessary. We can therefore infer that the inadequacy or lack of funding presents a palpable threat to the wellbeing of the health care sector in any country, underdeveloped in particular. It is also documented that cuts on budgets of public health represents an untrue economy (Masters et al., 2017). Indeed, without funding, the ongoing crisis of maternal, newborn and neonatal deaths shall continue (Murray, 2007). Therefore, the objective of the study is to examine the relationship between government financial grants, internal revenue and maternal mortality rate and the question posed is therefore; what is the relationship between government financial grants, internal revenue and maternal mortality rate?

2. LITERATURE REVIEW

Governments of developing countries acknowledge the ongoing responsibility of offering financial support to the ever-rising expectation by citizens for better health services. However, despite the common endeavors and strides made thus far, the BRICS countries still differ in their capacity to increase financial investments in ministries of health (Jakovljevic et al., 2017). Sengupta (2015) indicated that expenditure on health taken alone does not necessarily exert a positive impact on the health outcomes; instead, such expenditure should work in tandem with other parameters such as education, poverty level of the users as represented by per capita income and spending of the allocated funds by the health ministry or government. In addition, policies on public health financing must be separate and specific to the individual sectors within the country, with the chief aim of ensuring good health outcomes across the poor and the rich sectors of the society (Senguta, 2015). Another research by Hooda (2014) corroborates the other findings that amount of public expenditure on health is not necessarily the only factor to quality health. Public financial management of such funding and proper governance is also of the essence in utilisation health funds to provide desired quality health care.

In their research, Rahman et al. (2018) found that the increase in total health expenditure coupled with transparency and responsibility on the usage of public funds, yielded positive health outcomes in the South Asian Association for Regional Cooperation (SAARC) and Association for South East Asian Nations (ASEAN). Another similar research found a significant relationship between life expectancy and the health financing (Jaba et al., 2014). Furthermore, Aísa et al. (2014) supported the view that spending on public health has an important role to play in enhancing life expectancy. Similar research by Gallet and Doucouliagos (2017) suggested that healthcare financing remains the greatest influencer on mortality. Rahman et al. (2018) applied a panel data approach to examine the existence of fixed and random implications of health expenditure on health outcomes. The major variables of their study includes public and private heath financing, life expectancy, infant mortality rate. They find that a combination of public health financing and private health financing has a significant effect on reduction of infant mortality. However, they also find that private health financing has greater influence on health care than public health expenditure. This finding informs the need for other sources of finance rather than reliance on governance finance alone. In another closely related research, Jaba et al. (2014) examine the link between health expenditure and life expectancy by applying a panel data statistical analysis on a group of 175 countries located in different geographical zone with similar income data for a period of sixteen years. They find that health expenditure relates significantly with life expectancy – thus confirmation other previous studies such as (Rahman et al., 2018). Using a fixed effect regression model, Aísa et al. (2014) examine the effect of public health expenditure on longevity in OECD countries and finds that although public health care expenditure does have effect on longevity but that this effect reduces with increase in size of public health expenditure on the GDP. Bein et al. (2017) study the influence of health expenditure on life expectancy of East African countries with data from the Global Development Index. Applying a panel data approach, they find that health expenditure is has a positive influence on life expectation of men and women, but document that health care expenditure has more positive effect on women's life expectancy than the men counterparts. On the contrary, the study found that health care spending has a negative effect on the rate of infant and neonatal mortalities.

According to Alkema et al. (2016), the ratio of maternal mortality showed a downward trend globally from 385 mortality per 100,000 live births in 1990-216 in the year 2015. However, the decrement differs between the regions and the state of development of each continent or country. It is worth noting that eastern Asia recorded the highest decline whilst the Caribbean recorded the lowest performance during the same period. In year 2015, the sub-Saharan region of Africa recorded about 546 maternal deaths while the developed regions recorded 12 maternal deaths per 100,000 live births. To achieve the SDG target, countries with the maternal mortality ratio of less than 432 per 100,000 live births in 2015 should report an annual reduction of 7.5%. Alkema et al. (2016) reports that both Cambodia and Rwanda experienced a hastened decrease of maternal mortality due to improvement of government investment in access to health care service report it. This was made possible by; the increment of midwives as well as financial incentives to the health workers. In Rwanda, the government won the battle through the implementation of certain policies such as the nationwide placement of 45 000 community health care workers to help fight maternal mortality (Alkema et al., 2016). In West African countries (i.e. Benin, Nigeria, Mali, Ghana, Burkina Faso and Senegal), the aim of delivering excellent services for the improvement of maternal, newborn and child health has proved to be very challenging because of insufficient funding to develop and maintain the health care system, (Agyepong, 2017). Furthermore, the out-of-pocket payments at the service delivery point acted as a restrictive factor to the use of services and therefore exposed mothers and their families to calamitous expenditures. In their

