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**FACTORS INFLUENCING PROVISION OF HEALTH CARE IN  
A DEVOLVED SYSTEM OF GOVERNMENT, BUNGOMA  
COUNTY, KENYA**

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## FACTORS INFLUENCING PROVISION OF HEALTH CARE IN A DEVOLVED SYSTEM OF GOVERNMENT, BUNGOMA COUNTY, KENYA

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### Abstract

**Purpose:** The general objective of the study was to assess the factors influencing provision of health care in a devolved system of government, with a special focus on Bungoma County.

**Methodology:** The research design was a descriptive survey utilizing both the quantitative and qualitative aspect. The target population will be all the heads of the health facilities in Bungoma County. The sampling technique will be Non Probability Sampling where Purposive Sampling will be used to identify all the heads of government hospitals, Health Centers and dispensaries in the county as they possess the relevant knowledge required for the study. Questionnaires will then be used to obtain primary data. The Statistical Package for Social Sciences (SPSS version 12) was used to analyze quantitative data and presented using descriptive statistics. Qualitative data will be analyzed using thematic analysis and presented in form of narratives and themes.

**Results:** Based on the findings the study concluded that disbursement and adequacy of finances, supplies and equipment affected health care provision in a devolved system of government. The study also concluded that drugs procurement challenges affected health care provision in a devolved system of government. Findings further concluded that disbursement and adequacy of finances, supplies and equipment has a positive and significant effect on health care provision as supported by ( $r=0.502$ ,  $p=0.002$ ). However, procurement challenges has a positively and insignificant association on health care provision as supported ( $r=0.309$ ,  $p=0.603$ ) The results revealed that healthcare personnel had a positively and a significantly association to health care provision ( $r=0.406$ ,  $p=0.013$ ).

**Policy recommendation:** The findings of this study will be of great significance to the ministries of Health and that of Devolution and Planning plus the County Governments in Kenya on the factors that face devolution of health in order to come up with practical solutions.

**Keywords:** *Procurement and distribution, health care personnel challenges, devolved system of government*

## **1.0 INTRODUCTION**

### **1.1 Background**

Over the past twenty years, there has been a great deal of interest in the concept of devolution, not only among academic researchers but also among politicians, bureaucrats and the general public. This interest is not only confined to Western countries, but also evident in many African and Asian countries, as well as in the newly independent "island states" in the Pacific, namely; Fiji, Vanuatu, Solomon Islands and Papua New Guinea (Bhindi, 1990). There have been numerous conferences and workshops on the topic, sponsored and conducted by both the public and private sectors within these countries and by international agencies such as UNESCO and OECD. The issues relating to the notion and practices of devolution define a "new field" for research in public and educational administration (Kulwaum, 2005).

According to the World Bank, when governments devolve functions, they transfer authority for decision-making, finance and management to quasi-autonomous units of local government with corporate status. Devolution usually transfers responsibilities for services to municipalities that elect their own mayors and councils, raise their own revenues and have independent authority to make investment decisions. In a devolved system, local governments have clear and legally recognized geographical boundaries over which they exercise authority and within which they perform public functions(KPMG, 2013)

Through devolution, the central government relinquishes certain functions or creates new units of government that are outside its direct control. Devolution in its purest form has certain fundamental characteristics. First, local units of government are autonomous, independent and clearly perceived as separate levels of government over which central authorities exercise little or no direct control. Second, the local governments have clear and legally recognized geographical boundaries within which they exercise authority and perform public functions. Third, local governments have corporate status and the power to secure resources to perform their functions. Fourth, devolution implies the need to develop local governments as institutions in the sense that they are perceived by local citizens as organizations providing services that satisfy their needs and as governmental units over which they have some influence. Finally, devolution is an arrangement in which there are reciprocal, mutually beneficial, and coordinate relationships between central and local governments(UNDP, 1999).

According to Dent (2004), devolution has been advocated as a political response to the ills plaguing fragile and plural societies such as conflict inequalities, rent seeking, economic stagnation, corruption and inefficient use of public resources.

### **1.2 Statement of the Problem**

The Constitution of Kenya 2010 upon enactment and promulgation changed the Governance structure from a centralized unit to devolved sub-units known as the County Governments. It was expected that the onset of these devolved system of governments, after the 2013 Elections and enactment of subsidiary laws, would address development challenges of the centralized governance that Kenya has had since independence. While there has been greater public awareness in matters of accountability, transparency and prudent use of resources and at the same time the growth and strengthening of institutions charged with supervision and over

sighting of those implementing the projects at county level, a lot needs to be done to meet the spirit and the letter of the constitution and public expectation.

Moreover, the apparent positive realizations through County Governments' establishments in Kenya, they to a larger extent seem to have been overshadowed and threatened by a number of challenges, five years after the enactment of the Constitution. Currently, most media houses in Kenya are awash with negative reports about the County Governments that the impression given is that of; decentralization in Kenya could be a false start if not a total failure. The Auditor General's reports scream of massive impropriety in many Counties. A number of Governors have been summoned by the Senate to account. The allegations range from improper use of financial resources, flouting procurement rules and procedures or outright misappropriation.

