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Primary Health Facilities Readiness in Providing Non-Communicable Disease Services in Katavi Region: Cross Sectional Study

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ABSTRACT

Background: non-communicable disease by its nature is serious global public challenges in management. Affect individual physiological, social, and cost-effective if left to chronic the mortality rate increased. Current study aimed to assess the primary health facilities readiness in providing non-communicable disease services in Katavi region.

Methods: Cross-sectional study was undertaken 95 health facilities readiness were assessed by using WHO PEN standard tools with four domains, Descriptive statistics were used for elaborating facilities profile, whereby chi square test were used to assess relationship between facilities types, ownership and location and availability of equipment, essential medicine for non-communicable diseases.

Results: 60% of facilities shown readiness in providing non-communicable disease whereby 40% of facilities shown not ready to provide NCD services.The total of 95 of health facilities were assessed in which 15.8% health centers and 82.2% dispensaries where by 81.1% ware public ownership and 18.9% were private ownership, 73.7% located at rural setting and 26.3% Located at urban setting. Furthermore study shown that, health centers have high availability of non-communicable disease equipment account 94% compare with dispensaries account for 77.6%, whereby 79.5% were public ownership and 41.8% was private ownership. Furthermore facility located in rural setting have more NCD equipment 82.8% and urban setting was 63.4% of medical equipment.

Apart from that health centers shown has more essential drugs for NCD management 77.3% compare to dispensaries 51.1%, whereby private shown more 58.3% difference in public 55.2%, and health facility located in rural shown most of them have NCD drugs 57% compare with facility located in urban 51%.Cross tabulation done in table 5 shown some availability of equipment have significant relationship include blood pressure machine in facility located in rural and urban setting were P-0.003, blood glucose machine have relationship significant in health centre and dispensaries with P-0.005.

Furthermore NCD budget have significant relationship between public and private health facility ownership but also rural and urban with P <0.001.

Moreover availability of non-communicable disease has significant relationship between public and private some with rural and urban with

P <0.001, while availability of HPV vaccination have significant relationship between public and private and between rural and urban resident were P<0.001. Table 6 shown availability of NCDSs medicine like atenolol for hypertension have significant relationship between health centre and dispensaries with P <0.001 and isosorbide p<0.001, whereby health facility located in rural and urban have significant relationship in which P <0.024.availability of glibenchramide have significant relationship between health

centre and dispensaries with P<0.001,and availability of frusemide, have significant relationship between rural and urban were P=0.017,availability of insulin between health centre and dispensaries were P=0.003, and rural and urban P=0.002.furthermore study shown that availability of metformin have significant relationship between health centre and dispensaries were P =0.004 and between public and private were P= 0.025.

CONCLUSSION:

Poor compliance of council's health management team in providing NCDs services contribute much unavailability of NCDs clinics within the health Centre and dispensaries despite having essential NCDs commodities.

Keywords Facilities Readiness, non-communicable disease services in Katavi region

INTRODUCTION

1.1 Background of the Study

Non-communicable diseases, by nature, existing from the combination of genetics, physiological, environmental and behavioral factors, due to the nature of etiology prevention and treatment become challenge globally and nations (WHO,2017). Prevention and treatment require strong health management system to enhance priority of NCDs services which include, employ and deployed competent health workers, increased health financing, and multispectral teamwork (Bintabara&Mpondo, 2018).Study done at Nepal conclude that availability of training health workers on NCDs, medical supply would supplement the performance of NCDs services (Aryal et al, 2018).

Non communicable diseases kill 41 million people, which is equal to 71% of all death globally. In fact15 millions of people die from NCDs between the ages of 30-69 whereby cardiovascular disease include hypertension contribute17.9, cancer 9.0 million and diabetes mellitus 1.6 million. Various studies addressed that the risk factors for NCDs include tobacco use contribute 27 million, excessive salt intake contribute 4.1 million, alcohol intake 3.3 million and physical inactive 1.6 million deaths annually (WHO, 2017).