research, Bijlmakers et al. (2019) made effort to comprehend the variations between maternal health coverage and outcomes within the various regions of Rwanda. They found that the conditions and differences between the regions or districts must be taken into consideration at all times, when financial resources are being allocated, so as to realize the delivery of quality maternal care and outcomes in all the districts.

Between 1990 and 2015, both Rwanda and Cambodia experienced a rapid decrease in maternal deaths at a rate of reduction of 7·4% (80% UI 5·6–8·7), and 6·0% (4·5-7·4) respectively (Alkema et al., 2016). In both countries, direct or indirect funding played a key role in improving the maternal mortality reduction rates. In addition, Alkema et al. (2016) suggests that more effort is required in order to reach the sustainable developmental target. They suggest that countries with a maternal death rate of <432 mortality per 100,000 live births in 2015 will require an annual continuous rate of reduction of 7.5% for 2016–30, which is beyond the rate of 5.5% that was required to meet MDG 5.

In Nigeria, the most populous country in Africa, maternal mortality sits at about 630 per 100,000 live births, with 145 women dying during labor every day, one every minute and one in every 13 pregnant mothers dying (Piane, 2019). The ratio remains the highest in the continent of Africa and by far higher than the worldwide average of 290 per 100,000 live births (Piane, 2019). Among others, Bazuaye (2013) and Okonofua (2013) in their article titled: "Tackling maternal mortality in Africa after 2015: What should the priorities be?" identify that funding for proper health care is one of the key strategies which will include free or subsidized services, as well as appointment of more doctors, betterment of hospitals and increase in their numbers, remains the cornerstone of improving maternal survival outcomes. Paradoxically, putting an end to donor reliance for funding is also identified as one of the key strategies in decreasing maternal mortality in Africa (Bazuaye and Okonofua, 2013). What remains clear is that political will must reign supreme in prioritizing women's health both in monetary terms and in policies. (Piane, 2019). The launch of the Global Strategy for the health of children, adolescents and women in year 2015 demonstrated that reducing maternal deaths remains a key priority of the international development community (Kuruvilla et al., 2016). It must also be noted that sustainable development goal number three, aims to improve maternal and newborn health (Kuruvilla et al., 2018). Though challenging for this ideal to be realized, health financing involving revenue collection, pooling of risk and purchasing systems must be in place to ensure a smooth running of the health care system (Zaman and Hossain, 2017). Borghi et al. (2006) indicate that the scarcity of resources and underinvestment in maternal health negatively affects the realization of good maternal survival results. In 2018, Machira and Palamuleni further pointed out that the majority of developing nations still have maternal mortality as the chief public health challenge in spite of the longstanding pledges and declarations aimed at providing quality maternal health care service and ultimately decreasing poor maternal health outcomes. This is further supported by Piane (2019) who concludes in his study of maternal mortality in Nigeria, that governments and their leaders must prioritize health of women and mothers both in policies and budgets.