According to the cabinet secretary for Devolution and planning, during the evaluation of the State of Counties in Kenya today, there have been teething problems with different institutions grappling with new roles and mandates. Transition from national to county governments has been marred by inconsistency, poor understanding of the system, management issues and lack of coordination between the two levels of government. There has been a general fear among health care workers about their job security. Additionally, there have been challenges in resource distribution whereby the allocation of funds to counties has generated a lot of debate and controversy. This has led to delays or stalling of functions at the county level. There has been a spate of health personnel downing their tools; protesting against the transfer of Health functions to the counties. The nationwide strike of nurses and doctors in 2014 arose out of devolution of health services. Doctors and nurses also demanded a national health commission be established to manage the devolution process and requested that parliament enacts a Health Bill.

In Kenya's Bungoma District, three key issues can be identified as among the most significant contributors to morbidity and mortality. They include AIDS, malaria and healthcare access. These are diseases that have proven difficult to combat and present a significant drain not only on the health of individuals infected but more broadly on the economic productivity of Bungoma. With access to affordable, quality healthcare lacking in Bungoma, diseases including AIDS and malaria are able to flourish.

The situation of health services in Bungoma County is very worrying, particularly at the county health facilities. The strike by health workers at the hospitals has had devastating effects on the health of the residents and has resulted to the breakdown of primary health care especially care of pregnant women and newborns. Vital vaccinations and disease prevention programs are all suffering (Inter-religious Council of Kenya, 2015).

It is in light of the aforementioned reports and other similar health provision challenges that the study seeks to assess the theory and practice of health service provision, challenges and possible solutions to the problems facing the health sector in the devolved system of government.

### **1.3 Objectives of the study**

1. To assess the extent to which disbursement of adequate finances, supplies and equipment affect health care provision in the devolved system of government.

2. To determine the effect of procurement and distribution of drugs on health care provision in the devolved system of government.
3. To establish the extent to which health care personnel challenges affect health care provision in the devolved system of government.

## **2.0 LITERATURE REVIEW**

### **2.1 Review of Theoretical Literature**

#### **2.1.1 Participation Theory**

At all levels of government, citizen participation programs were launched, beginning in the 1960s with the underlying assumption that if citizens became actively involved as participants in their democracy, the governance that emerged from this process would be more democratic and more effective. This began with Arnstein's ladder of participation. He described different levels of participation; manipulation or therapy of citizens, consultation and genuine participation, i.e. the levels of partnership and citizen control (Storey, 1999).

Participation is often referred to as community participation. It is the role of community in decision-making. It represents a move from the global, aspatial, top-down strategies that dominated early development initiatives to more locally sensitive methodologies (Storey, 1999). Claridge (2004) suggested that the historical antecedents of community participation include: the legacy of western ideology, the influence of community development and the contribution of social work and community radicalism. According to Holcombe (1995), acknowledgement of the importance of participation grew out of the recognition that the worlds' poor have actually suffered as a result of development, and that everyone needs to be involved in development decisions, implementation and benefits.

As participatory approaches advanced, they highlighted the weaknesses inherent in traditional, top-down approaches that focused on single disciplines and reductionist paradigms (Johnson & Walker, 2000). They identified the limitation of the state in top-down resource conservation practices and emphasizes popular participation as the remedy of these shortcomings. Mompoti and Prinsen (2000) made a similar observation of the uniqueness of an individual as an entity who is capable of making unique contributions to decision-making. This move represents a move towards people centered development at a normative level. (Claridge, 2004) suggested that the community development movement of the 1950s and 1960s was another source of inspiration for contemporary community participation theory. This theory therefore supports devolution of services and resources as well as community participation

### **2.2 Empirical Literature Review**

#### **2.2.1 Disbursement of adequate finances, supplies and equipment**

In August 2010, 67 percent of voters approved the new constitution in a referendum, commencing a new round of decentralization. The drafters of the 2010 constitution chose to devolve a wide range of administrative, political and financial functions to 47 newly created counties, based on Kenya's 1992 district framework (Republic of Kenya, 1992). These new functions would be administered by locally elected politicians and civil servants, with formula-

driven funding from the national government and limited locally generated revenue. The national government could also provide grants to counties for priority services. Recognizing the complexities inherent in devolution, the Health Policy Project (HPP) with USAID/Kenya and Kenyan government support brought together health system actors in various forums from June 2012 to March 2013 to develop a shared understanding of devolution, discuss common concerns, and find consensus on implementation (Williamson & Mulaki, 2015).

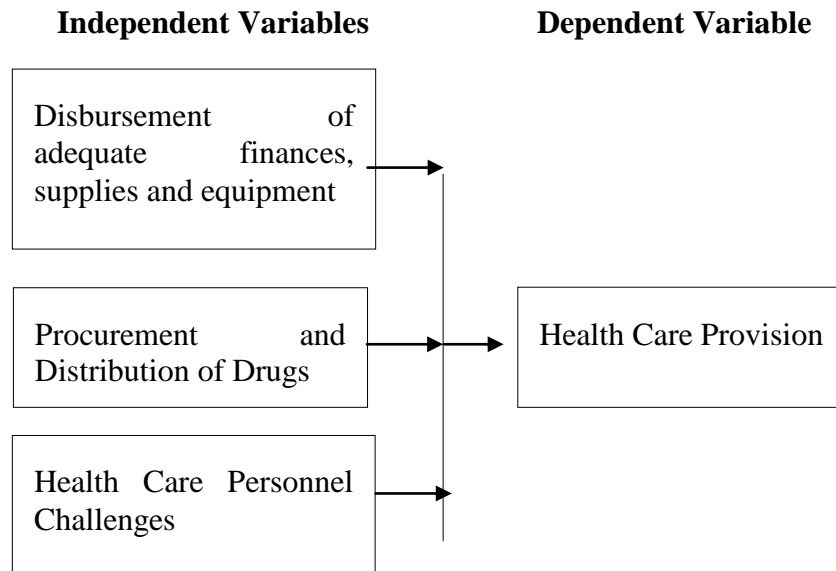
### **2.2.2 Procurement and Distribution of Drugs**