In sub-Saharan Africa, NCDs increased from 90.6 million-year 1990 to 151.3 million-year 2017 and the leading cause were CVD 22.9 million, cancer 16.9million, mental disorders 13.6 million and diabetes mellitus 10.4 million (Gouda *et al.*, 2019).

In Tanzania, deaths due to NCDs increased from 27% in 2011 to 34% in 2017. Despite health financing budget increase the burden of NCDs still increased too. whereby hypertension account 25.9%and diabetes 9.1% were by the risk factors include; tobacco use 15.9%, alcoholic user 29.3% and obesity 26% (MOH, 2016)

To act upon the NCDs burden, Tanzania planned to achieve the main four objectives by 2020, first is to ensure NCDs services particularly prevention and treatment become priority, second to strengthen leadership, governance, multispectral partnership and responsibility for prevention and control of NCDs, third is to strengthen and support health systems to deal with NCD though primitive, preventive curative and rehabilitative services , and fourth is to strengthen national capacity for NCD supervision, research for evidence based planning, monitoring and evaluation were conducted(MOH, 2016)

According the study conducted to assess the primary health facilities in Tanzania on their ability to provide management of NCDs services revealed that 72% of health facilities had high redness to provide and manage NCDs services whereby 41.3% had NCDs guideline, 8.3% had trained health workers, 1.9%

had equipment for NCDs and 2.7% had medicine for NCDs however only 5.6% of services were conducted by public sector and 22.5% from private health facilities in which most of them were located in urban setting (Shayo&Shayo, 2019).

Some study done in Tanzania, revealed that the primary health facility level was not well prepared to provide NCDs services; out of 725 health facilities assessed only 9% health workers had received training on the provision of hypertension and other NCDs and only 42% of health facilities had NCD guideline (Bintabara, Ernest, &Mpondo, 2019)

Further study conducted in Tanzania concluding that the health workers who attending training of NCDs services or workshops were capable to manage and report NCDs cases appropriate than those who didn't attend any training pertaining to NCDs, services (Davila et al., 2015)

Tanzania's Vision 2025 was to access to quality primary health care for all with whereby each village to have dispensary and each ward to have health centers and strengthening referral system and reduction of all NCDs by 25% in 2025(URT-MoHSW, 2010)

Therefore, the research required to assess the general performance of health facility readiness, compliance of council's health management team and health providers on provision of NCDs services in Katavi regionparticular to health Centre and dispensaries

Objectives

The general objective of this study was to determine health facility readiness in providing NCDs services in Katavi region.

METHODOLOGY

Study Design

This wascross sectional analytical study with quantitative approaches

Study Area: The study was conducted at Katavi Region within five councils, namely Mpimbwe, Nsimbo, Tanganyika. Mpanda Municipal and Mlele Districtcouncil Katavi was established on 1st March 2012. Currently, it has three district and five councils. The region has 45,843km2 with projection population of 771300 in 1st July 2019.

The Study Population: The study population was health facilities (health Centre and dispensary)

Selection Criteria

Inclusion Criteria

All health Centre and dispensaries registered available in Katavi region were include in current study.

Studied Sample size

All 95 health facilities were include in the study

Sampling Techniques

15 health Centre and 80 dispensaries were selected by convenience according to WHO Perspective when you assessing health facility less than 100 you select all but greater than 100 facilities the researcher should take 50% of it to include in the study.

Data Collection Methods

The current study was focus on facilities readiness toward provision of NCDs services including the availability of working equipment, and medical supplies, and availability of NCD clinics whereby checklist was used to observe based on WHO-PEN Standard tool.

Data Collection Tools

Data was collected from the facilities check list was used to assess facility readiness by using WHO-PEN

standard in which list of items was assessed. The question was structured in English.

Validation of Research Instruments

According to WHO PEN standard it's was the standard tools for assessing facilities with low resource setting.

Measurement of variables

Dependent Variable

The dependent variable of this study is readiness of facility in providing non-communicable disease services. This variable was measured through performance categorized as ready to provide services or not ready to provide services.