In his paper entitled "America's Maternal Mortality Crisis: Policy Proposal" Eidson (2019) asserts that America is one of the thirteen countries where the rate of maternal mortality is far worse than it was fifteen years ago for it registered an increase in maternal deaths of 26.6% between year 2000 and 2014. Mann et al. (2019) supports the above assertion by saying that "women in the United States are more likely to die from childbirth-related or pregnancy-related causes than women in other high-income countries, with black women dying at a rate 3-4 times that of white women". The assertion by Eidson is attributed to, pre-existing medical conditions, race, geographic location, poverty and access to healthcare and it is further reported that it is only in California where there is an improvement in maternal health compared to states such as Texas where the government has reduced funding maternal health (Eidson, 2019). Eidson (2019) further indicates that, compared to Canadian women, American women are three times more likely to die of causes related to childbearing. Proulx et al. (2017) revealed that Canada took a conscious decision to fund its maternal, neonatal and child health through deep cuts in almost all other facets of the country's development assistance. Searing (2019) and Ross (2019) conducted a study in America which concludes that lower maternal mortality rates are strongly associated with Medicaid expansion and thus showing 1.6 fewer maternal deaths per 100,000 live births. Such Medicaid comes with significant increase in access to health care before, during and after pregnancy, which then allows early detection and management of pre-existing medical conditions which may pose risks to the pregnancy itself or the life of the mother. This therefore suggests that the realization of a good health care system comes with significant sacrifices by the government when funding is prioritized. Approximate figures from the global metrics and institutional reports suggest that South Africa has made noteworthy progress in decreasing both neonatal and maternal mortality even though it has not attained the MDG targets as envisioned by (Damian et al., 2019). We must therefore evaluate the South African Health Care funding (i.e. government financial grant or internal revenue) against the maternal health outcomes so as to assess if the country is on track in its efforts to realize the 2030 vision of driving down maternal mortality from 500 to less than 100 per 100,000 live births (National Planning Commission, 2013).

3. METHODOLOGY

The data used is the secondary data obtained from the audited annual reports (2014/15 – 2018/19) of nine provincial health departments in South Africa. The panel data regression analysis method was employed to analyze the relationship between the government financial grant, internal revenue and maternal mortality rate.

The regression model used is as follows:

To examine the relationship between government financial grants, internal revenue and maternal mortality rate;

$$Y1 = b0 + b1X1 + b2X2 + e \quad (1)$$

Where;
Y1: Maternal Mortality Rate(MMR)
b0: Regression intercept
b1: Regression co-efficient
X1: Government Financial Grant
X2: Internal Revenue
e: Error term

The dependent variable was compared using bar graphs. The data set consisted of maternity mortality rate (measured as total maternal death per 100,000 live births) and for further exploration, averages per province were computed.

Maternal mortality among South African provinces fluctuates from year to year. The province with the highest average MMR per 100,000 live births was Free State with 158,425 per 100,000 Live Births, followed by Northwest Province with 145,65 per 100,000 Live Birth and Western Cape having the least at 62,318 per 100,000 Live Births. Figure 1 shows a summary of all provinces.

The multiple regression Model analysed the relationship between GFG, IGR, and maternal mortality rate (MM). The regression model had an R square of 0.264 (Adjusted R-square of 0.224), thus the model explained 26.4% of the variance. The regression model was significant with F (2.40) =7.187, p<0.05, the model is strongly significant. Table 1 presents the coefficients of the variables.

Table 1 shows that the variables IGR were statistically significant at a 5% level of significance p<0.05 and GFG was not statistically significant p>0.05. The research, therefore, concluded that the maternal mortality rate is dependent on internal revenue and not on government financial grants.

4. DISCUSSION

During the period under survey over R825 trillion worth of government grants was allocated. The province of Gauteng (about 12 million population and 76.3% depends on public health care, Stats SA 2011) received the highest portion (23%), closely followed by KZN (about 10 Million population and 87.8% dependant on public health care, Stats SA 2011) that received 22%. The Northern Cape (about 1 million population and 87.1% dependant on public health care, Stats SA 2011) received the least of 2%. In the same period, internal revenue was over R10.61 trillion of which Western Cape (5.8 million population and 75% dependant on public health care, Stats SA 2011) had the highest portion of 28%, followed by Gauteng at 27%. Similar to GFG, Northern Cape (1%) had the lowest. Figure 2 shows the percentage of government financial grant allocations per province and internally generated revenue per province.