According to a report by Murkomen (2012), the Kenyan constitution draft policy had allocated the function of medical procurement to national government. The Health Bill allocated the national government the function of “Procurement of pharmaceutical and non-pharmaceutical goods for public health facilities except as otherwise delegated to procuring entity within the County government”. National government under the Bill was expected to enact regulations on “The procurement of pharmaceutical and non-pharmaceutical drugs.” Sec (57): the procurement for the public health services of medicines, vaccines and other medical goods would be undertaken primarily by the Kenya Medical Supplies Agency (KEMSA). The classes of products procured by the Kenya Medical Supplies Agency would extend to therapeutic feeds and nutritional formulations in addition to pharmaceutical and non-pharmaceutical goods. The Kenya Medical Supplies Agency would be the Point of first call for procurement at the county level and it would endeavor to establish branches within each county at such locations as it determined (Murkomen, 2012).

### **2.2.3 Health care personnel challenges**

During the consultative meeting in 2012, the Public Service Commission explained its roles in the devolved government system. It would nominate people to the judicial service commission and to the salaries and remuneration commission, recommend people to be principal secretaries, and hear and settle appeals to decisions by county government public service agencies. Each county would therefore establish its own county public service board. The following laws were passed regarding human resources management in the devolved system: Article 235 allows counties to establish offices for public service and appoint people to those offices, Article 236 protects public officers and Section 138 of the County Governments Act stipulates that officers employed by government agencies that the devolution process abolishes will be seconded to new county agencies on the same terms of service they had before and that this cannot be altered (Consultative Meeting Report, 2012).

## 2.3 Conceptual Framework



**Figure 1: Figure showing the relationship between theory, independent and dependent variable**

## 2.4 Operationalization of Variables

### 2.4.1 Disbursement of adequate finances, supplies and equipment

This variable seeks to establish how the facility receives finances from the county and how it uses the same to purchase supplies and equipment for efficient provision of health care. It also establishes whether these resources are adequate or not.

### 2.4.2 Procurement and distribution of drugs

The researcher seeks to determine what challenges face procurement of drugs that leads to delays and shortages both at the county and facility level, and how this affects provision of care.

### 2.4.3 Health care personnel challenges

In this variable, emphasis is placed on challenges experienced by the health care personnel that results to strikes and resignations and how these affect provision of health care in the health facilities.

## 3.0 METHODOLOGY

The research design will be a descriptive survey utilizing both the quantitative and qualitative aspect. The target population will be all the heads of the health facilities in Bungoma County. The sampling technique will be Non Probability Sampling where Purposive Sampling will be used to identify all the heads of government hospitals, Health Centers and dispensaries in the county as they possess the relevant knowledge required for the study. Questionnaires will then be

used to obtain primary data. The Statistical Package for Social Sciences (SPSS version 12) will be used to analyze quantitative data and presented using descriptive statistics. Qualitative data will be analyzed using thematic analysis and presented in form of narratives and themes

## 4.0 RESULTS FINDINGS

### 4.1 Descriptive Statistics

#### 4.1.1 Disbursement and adequacy of finances, supplies and equipment

The study sought to establish whether disbursement and adequacy of finances, supplies and equipment affects provision of health care in a devolved system of government, Bungoma county, Kenya. The responses were rated on a likert scale and the results presented in Table 1 below. A majority of the respondents 59.4 % disagreed that as the head of the health facility, they were given an opportunity to prepare financial budgets for their facility. A majority of 67.5% of the respondents disagreed that the county government allocated finances to the health facility as per the prepared and presented budget. A majority of 70.2 % of the respondents disagreed that the finances received from the county government were adequate to purchase the supplies and equipment required for the day to day running of the health facility. A majority of 67.5 % of the respondents disagreed that the supplies and equipment in the health facility was adequate for timely diagnosis and treatment of all patients requiring attention. Further, a majority of 62.1 % of the respondents agreed that the health facility got additional funding or equipment from donors and well-wishers. A majority of the respondents 62.1 % disagreed that the fees charged to patients was adequate. Finally, a majority of 67.5% of the respondents disagreed that the facility has enough equipment to effectively handle patients. On a five-point scale, the average mean of the responses was 2.23 which means that majority of the respondents were disagreeing to the statements in the questionnaire; however, the answers were varied as shown by a standard deviation of 1.25. The study seems to agree with (Williamson & Mulaki, 2015) who says that when revenues were devolved, few counties possessed the administrative capability to absorb the available funding or plan for its use. Although the national government was concerned about these capacity gaps, it had not outlined training and mentoring plans for the counties, as it expected to use the full three-year transition period originally allowed by law. Counties sought to expand the scope of resources transferred from the national government, increase their authority over services, and reduce national government restrictions. However, the national government fought to retain centralized control

**Table 1: Disbursement and adequacy of finances, supplies and equipment**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std .Dev
As the head of the	32.4%	27.0%	16.2%	18.9%	5.4%	2.38	1.277



health facility, you are given an opportunity to prepare financial budgets for your facility.

The county government allocates finances to the health facility as per the prepared and presented budget.