Independent Variable

Demographic Information

The demographical information was measured by asking question based on social demographic factors that include age, sex, educational level, and working experience in the particular health setting. Nominal and interval scale was used to measure the respondent's social demographical characteristics during this study.

Facility Readiness Factors

Facility Readiness Factors according to current study facilities readiness was the ability of health setting to have accommodated all essential NCDs commodities particular equipment as per national non communicable guideline , tracer medicine for NCDs, for hypertension, diabetes mellitus, cervical cancer management and others NCD conditions .Four domains were used to assessed in which domain one were assesses in availability of NCD medical equipment's for measurement of hypertension, diabetes, and cervical cancer contain 8 units with 8 score. Domain two were assess on availability of NCD drugs which contain 8 units with 8 score. Domain three have 1 items assess on availability of functional NCDs clinics. domain four were assessed on availability of trained NCDs personnel, whereby total score were 18 points equal to 100%.with cut point of 60%. Therefore facilities score < 60% were categorized as not ready to provide NCD services where by facilities score ≥60% were categorized as ready to provide NCD services

Ethical Considerations

Ethical clearance for study was sought from the University of Dodoma Institutional Research Review Committee. The permissions to conduct research were obtained from Regional Secretary (RAS) of Katavi region, and five Council Executive Directors of councils and district medical officers in the study areas. Written and informed consent was sought before enrolment of study participants. The participation in study was voluntary and each participant was granted freedom to withdraw from study at any time during the interview when she/he wishes to do so. Privacy and confidentiality ware assured through coding in place of names.

Data Analysis

The data was analyzed by using SPSS software test, and be presented in tables and graph in which each variable was measured. Descriptive analysis was used to analyze social demographic characteristics data. Chi- square and cross tabulation was used to determine the relationship between the categorical variables. Binary logistic regression analyses were used to establish association between variables if $P < 0.05$ the variable were significant relationship.

Results

60% of primary health facilities shown readiness in providing non-communicable disease whereby 40% of facilities shown not ready to provide NCD services. A total of all 95 health facilities health centres and

dispensaries were involved in this study, 15.8% health centres and 82.2% were dispensaries where 81.1% were public ownership and 18.9% were private ownership, among of them 73.7% located at rural setting and 26.3% located in urban setting.

Descriptive and analytical cross sectional study designed were used were by checklist were applied by using WHO PEN standard tools to assess facility readiness in providing NCD services. Data was analysed using SPSS version 20.

Health facilities readiness in providing non-communicable disease services

The total of 95 (100) registered health centres and dispensaries in which 15.7% were health centres and 84.2% were dispensaries whereby 78.9 % owned by public ownership and 21% owned by private sectors. The majority 73.6% located in rural setting and 26.3% located in urban setting as shown in table 5 the researcher was assessed the facilities readiness in providing NCD services by using WHO-PEN Standard tools in low resource approach.

Cross tabulation done in table 5 shown some availability of equipment have significant relationship include blood pressure machine in facility located in rural and urban setting were P-0.003, blood glucose machine have relationship significant in health centre and dispensaries with P-0.005.

Furthermore NCD budget have significant relationship between public and private health facility ownership but also rural and urban with P <0.001.

Moreover availability of non-communicable disease has significant relationship between public and private some with rural and urban with

P <0.001, while availability of HPV vaccination have significant relationship between public and private and between rural and urban resident were P<0.001. Table 6 shown availability of NCDSs medicine like atenolol for hypertension have significant relationship between health centre and dispensaries with P <0.001 and isosorbide p<0.001, whereby health facility located in rural and urban have significant relationship in which P <0.024.availability of glibenchramide have significant relationship between health centre and dispensaries with P<0.001,and availability of frusemide, have significant relationship between rural and urban were P=0.017,availability of insulin between health centre and dispensaries were P=0.003, and rural and urban P=0.002.furthermore study shown that availability of metformin have significant relationship between health centre and dispensaries were P =0.004 and between public and private were P= 0.025.

shown, whereby health centres shown has more readiness to provide NCD services was score total of 75% of all four domain assessed compare with dispensaries 55%, but also public health facilities shown complimentary readiness score 60% compare to private health facilities 55%.