It was thought provoking to observe that Western Cape received only 12% in government financial grants and yet had internal revenues of 28%. Thus, internal revenues were more than double when compared to the government financial grant. In contrast, KZN received 22% in government financial grants and had 13% internal revenue. Table 1 shows that the variables in internal revenue (IGR) were statistically significant at a 5% level of significance p<0.05 and Government Financial Grant (GFG) was not statistically significant p >0.05. The paper therefore concluded that the maternal mortality rate (MMR) has a significant relationship with internal revenue and no significant relationship with government financial grants. This is supported by the Western Cape Province which has the highest internally generated revenue and lowest maternal mortality ratio compared to the other provinces that demonstrated the contrary. The lack of relationship between maternal mortality rate and government financial grants suggests two financial management possibilities, namely either the allocated funds are too little to enhance quality health service for maternal health or the funds are enough but mismanaged by administrators in such a way that the maternal health programmes are left with little funds to provides expected maternal health care. Therefore, accountability on public health funds needs to be interrogated further by further researchers. Findings of this paper lends support to prior research findings such as Arthur and Oaikhenan (2017), who found that in Sub-Saharan Africa, spending on health by government bears a sizeable funding but with less impact on health outcomes such as mortality rates.

Figure 1: Average maternal mortality per 100,000 live births between financial years 2014/15-2018/19

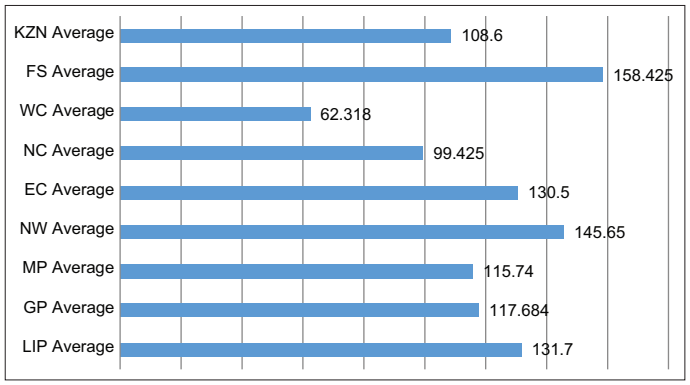

Figure 2: GFG and IGR comparison of provinces between financial years 2014/15-2018/19

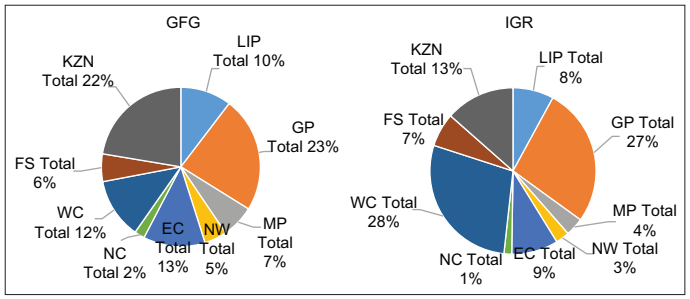

Table 1: Multiple regression analysis results: dependent variable MM

Variables	Estimate (B)	SE	95% CI		p
			LL	UL	
GFG	0.566	0.524	−0.493	1.626	0.287
IGR	−100.712	30.177	−161.701	−39.722	0.002
(Constant)	132.945	8.362	116.045	149.846	0.000

F (2.40)=7.187**, P<0.05, R^2=0.264. Government financial grant (GFG), internal revenue (IGR), N=42. CI=Confidence interval; LL=Lower limit; UL=Upper limit

5.1. Implications of the Study

The study findings significantly change the long held saying that maternal health outcomes improve significantly, when the government pumps more financial resources into the health system. On the contrary, the study reveals that internal revenue generation may have an impact on the fight against maternal mortality rates thus bringing in another approach to the fight against maternal mortality. The study adds value to the health system and school of public health as well as public administration in that it brings a different perspective on the fight against the maternal mortality in South Africa through improved public health expenditure and administration.