32.4%      35.1%      16.2%      5.4%      10.8%      2.27      1.28

The finances received from the county government are adequate to purchase the supplies and equipment required for the day to day running of the health facility

37.8%      32.4%      18.9%      5.4%      5.4%      2.08      1.14

The supplies and equipment in the health facility is adequate for timely diagnosis and treatment of all patients requiring attention.

37.8%      29.7%      21.6%      5.4%      5.4%      2.11      1.149

The health facility gets additional funding or equipment from donors and well wishers

35.10%      27.0%      16.2%      5.4%      16.2%      2.41      1.443

The fees charged to patients is adequate

35.1%      27.0%      21.6%      5.4%      10.8%      2.3      1.3

The facility has enough equipment to effectively handle patients

37.80%      29.70%      21.60%      5.40%      5.4%      2.11      1.149

**AVERAGE**

**2.23      1.25**

#### 4.1.2 Drugs Procurement Challenges

The respondents were also asked to identify on how the drugs used in the health facility were procured. Results in table 2 reveal that majority (48.6%) of the respondents agreed that drugs

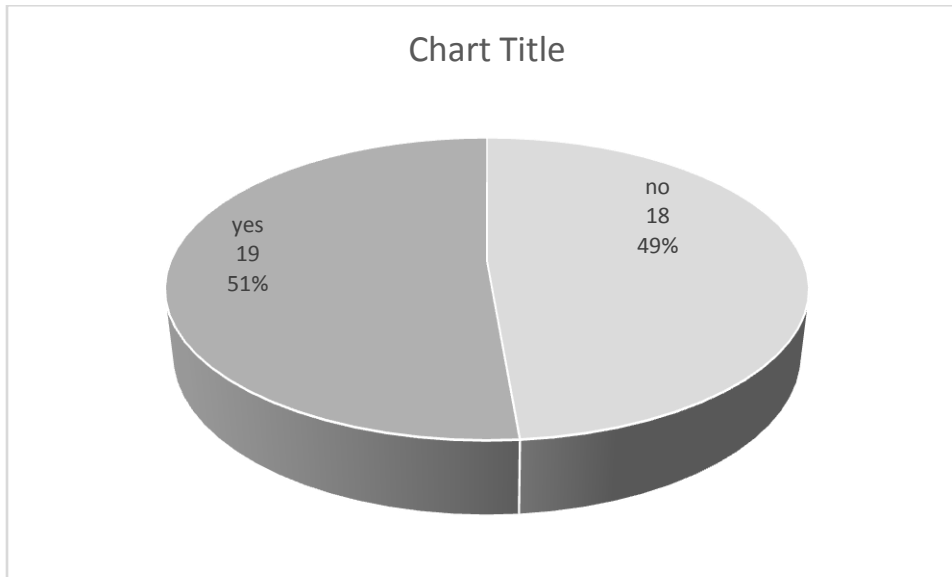
were procured directly from KEMSA.29.7% the respondents indicated that the drugs were procured through the county headquarters.21.6% the respondents indicated that the drugs were procured directly from other drug companies.

This indicates that procurement of drugs used in the health facility was a challenge to health care in a devolved system of government, Bungoma County, Kenya. This was in agreement with (Oketch, 2014) who reports further indicated that though devolution of health-care services was planned to be seamless and designed to be fool-proof, it was hard to maintain. Even as doctors resigned all over the place citing tribalism and missed salaries, hospitals ran the risk of going without crucial medical supplies as some counties turned their backs on state provider KEMSA, which they accused of inflating costs. Analysts concerns were that this state exposed millions of Kenyans to major health dangers, including counterfeit medicines and, worse, bare pharmacy shelves where procurement procedures proved ineffective. However, the county chiefs insisted there was no turning back as KEMSA had failed to live up to their expectations

**Table 2: How are the drugs used in the health facility procured?**

	<b>Frequency</b>	<b>Percent</b>	<b>Valid Percent</b>
Through the county headquarters	11	29.7	29.7
Directly from KEMSA	18	48.6	48.6
Directly from other drug companies	8	21.6	21.6
<b>Total</b>	<b>37</b>	<b>100</b>	<b>100</b>

The respondents were also asked to if they were involved in the procurement of drugs that were used in the facility. Results in figure 2 reveal that majority (51%) of the respondents agreed that they were involved in the procurement of drugs that were used in the facility.49 % the respondents indicated that they were not involved in the procurement of drugs that were used in the facility. This indicates procurement of drugs that were used in the facility was a procurement challenge to health care in a devolved system of government, Bungoma county, Kenya.



**Figure.2: Involvement in Procurement**

The respondents were also asked indicate the nature of their procurement involvement procurement of drugs that were used in the facility. Results in table 3 reveal that majority (54.1%) of the respondents participated in actual purchase of drugs while 24.3% the respondents agreed that they were consulted before purchase. Finally, (21.6%) of the respondents indicated that they participated in any other activity

**Table 3: Nature of Their Procurement Involvement**

	Frequency	Percent	Valid Percent
Consulted before purchase	9	24.3	24.3
Participate in actual purchase of drugs	20	54.1	54.1
Any other	8	21.6	21.6
<b>Total</b>	<b>37</b>	<b>100</b>	<b>100</b>

The respondents were also asked to indicate on how often were drugs supplied into the health facility Results in table 4 reveal that majority (32.4%) of the respondents agreed on any other method of drug supply while 29.7 % the respondents agreed drugs supply was done on a daily basis. 21.6 % the respondents agreed drugs supply was done on a monthly basis. Finally,16.2% the respondents agreed drugs supply was done weekly.