Furthermore facility located in rural setting shown has more readiness to provide NCD services it has score 61% compare to urban setting score 50% shown. The assessments use to measure 4 domains whereby first domain was assesses the availability of NCD medical equipment contain 8 items with 8 units score, second domain was assessed the availability of NCD drugs contain 8 items with 8 units score. Whereby third domain were assessed availability of functional NCD clinics contains 1 domain with 1unit score, and fourth domain assessed availability of NCD trained personnel contain 1 items with 1 unit score and make total of 18 score equal to 100%.Therefore the facility score < 60% was regarded not ready to perform NCD services and facilities score ≥ 60% was regards as ready to perform NCD services.

Table 1 shown facilities profile based on types, ownership and location in providing non communicable disease services in Katavi region (N=95)

Variables	frequency	Percentage (%)
Facility types		
Health centre	15	15.7
Dispensaries	80	84.2
Classification		
Public	**75**	**78.9**
Private	20	21.0
Location		
Rural	**70**	**73.6**
Urban	25	26.3

Table 2 shown domain 1 availability of non-communicable disease equipment assessed in health centre and dispensaries in used to provide NCD services (N=95)

Domain 1	**Response**	
1.Availability of blood pressure machine	**Yes N (%)**	**No N (%)**
Health centre	15(100)	0 (0.0)
Dispensaries	77 (96.3)	3 (3.8)
Public ownership	74 (96)	3 (3.9)
Private ownership	18 (100)	0 (0.0)
Rural	70 (100)	0 (0.0)
Urban	22 (88)	3 (12.0)
2.Availability of blood glucose machine		
Health centre	15 (100)	0 (0.0)
Dispensaries	51 (63,8)	29(36.3)
Public ownership	49 (63.6)	28 (36.4)
Private ownership	17 (94)	1 (5.6)
Rural	45 (64.3)	25 (35.7)
urban	21 (84)	4 (16)
3.Availability of NCD budget		
Health centre	12 (80)	3 (20)
Dispensaries	57 (71)	23 (28.8)
Public ownership	69 (89.6)	8 (10.4)
Private ownership	0 (0.0)	8.(100)
Rural	66 (94.2)	4 (5.7)
Urban	3 (12)	22 (88)
4.Availability of oxygen machine		
Health centre	13 (86.7)	2 (13.3)
Dispensaries	3 (3.8)	77 (96.2)
Public ownership	11 (14.3)	66 (85.7)
Private ownership	5 (27.8)	13 (72.2)
Rural	10 (14.3)	60 (85.7)

Urban	6 (24)	19 (76)
5.Availability of weight scale		
Health centre	15 (100)	0 (0.0)
Dispensaries	79 (98.8)	1 (1.2)
Public ownership	76 (98.7)	1 (1.3)
Private ownership	18 (100)	0 (0.0)
Rural	70 (100)	0 (0.0)
Urban	24 (96)	1 (4)
6.Availability of NCD guideline		
Health centre	15 (100)	0 (0.0)
Dispensaries	65 (81.2)	15 (18.8)
Public ownership	72 (93.5)	5 (6.5)
Private ownership	8 (44.4)	10 (55.6)
Rural	70 (100)	0(0.0)
Urban	10 (40)	15(60)
7.Availability of urine dipstick reagent		
Health centre	15 (100)	0 (0.0)
Dispensaries	69 (86.3)	11 (13.7)
Public ownership	67 (87)	10 (13)
Private ownership	17 (94.4)	1 (5.6)
Rural	63 (90)	7 (10)
Urban	16 (64)	9 (36)
8.Availability of HPV vaccine		
Health centre	14 (93.3)	1 (6.7)
Dispensaries	72 (90)	8 (10)
Public ownership	75 (97.4)	2 (2.6)
Private ownership	11 (61.1)	7 (38.9)
Rural	70 (100)	0 (0.0)
Urban	16 (64)	9 (36)

Total mean score of equipment for health centre were 7.6, dispensaries, were 5.9, where public health facilities score 6.4, Private and facility located in rural score 6.6 compare with urban score 4.9.

