

(RESEARCH ARTICLE)

## Budgetary parameters on health human resource among healthcare workers in Samburu County Referral Hospital, Kenya

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### Abstract

Health should be the colossus of each country if not the world, since everything else from being human depends on the health status of that people. A healthy nation is a working nation and a working nation is a growing and developing nation. While the economy of majority of countries is growing the health budget of all if not majority of the countries is increasing at a very high rate While markets adapted quickly to growing demand, public policy to address market failures in health care and protect the most vulnerable has adjusted more slowly. The chief reason for carrying out this project was to determine the budgetary parameters on Health Human Resource among Healthcare Workers in Samburu County Referral Hospital, Kenya. The investigation was a cross-sectional study. A sample population of 106 participants was picked using Fishers et al method of 1998. Data collection was done using a survey with open and closed ended queries. A key informant interviews was held with the various top level management managers to gain deeper insights into the study. A strict inclusion criterion was followed to select the respondents from all trained health personnel in Samburu County Referral Hospital. Data was analysed using SPSS, presented in figures with various diagrams like charts and tables and interpreted using descriptive statistics. Majority of the healthcare workers agreed that they do not receive their salary on time with a statistically significant value  $p = 0.0001$ , indicating that the county has a challenge financial resources to pay its workers on time. With regards to remuneration among the healthcare workers a small number of about 4% with a  $p$  value of 0.002 strongly agreed with being comfortable, they seem to be satisfied with their kind of remunerations they receive. A health budget is a pivotal and consequential organizational document that guides and dictates major financial objectives and even a monitoring tool towards the agreed health policies, strategies and policies. The findings will enable the policy makers and other shareholders to review the health policies in order to address the budgetary parameters on Health Human Resource among Healthcare Workers.

**Keywords:** Budget; County Executive Committee; Chief Officer of Health; PHC; UHC; SDGs.

### 1. Introduction

Engaging in budget preparation, understanding guiding principles of budgeting as well as the political dynamics that enable the budget elaboration and approval process, is essential for health planners and managers [9]. In many countries, a lack of understanding of budgeting issues results in delinked processes such that health policy-making, planning, costing and budgeting take place independently of each other. This leads to a misalignment between the health sector priorities outlined in overall strategic plans and policies and the funds that are ultimately allocated to the health sector through the budgeting process. This misalignment has negative consequences: resources are not used as intended, and accountability is weakened. On the other hand, a good understanding of the budget process and engagement by MoH and other health sector stakeholders at the right time during the budget cycle will increase the chances that the final resource allocation matches planned health sector needs [13].

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The health sector is growing faster than the economy as a whole. Yet this progress continues to leave too many countries and too many people behind [10]. Progress in access to services is slowing globally, with lower annual rates of increase between 2010 and 2015 than between 2000 and 2010. While markets adapted quickly to growing demand, public policy to address market failures in health care and protect the most vulnerable has adjusted more slowly. Large inequities remain between and within countries [1]. Progress is particularly slow in improving access to skilled health workers and essential medicines. Progress also comes at a cost, with an increase in out-of-pocket spending globally as social protection policies and institutions adapt to the new parameters of health service markets. Progress can be accelerated. The targets set for universal health coverage (UHC) in the SDGs in low and middle income countries can be achieved through the primary health care (PHC) route with a relatively modest additional investment and increase in health budgets [5].

Two years into the Sustainable Development Goals era, global spending on health continues to rise. It was US\$ 7.8 trillion in 2017, or about 10% of GDP and \$1,080 per capita – up from US\$ 7.6 trillion in 2016 [11]. The health sector continues to expand faster than the economy. Between 2000 and 2017, global health spending in real terms grew by 3.9% a year while the economy grew 3.0% a year. Middle income countries are rapidly converging towards higher levels of spending. In those countries, health spending rose 6.3% a year between 2000 and 2017 while the economy rose by 5.9% a year. Health spending in low income countries rose 7.8% a year. Across low income countries, the average health spending was only US\$ 41 a person in 2017, compared with US\$ 2,937 in high income countries – a difference of more than 70 times. High income countries account for about 80% of global spending, but the middle income country share increased from 13% to 19% of global spending between 2000 and 2017 [12]. Public spending represents about 60% of global spending on health and grew at 4.3% a year between 2000 and 2017. This growth has been decelerating in recent years, from 4.9% a year growth in 2000–2010 to 3.4% in 2010–2017. As the health sector grew, it became less reliant on out-of-pocket spending. Total out-of-pocket spending more than doubled in low and middle income countries from 2000 to 2017 and increased 46% in high income countries. But it grew more slowly than public spending in all income groups. Donor funding represents 0.2 % of health spending globally. It continues to be an important source in low income countries at 27% of health spending and 3% in lower middle income countries [12].