**Table 4 Frequency of Drugs Supply**

	Frequency	Percent
Daily	11	29.7
Weekly	6	16.2
Monthly	8	21.6
Any other	12	32.4
<b>Total</b>	<b>37</b>	<b>100</b>

The study sought to establish to what point the respondents agreed with the following statements. The responses were rated on a likert scale and the results presented in Table 5 below. A majority of the respondents 63.9% indicated that the time interval taken to supply drugs into the health facility was adequate. A majority of 63.9% of the respondents disagreed that drugs were received on time with no delays from the supplier or county. A majority of 66.7% of the respondent's disagreed that the drugs available in the health facility were adequate to provide basic health care to patients. Further, a majority (70.4 %) of the respondents indicated that they disagreed that procurement was done in a transparent manner. Finally, 70.4 % of the respondents disagreed that there were systems in place to ensure drugs were procured on time to avoid stock outs. On a five point scale the average mean of the responses was 2.2 which means that majority of the respondents were disagreeing to the statements in the questionnaire; however, the answers were varied as shown by a standard deviation of 1.1.

This results are supported by (Mutavi, 2015) who argue that as a result of these procurement challenges, there have been numerous reports on drug shortages in various counties. In the late 2015, the County Assembly Committee noted that most hospitals in Nairobi were poorly managed, understaffed and lacked essential drugs. Members visited Umoja 1 and Jericho health centers in their fact-finding mission on the state of health services in the county and reported lack of drugs in the health centers with patients resorting to buy medicine from private hospitals. From the report, the last time KEMSA supplied drugs to the two health centers was in August 2014. In their recommendation, they insisted that the issue of drug supplies to the facilities must be resolved immediately and future supplies to all other county health facilities be processed and delivered on time.

**Table 5: Procurement Challenges**

	strongly disagree	disagree	neutral	agree	strongly agree	Mean	Std. Deviation
The time interval taken to supply drugs into the health facility is adequate.	22.2%	41.7 %	16.7%	8.3%	11.1%	2.44	1.25
Drugs are received on time with no delays from the supplier or county	22.2%	41.7 %	22.2%	2.8%	11.1%	2.39	1.20
The drugs available in the health facility are adequate to provide basic	38.9%	27.8 %	22.2%	5.6%	5.6%	2.11	1.16

health care to patients.

Procurement is done in a transparent manner	27.8%	41.7 %	16.7%	8.3%	5.6 %	2.22	1.12
There are systems in place to ensure drugs are procured on time to avoid stock outs.	27.8%	41.7 %	16.7%	2.8%	11.1%	2.28	1.23
<b>AVERAGE</b>						2.2	1.195

#### 4.1.3 Health Care Personnel

The study sought to establish whether health care personnel affect health care in a devolved system of government, Bungoma County, Kenya. The responses were rated on a likert scale and the results presented in Table 6 below. A majority of the respondents 61.1% disagreed that the health care personnel in various departments was adequate to enable timely provision of health care. A majority of 66.7% of the respondents disagreed that the terms of employment for health workers in terms of transfers, salary payment and working conditions were clear. A majority of 63.9 % of the respondents disagreed that health workers in their facility could access training opportunities, ease of transfers and other welfare opportunities. Further, a majority (63.9 %) of the respondents disagreed that health workers were remunerated adequately. A majority of 66.7% of the respondents disagreed that health workers had job security. A majority of 63.9% of the respondents disagreed that health workers were adequately protected from risks involved in the job. On a five point scale, the average mean of the responses was 2.1 which means that majority of the respondents were agreeing to the statements in the questionnaire; however, the answers were varied as shown by a standard deviation of 1.28.

**Table 6: Health care personnel**

	strongly disagree	disagree	Neutral	agree	strongly agree	Mean	Std. Deviation
The health care personnel in various departments is adequate to enable timely provision of health care	36.1%	25.0%	30.6%	0.0%	8.3%	2.19	1.19
The terms of employment for health workers in terms of transfers, salary payment and working conditions are clear.	30.9%	35.8%	25.0%	0.0%	8.3%	2.11	1.19
Health workers in your facility can access training opportunities, ease of transfers and other welfare opportunities.	38.9%	25.0%	25.0%	0.0%	11.1%	2.19	1.28
Health workers are remunerated adequately	36.1%	27.8%	25.0%	2.80%	8.3%	2.19	1.25
The county government has adopted other ways of making sure health workers are satisfied at work (	25.0%	38.9%	25.0%	0.0%	11.1%	2.19	1.28

bonuses, team building)

Health workers have job security	38.9%	27.8%	25.0%	0.0%	8.3%	2.11	1.19
Health workers are adequately protected from risks involved in the job.	36.1%	27.8%	25.0%	2.80 %	8.3%	2.19	1.21
<b>Average</b>						2.16	1.2

#### 4.1.4 Health care provision

The study sought to establish health care provision in a devolved system of government. The responses were rated on a likert scale and the results presented in Table 7 below. A majority of the respondents 72.2% agreed that there had been an increase in the number of patients attended to monthly. A majority of 72.9% of the respondents agreed that there had been an increase in the number of inpatients and outpatients. A majority of 64.8% of the respondents agreed that there had been an improvement in the quality of service. Further, a majority (64.8 %) of the respondents agreed that there had been a reduction in cases of misdiagnosis. A majority of 56.7% of the respondents agreed there has been a decrease in the number of referrals. On a five point scale, the average mean of the responses was 2.1 which means that majority of the respondents were agreeing to the statements in the questionnaire; however, the answers were varied as shown by a standard deviation of 1.1.