Table 3: shown domain 2 aavailability of NCD medicine assessed in health centres and dispensaries studied in providing NCD services (N=95)

Domain 2	**Responses**	
1.Availability of Atenolol in	**Yes N (%)**	**No N (%)**
Health centre	15 (100)	0 (0.0)
Dispensaries	43 (53.8)	37 (46.2)
Public	45 (58.4)	32 (41.6)
Private	13 (72.2)	5 (27.8)
Rural	42 (60)	28 (40)
Urban	16 (64)	9 (36)

2.availability of isosorbide in		
Health centre	11 (73.3)	4 (26.7)
Dispensaries	30 (37.5)	50 (62.5)
Public ownership	35 (45.5)	42 (54.5)
Private facility	6 (33.3)	12 (66.7)
Rural	35 (50)	35 (50)
Urban	6 (24)	19 (76)
3.Availability of Glibenchramide in		
Health centre	13 (86.7)	2 (13.3)
Dispensaries	33 (41.2)	47 (58.8)
Public	38 (49.4)	39 (50.6)
Private	10 (55.6)	8 (44.4)
Rural	35 (50)	35 (50)
Urban	11 (44)	14 (56)
4.**Availability of Furosemide**		
Health centre	15 (100)	0 (0.0)
Dispensaries	78 (97.5)	2 (2.5)
Public	75 (97.4)	2 (2.6)
Private	18 (100)	0 (0.0)
Rural	70 (100)	0 (0.0)
Urban	23 (92)	2 (8)
5.**Availability of insulin**		
Health centre	10 (66.7)	5 (33.3)
Dispensaries	22 (27.5)	58 (72.5)
Public	28 (36.3)	49 (63.7)
Private	4 (22.2)	14 (77.8)
Rural	30 (42.9)	40 (57.1)
Urban	2 (8)	23 (92)
6.**Availability of metformin**		
Health centre	14 (93.3)	1 (6.7)
Dispensaries	43 (53.8)	37 (46.2)
Public	42 (54.5)	35 (45.5)
Private	15 (83.3)	3 (16.7)
Rural	38 (54.2)	32 (45.7)
Urban	19 (76)	6 (24)
7.**Availability of Amoxylline**		
Health centre	15 (100)	0 (0.0)
Dispensaries	80 (100)	0 (0.0)
Public	77 (100)	0 (0.0)
Private	18 (100)	0 (0.0)
Rural	70 (100)	0 (0.0)
Urban	25 (100)	0 (0.0)

8.**Availability oral morphine**		
Health centre	0 (0.0)	15 (100)
Dispensaries	0 (0.0)	80(100)
Public	0 (0.0)	77 (100)
Private	0 (0.0)	18 (100)
Rural	0 (0.0)	70 (100)
Urban	0 (0.0)	25 (100)

Table 2 shown that health center mean score were high 6.2 in availability of NCD drugs compare with dispensaries score 4.1, whereby private facilities have shown more higher 4.7 compare with public health facilities 4.4 and rural setting were shown more 4.5 compare to urban 4.0 score

Table 4: shown domain 3 and 4 availability of NCD availability of functional NCD clinics per facilities and NCD trained personnel per facilities assessed in providing NCD services (N=95)

	Response	
Domain 3 and 4	**Yes N (%)**	**No N (%)**
1 Availability of functional NCD clinics		
Health center	0 (0.0)	15 (100)
Dispensaries	0(0.0)	80 (100)
Public	0 (0.0)	77 (100)
Private	0 (0.0)	18 (100)
Rural	0 (0.0)	70 (100)
Urban	0 (0.0)	25 (100)
2. Availability Of NCD trained personnel		
Health center	4(26.7)	11(73.3)
Dispensaries	0(0.0)	80 (100)
Public	4 (5.1)	73 (94.8)
Private	0(0.0)	18 (100)
Rural	0 (0.0)	70 (100)
Urban	4(16)	21 (84)

shown only public health centre have at list trained health personnel on NCD cervices compare with other facilities mean score of 0.26.