6. CONCLUSION

Western Cape achieved the lowest Maternal mortality rate at 62.3 maternal deaths per 100,000 live births whilst Free State had the highest maternal mortality rate at 158.4 maternal deaths per 100,000 Live births over the period between 2014/15 -2018/19. In addition, Western Cape generated the highest internal revenue compared to all the other provinces. Subsequent to the analysis made, the researcher concluded that the maternal mortality rate (MMR) is dependent on internal revenue and not on government financial grants. The Non-dependency of maternal mortality rate on government financial grant is suggestive of the notion that either the health budget allocation is inherently too little to reach the maternal health programmes or the health budget allocation is enough but mismanaged or does not prioritize the maternal health programmes thus raising the question of responsibility and accountability of the respective managers or authorities. This finding is in line with the reviewed literature which highlighted that spending alone on health by government does not necessarily equate to excellent outcomes on maternal health (Arthur and Oaikhenan, 2017), in fact, quality of financial systems plays a critical role in achieving better outcomes (Kulkarni, 2016). The non-dependency of maternal mortality on government funding (i.e., how much money health facilities are given) reveals to us that the human factor may be a contributor to the maternal mortality in South Africa. Furthermore, the level of knowledge and skills of health professionals has to be interrogated with the aim of establishing better health care, thus effectively addressing maternal mortality.

More research is thus recommended to uncover more possible reasons which could explain the non-dependency of maternal mortality rate on government financial grants. More importantly, the research revealed that for public health to succeed, managers must look beyond the narrative of inject more money and all shall be well and start introducing strict measures to ensure accountability and responsibility for the allocated budgets.

REFERENCES

Agyepong, I.A., Kwamie, A., Frimpong, E., Defor, S., Ibrahim, A., Aryeetey, G.C., Lokossou, V., Sombie, I. (2017) Spanning maternal, newborn and child health (MNCH) and health systems research boundaries: Conducive and limiting health systems factors to improving MNCH outcomes in West Africa. Health Research Policy and Systems, 15(1), 54-70.

Aísa, R., Clemente, J., Pueyo, F. (2014), The influence of (public) health expenditure on longevity. International Journal of Public Health, 59(5), 867-875.

Alkema, L., Chou, D., Hogan, D., Zhang, S., Moller, A.B., Gemmill, A., Fat, D.M., Boerma, T., Temmerman, M., Mathers, C., Say, L. (2016), Global, regional, and national levels and trends in maternal mortality between 1990 and 2015, with scenario-based projections to 2030: A systematic analysis by the UN Maternal Mortality Estimation Inter-Agency Group. The Lancet, 387(10017), 462-474.

Arthur, E., Oaikhenan, H.E. (2017), The effects of health expenditure on health outcomes in Sub-Saharan Africa (SSA). African Development Review, 29(3), 524-536.

Bazuaye, A., Okonofua, F.E. (2013), Tackling maternal mortality in Africa after 2015: What should the priorities be? African Journal of Reproductive Health, 17(2), 9-17.

Bein, M.A., Unlucan, D., Olowu, G., Kalifa, W. (2017), Healthcare spending and health outcomes: Evidence from selected East African countries. African Health Sciences, 17(1), 247-254.

Bijlmakers, L., Sayinzoga, F., Tetui, M., Van Der Velden, K., Van Dillen, J. (2019), Understanding Variation in Maternal Health Service Coverage and Maternal Health Outcomes among Districts in Rwanda. Available from: https://www.biorxiv.org/content/10.1101/516112v1 [Last accessed on 2020 Feb 10].

Borghi, J.O., Ensor, T., Somanathan, A., Lissner, C., Mills, A., Lancet Maternal Survival Series Steering Group. (2006), Mobilising financial resources for maternal health. The Lancet, 368(9545), 1457-1465.

Damian, D.J., Njau, B., Lisasi, E., Msuya, S.E., Boulle, A. (2019), Trends in maternal and neonatal mortality in South Africa: A systematic review. Systematic Reviews, 8(1), 76.

Eidson, K. (2019), America's Maternal Mortality Crisis: Policy Proposal. p. 1-7. Available from: https://www.digitalrepository.trincoll.edu/trinitypapers/75 [Last accessed on 2019 Dec 20].

Entrepreneur. (2016), South African Government Grant. Available from: https://www.entrepreneurmag.co.za/advice/funding/government-funding-funding/government-grants [Last accessed on 2018 Mar 10].

Gallet, C.A., Doucouliagos, H. (2017), The impact of healthcare spending on health outcomes: a meta-regression analysis. Social Science and Medicine, 179, 9-17.

Hooda, S.K. (2014), Health expenditure, health outcomes and the role of decentralised governance: Evidences from rural India. Journal of Indian School of Political Economy, 26(4), 99-125.