**Table 7: Health care provision**

	strongly disagree	disagree	neutral	agree	strongly agree	Mean	Std. Dev
There has been an increase in the number of patients attended to monthly	36.1%	36.1%	16.7%	5.6%	5.6%	2.8	1.1
There has been an increase in the number of inpatients and outpatients	32.4%	40.5%	18.9%	2.7%	5.4%	2.0	1.0
There has been an improvement in the quality of service	27.0%	37.8%	27.0%	0.0%	8.1%	2.2	1.1
There has been a reduction in cases of misdiagnosis	40.5%	24.3%	24.3%	2.7%	8.1%	2.1	1.2
There has been a decrease in the number of referrals	35.1%	21.6%	29.7%	13.5%	0.0%	2.2	1.0
<b>Average</b>						2.1	1.1

## 4.2 Inferential Statistics

### 4.2.1 Correlation Analysis

The Table 7 below presents the results of the correlation analysis. It shows disbursement and adequacy of finances, supplies and equipment has a positively and significant effects on health care provision care in a devolved system of government, Bungoma county, Kenya. This is shown by the results on table 8; the findings indicated that disbursement and adequacy of finances, supplies and equipment has a positive and significant effect on health care provision as supported by ( $r=0.502$ ,  $p=0.002$ ). However, the table further indicates that procurement challenges has a positively and insignificant association on health care provision as supported ( $r=0.309$ ,  $p=0.603$ ). The results revealed that healthcare personnel has a positively and a significantly association to health care provision ( $r=0.406$ ,  $p=0.013$ ).

The situation of health services in Bungoma County is very worrying, particularly at the county health facilities. The strike by health workers at the hospitals has had devastating effects on the health of the residents and has resulted to the breakdown of primary health care especially care of pregnant women and newborns. Vital vaccinations and disease prevention programs are all suffering as supported by the **(Inter-religious Council of Kenya, 2015)** .

**Table 8: Correlation Matrix**

		<b>Disbursement and adequacy of finances, supplies and equipment</b>	<b>Procurement challenges</b>	<b>Healthcare personnel</b>	<b>Health care provision</b>
Disbursement and adequacy of finances, supplies and equipment	Pearson Correlation	1	0.233	0.299	.502**
	Sig. (2-tailed)		0.166	0.072	0.002
Procurement challenges	Pearson Correlation	0.233	1	0.068	0.309
	Sig. (2-tailed)	0.166		0.689	0.063
Healthcare personnel	Pearson Correlation	0.299	0.068	1	.406*
	Sig. (2-tailed)	0.072	0.689		0.013
Health Provision	Pearson Correlation	.502**	0.309	.406*	1
	Sig. (2-tailed)	0.002	0.063	0.013	

The results findings are supported by In (Osur, 2014) who argues that Kenya today, the Philippines history could be repeating itself. The frequent health worker's strikes are a signal that all is not well. Although resignations of health workers have been dismissed as insignificant, this

has been done without a thorough review of the sector, signaling the possibility that management at both national and county levels could be out of touch with emerging realities. In one incident, in a county in Western Kenya, a surgeon disagreed with the county on how services should be managed and the county rejected him. The government then transferred him to a neighboring county which also rejected him (Osuri, 2014)

#### 4.2.2 Regression Analysis

The results presented in table 9 present the fitness of model used of the regression model in explaining the study phenomena. Disbursement and adequacy of finances, supplies and equipment influencing provision of health care provision care in a devolved system of government, Bungoma county, procurement challenges influencing provision of health care provision care in a devolved system of government, Bungoma county, health personnel influencing provision of health care provision care in a devolved system of government, Bungoma county were found to be satisfactory variables in explaining health provision. This is supported by coefficient of determination also known as the R square of 36.3%. This means Disbursement and adequacy of finances, supplies and, procurement challenges, health personnel, explain 36.3% of the variations in the dependent variable which is health provision This results further means that the model applied to link the relationship of the variables was satisfactory.

**Table 9: Model Fitness**

Indicator	Coefficient
R	0.602
R Square	0.363
Adjusted R Square	0.487

In statistics significance testing the p-value indicates the level of relation of the independent variable to the dependent variable. If the significance number found is less than the critical value also known as the probability value (p) which is statistically set at 0.05, then the conclusion would be that the model is significant in explaining the relationship; else the model would be regarded as non-significant.

Table 10 provides the results on the analysis of the variance (ANOVA). The results indicate that the overall model was statistically significant. Further, the results imply that the independent variables affected health care provision in a devolved system of government, Bungoma county This was supported by an F statistic of 6.259 and the reported p value (0.002) which was less than the conventional probability of 0.05 significance level.

**Table 10: Analysis of Variance**

Indicator	Sum of Squares	df	Mean Square	F	Sig.
Regression	0.602	3	109.54	6.259	0.002
Residual	0.363	33	0.536		



Total 12.306 36

Regression of coefficients results in table 11 shows that there is a positive and significant relationship between disbursement and adequacy of finances, supplies and equipment procurement challenges, health personnel as supported by beta coefficients of 0.37, 0.204 and 0.281 respectively.