Summary of total score in 4 domains used to assess health facilities readiness in providing NCD disease services in Katavi region

The distribution of all total domain assess in all facilities with 18 units according to services available and readiness assessment tools (SARA) the facilities score <60% was categorised as not ready to provide services and score ≥60% were categorised as ready to provide NCD services . Total score point were divided by 18 units. Facility score as numerator and denominator were total score 18*100,

Table 5 shows percentages of four domain assessed per facilities, ownership and residence in Katavi region

SN	**Variables**	**Facility types (%)**		**Ownership (%)**		**Residence (%)**	
		Health centers	**Dispensaries**	**Public**	**Private**	**Rural**	**Urban**

1	Availability of NCD equipment's	42.2	32.8	35.6	28.3	36.7	27.2
2	Availability of NCD drugs	34.4	22.8	26.1	24.4	25	22.2
3	Availability of NCD functional clinics	0.0	0.0	0.0	0.0	0.0	0.0
4	Availability of NCD training personnel	1.1	0.0	0.3	0.0	0.0	0.9
Total		77.7	55.6	62	52.7	61.7	50.3

Figure 1: shown readiness of facility in providing non-communicable disease Services N=95

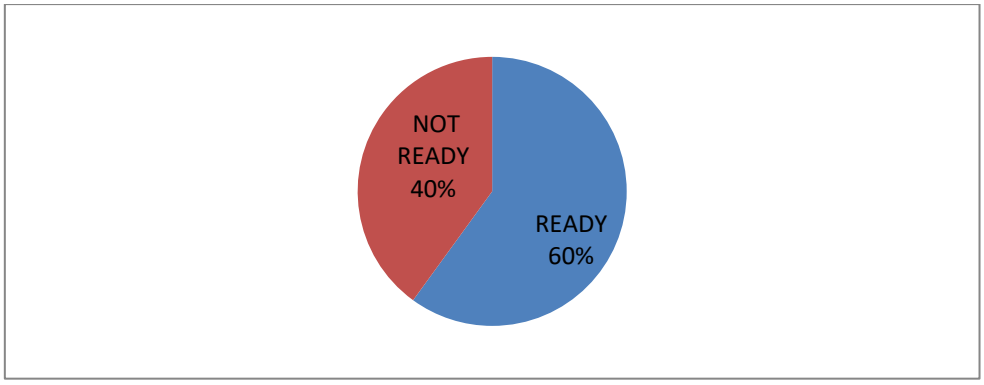

Figure 1 above shown that 60% of facilities were readiness to provide NCD services whereby 40% of health facility were not ready to provide NCD services in Katavi region.

Table 6 shown relationships between health facility profile and availability of non-communicable disease equipment used to screen NCDs condition (N=95)

	Responses		**X^2**	**P-value**
1.Availability of blood pressure machine	**Yes (%)**	**No (%)**		
Health centre Dispensaries	15 (16.5) 77 (83.7)	0 (0.0) 3 (100)	0.581	0.446
Public Private	74 (80.4) 18 (19.6)	3 (100) 0 (0.0)	0.724	0.395
Rural Urban	70 (76.1) 22 (23.9)	0 (0.0) 3 (100)	8.674	**0.003**
2.Availability of blood glucose machine				
Health centre Dispensaries	15 (22.7) 51 (77.3)	0 (0.0) 29 (100)	7.827	**0.005**