Health is financed by public and private funds. To make progress toward universal health coverage (UHC), a predominant reliance on public, compulsory, prepaid funds is necessary. Therefore, the way budgets are formed, allocated and used in the health sector is at the core of the UHC agenda [13]. Raising domestic public funds is essential for universal health coverage (UHC). No country has made significant progress toward UHC without increasing reliance on public revenues. Therefore, domestic tax systems that are essential to support country's fiscal space expansion are central to the UHC agenda [3].

The appropriate amount of spending in a country with a malnourished population facing endemic malaria and an epidemic of HIV/AIDS is likely to be very different from one with limited infectious disease and a high incidence of neoplasms and chronic conditions [8]. It is also apparent from frequent references to an alleged WHO "recommendation" that countries should spend 5 percent of GDP on health, a recommendation which was never formally approved and which has little basis in fact. The 5 percent figure first appeared in WHO documents in 1981 as an indicator that should be monitored, not as a recommended level of health spending. It appears that researchers, journalists, and policymakers later transformed the figure into a recommendation [8].

One of the dominant discourses in the public health domain within context of provision of Universal Health Coverage is the shortage of adequate number of qualified medical doctors and other healthcare professionals. World Health Organization (WHO) has promulgated desirable doctor–population ratio as 1:1,000. Yet, over 44% of WHO Member States reported less than one physician per 1,000 population. According to a 2018 survey by the Physicians Foundation, doctors on average work 51 hours a week and see 20 patients a day. Almost a quarter of their time is taken up with nonclinical (and frustrating) paperwork. The number of patients to whom a doctor can deliver excellent care without sacrificing health and job satisfaction depends on many factors. Universal healthcare focuses on access to quality services for citizens of all social classes. This requires bold discussions around the key pillars of an effective health system as defined by World Health Organization. [10].

The fact that Africa has fewer doctors than the rest of the world has frequently been identified as one of the root causes of the continent's health challenges [2]. A key determinant is the number of tasks that can be delegated. In health financing, Kenya ranks position 140 out of 190 in the WHO Ranking of the World's Health Systems. The difference between us and leading countries is health financing. This has greatly affected other components such as human resources, essential medical products and technologies and, ultimately, service delivery [7]. The WHO provides for minimum staffing norms, which were customized in the August 2014 Human Resources for Health Staffing Norms and Standards by the Ministry of Health. In Kenya, for instance, the doctor to patient ratio is 1 to 17,000 against the World

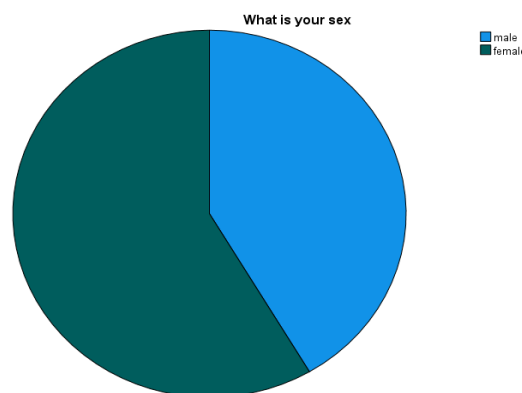
Health Organization’s recommended ratio of 1 to 1,000. With the total population in Kenya currently standing at almost 50 million people, this is proof that the country needs to put more effort on the number of doctors for a steady healthcare system in Kenya. This was to be achieved by employment of 12,000 health workers per year for four years, but the government has since employed only 15,000 in four years [1]. According to the guidelines, we were supposed to have 16,278 clinical officers, 13,141 doctors and 38,315 nurses in public health sector employment against the current 6,000 clinical officers, 5000 doctors, and 25,000 nurses. The ideal minimum health worker to population ratio should be 23 health workers to 10,000 Kenyans or 40 clinical officers per 100,000 Kenyans, 32 doctors per 100,000 Kenyans or 95 nurses per 100,000 Kenyans. Currently, Kenya has 2,204 active medical specialists of the 2,711 that are registered by the doctors’ board and in view of the World Health Organization’s recommendation of one doctor per 1,000 populations, Kenya has an absolute deficit of 40,332 doctors [8].