**Table 11: Regression of Coefficients**

	B	Std. Error	Beta		Sig.
(Constant)	1.14			4.42	
disbursement and adequacy of finances, supplies and equipment	5	0.259		2	0
drugs procurement challenges	0.18			2.47	0.01
health care personnel	1	0.073	0.37	8	8
			0.20	1.42	0.16
	0.12	0.084	4	6	3
			0.28		0.06
	0.14	0.073	1	1.93	2

**Dependent Variable: Health Care Provision**

The multiple linear regression model is as shown below.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e$$

Where:

Y = Health care provision

X<sub>1</sub> = disbursement and adequacy of finances, supplies and equipment

X<sub>2</sub> = drugs procurement challenges

X<sub>3</sub> = health care personnel

Thus, the optimal model for the study is;

Health care provision = 0.145 + 0.181 disbursement and adequacy of finances, supplies and equipment + 0.12 drugs procurement challenges + 0.14 health care personnel + e

-0.392 Patients care with possible risk to health - 0.392 Nurse Physician Conflict + 0.483 Consent to Treatment + 0.187 Information Confidentiality + e

**5.0 SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

**5.1 Summary of findings**

**5.1.1 Disbursement and adequacy of finances, supplies and equipment**

The first objective of the study was to establish whether disbursement and adequacy of finances, supplies and equipment affected provision of health care in a devolved system of government,

Bungoma county, Kenya. A majority of the respondents disagreed that as the head of the health facility, they were given an opportunity to prepare financial budgets for their facility. Further majority of the respondents disagreed that the county government allocated finances to the health facility as per the prepared and presented budget. Also majority of the respondents disagreed that the finances received from the county government were adequate to purchase the supplies and equipment required for the day to day running of the health facility. Majority of the respondents disagreed that the supplies and equipment in the health facility was adequate for timely diagnosis and treatment of all patients requiring attention. Majority agreed that the health facility got additional funding or equipment from donors and well-wishers. majority also disagreed that the fees charged to patients was adequate. Finally, a majority of the respondents disagreed that the facility has enough equipment to effectively handle patients. The average mean of the responses was 2.23 which means that majority of the respondents were disagreeing to the statements in the questionnaire; however, the answers were varied as shown by a standard deviation of 1.25. The findings indicated that disbursement and adequacy of finances, supplies and equipment had a positive and significant effect on health care provision as supported by ( $r=0.502$ ,  $p=0.002$ ). Findings further concluded that healthcare personnel influenced health care provision in a devolved system of government. disbursement and adequacy of finances, supplies and equipment has a positive and significant effect on health care provision as supported by ( $r=0.502$ ,  $p=0.002$ ).

The results were supported by the Centre for Health Solutions- Kenya (2014) in March 2014 who convened a stakeholders' forum aimed at identifying and discussing best practice and strategies for health systems strengthening in the devolved system of government. The highly interactive session achieved its intended objective with participants actively sharing current practice and ideas on how to better enhance health systems in light of devolution. They noted that challenges in resource distribution had been witnessed whereby the allocation of funds to counties was inconsistent. This had consequently led to stalling of functions at the county level, further creating inefficiencies

### **5.1.2 Drugs Procurement Challenges**

The second objective was to assess drugs procurement challenges which affected provision of health care in a devolved system of government, Bungoma County, Kenya. Majority of the respondents agreed that drugs were procured directly from KEMSA. Respondents also indicated that the drugs were procured through the county headquarters. Finally respondents indicated that the drugs were procured directly from other drug companies.

This indicates that procurement of drugs used in the health facility was a challenge to health care in a devolved system of government, Bungoma County, Kenya. This was in agreement with (Oketch, 2014) who reports further indicated that though devolution of health-care services was planned to be seamless and designed to be fool-proof, it was hard to maintain. Even as doctors resigned all over the place citing tribalism and missed salaries, hospitals ran the risk of going without crucial medical supplies as some counties turned their backs on state provider KEMSA, which they accused of inflating costs. Analysts concerns were that this state exposed millions of Kenyans to major health dangers, including counterfeit medicines and, worse, bare pharmacy

shelves where procurement procedures proved ineffective. However, the county chiefs insisted there was no turning back as KEMSA had failed to live up to their expectations.

The respondents were also asked to if they were involved in the procurement of drugs that were used in the facility. Majority of the respondents agreed that they were involved in the procurement of drugs that were used in the facility. However, the respondents also indicated that they were not involved in the procurement of drugs that were used in the facility.

The respondents were also asked to indicate the nature of their procurement involvement in the procurement of drugs that were used in the facility. Majority of the respondents participated in the actual purchase of drugs also respondents agreed that they were consulted before purchase. Finally, respondents indicated that they participated in any other activity in the procurement of drugs at the health facility.

The respondents were also asked to indicate on how often drugs were supplied into the health facility. Majority of the respondents agreed on any other method of drug supply while the respondents also indicated that drug supply was done on a daily basis. Finally, respondents agreed drug supply was done on a monthly basis while others indicated that drug supply was done weekly.

The study also sought to establish to what point the respondents agreed with the following statements with regard to procurement challenges affecting health provision.