Jaba, E., Balan, C.B., Robu, I.B. (2014), The relationship between life expectancy at birth and health expenditures estimated by a cross-country and time-series analysis. Procedia Economics and Finance, 15, 108-114.

Jakovljevic, M.M. (2016), Comparison of historical medical spending patterns among the BRICS and G7. Journal of Medical Economics, 19(1), 70-76.

Kulkarni, L. (2016), Health inputs, health outcomes and public health expenditure: Evidence from the BRICS countries. International Journal of Applied Economics, 31(1), 72-84.

Kuruvilla, S., Bustreo, F., Kuo, N., Mishra, C., Taylor, K., Fogstad, H., Thomas, J. (2016), The Global strategy for women's, children's and adolescents' health (2016-2030): A roadmap based on evidence and country experience. Bulletin of the World Health Organization, 94(5), 398-400.

Kuruvilla, S., Sadana, R., Montesinos, E.V., Beard, J., Vasdeki, J.F., de Carvalho, I.A., Thomas, R.B., Drisse, M.N.B., Daelmans, B., Goodman, T., Koller, T. (2018), A life-course approach to health: Synergy with sustainable development goals. Sustainable Development, 96(1), 40-52.

Machira, K., Palamuleni, M. (2018), Women's perspectives on quality of maternal health care services in Malawi. International Journal of Women's Health, 10, 25-34.

Masters, R., Anwar, E., Collins, B., Cookson, R., Capewell, S. (2017), Return on investment of public health interventions: A systematic review. Journal of Epidemiology and Community Health, 71(8), 208141.

Murray, C.J., Laakso, T., Shibuya, K., Hill, K., Lopez, A.D. (2007), Can we achieve millennium development goal 4? New analysis of country trends and forecasts of under-5 mortality to 2015. The Lancet, 370(9592), 1040-1054.

National Planning Commission. (2013), National development plan Vision 2030. Nepal: National Planning Commission. p298-324.

Piane, G.M. (2019), Maternal mortality in Nigeria: A literature review. World Medical and Health Policy, 11(1), 83-94.

Proulx, K.R., Ruckert, A., Labonté, R. (2017), Canada's flagship development priority: Maternal, newborn and child health (MNCH) and the sustainable development goals (SDGs). Canadian Journal of Development Studies/Revue canadienne d'études du développement, 38(1), 39-53.

Rahman, M.M., Khanam, R., Rahman, M. (2018), Health care expenditure and health outcome nexus: New evidence from the SAARC-ASEAN region. Globalization and Health, 14(1), 113-124.

Riman, H.B., Akpan, E.S. (2012), Healthcare financing and health outcomes in Nigeria: A state level study using multivariate analysis. International Journal of Humanities and Social Science, 2(15), 296-309.

Searing, A., Ross, D.C. (2019), Medicaid Expansion Fills Gaps in Maternal Health Coverage Leading to Healthier Mothers and Babies. India: Academy Health 2019 National Health Policy Conference. p1-12.

Sengupta, K.E.Y., (2015), Health expenditure and its impact on health status. In: Proceedings of International Academic Conferences (No. 2804594). England: International Institute of Social and Economic Sciences.

Stats, S.A. (2011), Statistics South Africa. Formal Census. Available from: http://www.statssa.gov.za [Last accessed on 2019 Mar 01].

Stenberg, K., Hanssen, O., Edejer, T.T.T., Bertram, M., Brindley, C., Meshreky, A., Rosen, J.E., Stover, J., Verboom, P., Sanders, R., Soucat, A. (2017), Financing transformative health systems towards achievement of the health sustainable development goals: A model for projected resource needs in 67 low-income and middle-income countries. The Lancet Global Health, 5(9), 875-887.

World Health Organization. (2016), World Health Statistics 2016: Monitoring Health for the SDGs Sustainable Development Goals. Geneva: World Health Organization. p39. Available from: http://www.who.int/gho/publications/world_health_statistics/2016/en [Last accessed on 2018 Mar 01].

Zaman, S.B., Hossain, N. (2017), Universal health coverage: A burning need for developing countries. Journal of Medical Research and Innovation, 1(1), 18-20.