The government reached out to seek help from the government of Cuba, and just recently, a total of 110 Cuban doctors landed in Kenya for the purposes of ‘helping boost health sector in Kenya’ [4]. Bordering Baringo County to the west, Laikipia County to the South, Isiolo County to the East, Turkana County to the northwest and Marsabit County to the north. Samburu County is in the ASAL. It is due to the deficiency of human resource for health that the Kenyan Government decided to import 100 Cuban doctors and dispatch at least 2 in each county, including Samburu County. With competition for resources and a stifled budget Samburu county hospital struggles to run their daily health mandate leave alone achieving their objectives. In essence, developing robust health budget envelopes requires strong engagement by health ministries with national budget decision-makers, to make the standpoint of the health sector clear, comprehensible and compelling. This requires MoH and planning stakeholders to think through the operational details and costs of health sector needs and how health services should be purchased within the framework of existing PFM rules [7].

## 2. Material and methods

The study utilized a cross-sectional method study design, the study area was Samburu County Referral Hospital. This is the largest hospital in Samburu County. Conferring to the 2019 Census, Samburu County populace had 310,327 persons with a domestic of 4.7 and a populace mass of fifteen people per Km<sup>2</sup> and a populace growing rate of two percent per annum. The targeted population composed of 174 health workers that work at Samburu County Referral Hospital. These health workers were the trained personnel who provide healthcare services. The study included all 174 trained health personnel from all cadres in Samburu county referral Hospital. Stratification among the cadres and snow balling in top level management was the sampling used and a simple structured questionnaire together with a key informant interview schedule were utilized among the respondents. Data analysis was done using SPSS. An informed consent and ethical approvals were sought after from all relevant bodies and ethical principles observed before obtaining consents from the respondents.

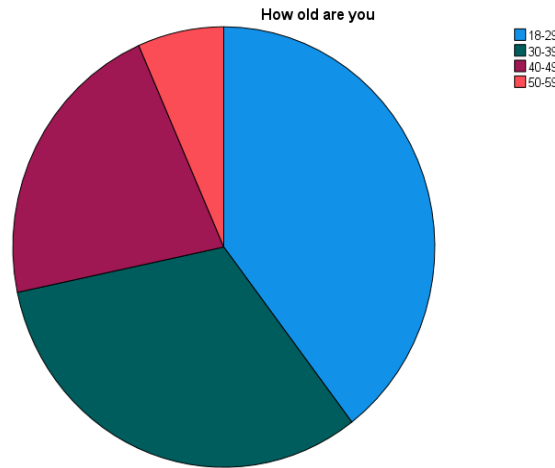
## 3. Results and Discussions



**Figure 1** Gender distribution among the study population

During the study a total of 106 out of the 144 responded participated in the study through completing and returning the study questionnaire. Healthcare staff in the age group 18-25 accounted for the greatest number of health care workers in Samburu sub county referral hospital, with 39.6% followed by 26-35 with 32.1%, 36-45 (21.7%), and 46-59 (6.6%), the mean age of the study population was 33.9 +/-1.9. Majority of the health care workers had attained collage

education at 52.8% and university graduates at 36.8% and finally 10.4 % had no access to education. Catholics were the most represented religious group 41.5%, followed by Protestants 34.9% and Islam at 9.4%. Majority of the health care workers 67.9% were married, followed by singles at 21.7 % and separated couples at 2.8% least represented.



**Figure 2** Age distribution among the study population

**Table 1** Social demographic characteristics

Social demographic characteristic	Frequency	Percent
Gender (n=106)		
Male	45	42.5
Female	61	47.5
Age (years) (n=106)		
18-25	42	39.6
26-35	34	32.1
36-45	23	21.7
46-59	7	6.6
Level of education (n=106)		
College	56	52.8
University	39	36.8
Others	11	10.4
Religion(n=106)		
Catholics	44	41.5
Protestants	37	34.9
Muslims	10	9.4
Others	15	14.2
Marital status (n=106)		
Single	23	21.7
Divorced	8	7.5
Married	72	67.9
Separated	3	2.8

Majority of the healthcare workers agreed that they do not receive their salary on time with a statistically significant value  $p = 0.0001$ , indicating that the county has a challenge financial resources to pay its workers on time. This was in

tandem with The COH who complained of diverting budget allocation resources meant for health to other uses within their county budget. This he claimed causes lots of issues giving an example of the latest incident of staff picketing. “Due to the strained budget resources it becomes difficult to even please or motivate the healthcare workers”. He gave an example of the nurses cadre where despite majority being promoted, re-designated and even redeployed under UHC, the county struggles to achieve the recommended nurse patient ratio. He alleged “it’s difficult even to attract specialized cadres due to their budget allocations and the fact that we are in the ASAL”. He stated that for an effective healthcare model and to address the disparities in ASAL, county health budget allocation is supposed to be above 20% and thereabout whereas what they get is way below 15%. This agreed with [13] that stated, appropriate amount of spending in a country with a malnourished population facing endemic malaria and an epidemic of HIV/AIDS is likely to be very different from one with limited infectious disease and a high incidence of neoplasms and chronic conditions.