A majority of the respondents disagreed that the time interval taken to supply drugs into the health facility was adequate. A majority of the respondents also disagreed that drugs were received on time with no delays from the supplier or county while a majority of the respondents disagreed that the drugs available in the health facility were adequate to provide basic health care to patients. Further, a majority of the respondents indicated that they disagreed that procurement was done in a transparent manner while finally the majority of respondents disagreed that there were systems in place to ensure drugs were procured on time to avoid stock outs. The average mean of the responses was 2.2 which means that majority of the respondents were disagreeing to the statements in the questionnaire; however, the answers were varied as shown by a standard deviation of 1.1. Further indicates that procurement challenges have a positive and insignificant association on health care provision as supported ( $r=0.309$ ,  $p=0.603$ )

KEMSA, on the other hand, turned the heat on the county chiefs, saying the allegation that its drugs are overpriced was outrageous with its Chief executive officer John Munyu arguing that the supplies at the agency were funded by the state, and that, because of the high volumes passing through his office, the ensuing economies of scale meant they were likely to get the drugs at a much cheaper cost than what individual counties would realize if they went alone. However, even as Dr Munyu defended the efficacy of his agency, more than 10 counties had already ordered drugs worth Sh200 million from Mission for Essential Drugs and Supplies (MEDS), a regional faith-based organization. Some counties were willing to order from MEDS while others preferred to stay with KEMSA (Oketch, 2014).

### **5.1.3 Health Care Personnel**

The third objective was to determine whether health care personnel affected provision of health care in a devolved system of government, Bungoma County, Kenya.

Results showed that a majority of the respondents disagreed that the health care personnel in various departments was adequate to enable timely provision of health care. Results also showed that a majority of the respondents disagreed that the terms of employment for health workers in terms of transfers, salary payment and working conditions were clear. Results also indicated that a majority of the respondents disagreed that health workers in their facility could access training opportunities, ease of transfers and other welfare opportunities. Further, results showed that a majority of the respondents disagreed that health workers were remunerated adequately. Also, results showed that majority of the respondents disagreed that health workers had job security and finally a majority of the respondents disagreed that health workers were adequately protected from risks involved in the job. The average mean of the responses was 2.1 which means that majority of the respondents were agreeing to the statements in the questionnaire; however, the answers were varied as shown by a standard deviation of 1.28. The results revealed that healthcare personnel have a positive and a significant association to health care provision ( $r=0.406$ ,  $p=0.013$ ).

The results are in agreement with a research conducted BY (Chen, Mulaki, & Williamson, 2014) who argue that although some issues have already been resolved, major human resource management questions remain, such as personnel transfer, salary payment, and terms of service. These questions highlight ongoing conflicts among three major interests—MOH civil servants, county political leadership, and health workers—each of whom would like to retain or expand their influence over the health system. Counties seek the authority to hire, release, and set standards for health workers, in order to maximize both power and autonomy. Health workers, seeking to preserve their terms of service, ensure timely payment of salaries, and retain control over their professions, have petitioned the national government to create a Health Services Commission to allocate health workers to the counties

### **5.1.4 Health care provision.**

The study sought to establish health care provision in a devolved system of government. Results show that a majority of the respondents agreed that there had been an increase in the number of patients attended to monthly. Results also show that a majority of the respondents agreed that there had been an increase in the number of inpatients and outpatients and also a majority of the respondents agreed that there had been an improvement in the quality of service. Further, a majority of the respondents agreed that there had been a reduction in cases of misdiagnosis. A further majority of the respondents agreed there has been a decrease in the number of referrals. The average mean of the responses was 2.1 which means that majority of the respondents were agreeing to the statements in the questionnaire; however, the answers were varied as shown by a standard deviation of 1.1.

The counties are responsible for three levels of care: community health services, primary care services comprising all dispensaries, health centers and maternity homes for both public and private providers, county referral services, operating in, and managed by a given county and

comprising the former level four and district hospitals in the county. The national government has responsibility for national referral services (KPMG, 2013)

## **5.2 Conclusions**

Based on the findings the study concluded that disbursement and adequacy of finances, supplies and equipment affected health care provision in a devolved system of government. The study also concluded that drugs procurement challenges affected health care provision in a devolved system of government. Findings further concluded that healthcare personnel influenced health care provision in a devolved system of government disbursement and adequacy of finances, supplies and equipment has a positive and significant effect on health care provision as supported by ( $r=0.502$ ,  $p=0.002$ ). However, the table further indicates that procurement challenges has a positively and insignificant association on health care provision as supported ( $r=0.309$ ,  $p=0.603$ ). The results revealed that healthcare personnel has a positively and a significantly association to health care provision ( $r=0.406$ ,  $p=0.013$ ). The regression analysis conclusion was supported by coefficient of determination also known as the R square of 36.3% which meant that disbursement and adequacy of finances, supplies and, procurement challenges, health personnel, explained 36.3% of the variations in the dependent variable which is health provision. This was supported by an F statistic of 6.259 and the reported p value (0.002) which was less than the conventional probability of 0.05 significance level.

## **5.3 Recommendations**

Based on the findings the study made the following recommendations;

- i) The county government should increase the disbursement and adequacy of finances, supplies and equipment so as to boost the service delivery in government
- ii) The should be more aggressive in ensuring proper practices are followed in drugs procurement so as to reduce the challenges associated with procurement in health care provision.
- iii) Health personnel should enjoy job insecurity, proper remuneration, induct them in training and welfare programs so as to boost their morale in in health care provision.

## **5.4 Areas of Further Studies**

The study sought to establish factors influencing provision of health care in a devolved system of Government. The following should be other areas of research. One should be the role of factors influencing provision of health care at non-governmental health facilities. Further the role of the factors influencing provision of health care in national hospitals which fall under the national government.

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