**Table 2** Social economic factors that influence shortage of human resource for health

Social economic factors	Rating					
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	TOTAL
Do you receive your salary on time?  P value OR (95% CI)	8 (7.5%)  0.001 1.7	13 (12.3%)  0.02 1.3	19 (17.9%)  0.0001 2.2	39 (36.8%)  0.006 1.1	27 (25.5%)  0.0001 3	100%
Are you satisfied with your current remuneration?  P value OR (95% CI)	4 (3.8%)  0.002 1	32 (30.2%)  0.000 2.8	27 (25.5%)  0.008 1	28 (26.4%)  0.06 2.4)	15 (14.2%)  0.0054 1.6	100%
Are you satisfied with current civil service benefits e.g., hardship allowance, leave and housing allowance?  P value OR (95% CI)	10 (9.4%)  0.4 0.5	17 (16%)  0.5 0.5	24 (22.6%)  0.003 1.23	38 (35.8%)  0.000 3.1	14 (16%)  0.001 1.1	100%
Do you believe there are enough opportunities for promotion in the devolve system?  P value OR (95% CI)	22 (20.8%)  0.003 1.1	27 (25.5%)  0.000 1	18 (18%)  0.5 0.001	22 (20.8%)  0.005 2.1	17 (16%)  0.005 1.3	100%
Are your beneficial deductions like NHIF remitted in time in the devolve system?  P value OR (95% CI)	7 (6.6%)  0.5 0.1	16 (15.1%)  0.002 0.0	24 (22.6%)  0.000 0.5	30 (28.3%)  0.002 3.2	29 (27.4%)  0.0012 2.234	100%

With regards to remuneration among the healthcare workers a small number of about 4% with a p value of 0.002 strongly agreed with being comfortable, they seem to be satisfied with their kind of remunerations they receive. But

when it came to allowances and leave the workers were not satisfied with what they were getting from the county government of Samburu county. Most of the healthcare personnel felt that they were okay in relation to promotions in the county referral hospital. Final remittances like NHIF were not remitted in good time by the county government of Samburu, another indicator of strained recourses in the county [1]. This was echoed by both offices custodians The CEC was in agreement with the COH stating that the budget kitty they have for health is very minimal compared to the quantified activities. He pinpointed remunerations as a key area of focus where the County could do nothing as they had to abide by the SRC guidelines yet healthcare staff are very dissatisfied with the package they get despite being the best among all other professions. He gave an example of how a nurse is well paid as compared to an engineer. He stated a huge wage bill of 80% of their budget going to salaries. They had to redeploy more staff especially under the UHC program and supplement their already constrained budget during the current pandemic so as to meet unforeseen but urgent county health issues. If health is a mandate for a decentralized entity, the full health policy and planning cycles may fall under a decentralized authority. Fiscal decentralization involves shifting some responsibilities for expenditures and/or revenues to lower levels of government; this can have an impact on health sector funding, as well as how funds flow to the health system. In particular, it is important to clarify where local governments can determine the allocation of health expenditures themselves versus those where the center mandates expenditures and decentralized entities simply execute those health expenditures [6].

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#### 4. Conclusion

A health budget should be viewed as a crucial sectorial orienting text, declaring key financial objectives and its real commitment to implementing health policies and strategies. During the budgeting process, health planning stakeholders and managers will need to understand the guiding principles of budgeting as well as the political dynamics that enable the budget elaboration and approval processes; not doing so will be a huge missed opportunity to make the case for health. If MoH and other health sector stakeholders are actively and knowledgeably engaged with MoF and others during the budget cycle, resource allocation will more likely match planned health sector needs, and execution is more likely to follow allocations. More analysis is needed to understand how counties can ensure adequate financing to prioritize better health care.

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#### Compliance with ethical standards

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##### *Disclosure of conflict of interest*

The author is ONLY ONE: Salim Matagi Omambia

##### *Statement of informed consent*

Informed consent was obtained from all individual participants included in the study.

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