Public Private	49 (74.2) 17 (25.8)	28 (96.6) 1 (3.4)	6.529	**0.011**
Rural Urban	45 (68.2) 21 (31.8)	25 (86.2) 4 (13.8)	3.376	0.065
3.Availability of NCDs budget				
Health centre Dispensaries	12 (17.4) 57 (82.6)	3 (11.5) 23 (88.5)	0.487	0.485
Public Private	69 (100) 0 (0.0)	8 (30.8) 18 (69.2)	58.936	**<0.001**
Rural Urban	66 (95.7) 3 (4.3)	4 (15.4) 22 (84.6)	62.746	**<0.001**
4.Availability of oxygen machine				
Health centre Dispensaries	13 (81.2) 3 (18.8)	2 (2.5) 77 (97.5)	62.007	**<0.001**
Public Private	11 (68.8) 5 (31.2)	66 (83.5) 13 (16.5)	1.896	0.168
Rural Urban	10 (62.5) 6 (37.5)	60 (75.9) 19 (24.1)	1.241	0.265
5.Availability of weigh scale				
Health centre Dispensaries	15 (16.0) 79 (84.0)	0 (0.0) 1 (100)	0.189	0.663
Public Private	76 (80.9) 18 (19.1)	1 (100) 0 (0.0)	0.236	0.627
Rural Urban	70 (74.5) 24 (25.5)	0 (0.0) 1 (100)	2.830	0.093
6Availability of NCD guideline				
Health centre Dispensaries	15 (18.8) 65 (81.2)	0 (0.0) 15 (100)	3.340	0.068
Public Private	72 (90) 8 (10)	5 (33.3) 10 (66.7)	26.412	**<0.001**
Rural Urban	70 (87.5) 10 (12.5)	0 (0.0) 15 (100)	49.875	**<0.001**
7.Availability urine dipstick				
Health centre Dispensaries	15 (17.9) 69 (82.1)	0 (0.0) 11 (100)	2.333	0.127
Public Private	67 (79.8) 17 (20.2)	10 (90) 1 (9.1)	0.787	0.375
Rural Urban	63 (75.0) 21 (25.0)	7 (63.6) 4 (36.4)	0.648	0.421

8.Availability of HPV vaccine				
Health centre	14 (16.3)	1 (11.1)		
Dispensaries	72 (83.7)	8 (88.9)	0.164	0.686
Public	75 (87.2)	2 (22.2)		
Private	11 (12.8)	7 (77.8)	22.406	**<0.001**
Rural	70 (81.4)	0 (0.0)		
Urban	16 (18.6)	9 (100)	27.837	**<0.001**

Table 7 shown relationships between health facility profile and availability of non-communicable disease medicine used to manage NCDs condition (N=95)

	Responses		**Chi-square**	**P-value**
1. Availability of Atenolol	**YES** n (%)	**NO** n (%)		
Health centre	15 (25.9)	**0 (0.0)**		
Dispensaries	43 (74.1)	37 (100)	11.363	0.001
Public	45 (77.6)	32 (86.5)		
Private	13 (22.4)	5 (13.5)	1.165	0.280
Rural	42 (72.4)	28 (75.7)		
Urban	16 (22.6)	9 (24.3)	0.124	0.725
2. Availability of Isosorbide				
Health centre	**11 (26.8)**	**4 (7.4)**		
Dispensaries	30 (73.2)	50 (92.6)	6.612	0.010
Public	35 (85.4)	42 (77.8)		
Private	6 (14.6)	12 (22.2)	0.874	0.350
Rural	35 (85.4)	35 (64.8)		
Urban	6 (14.6)	19 (35.2)	5.076	0.024
3Availability of glibenchramide				
Health centre	13 (28.3)	2 (4.1)		
Dispensaries	33 (71.7)	47 (95.9)	10.432	**0.001**
Public	36 (78.3)	41 (83.7)		
Private	10 (21.7)	8 (16.3)	0.453	0.501
Rural	35 (76.1)	35 (71.4)		
Urban	11 (23.9)	14 (28.6)	0.266	0.606
4. Availability of frusemide				
Health centre	15 (16.1)	0 (0.0)		
Dispensaries	78 (83.9)	2 (100)	0.383	0.536
Public	75 (80.6)	2 (100)		
Private	18 (19.4)	0 (0.0)	0.478	0.490
Rural	70 (75.3)	0 (0.0)		
Urban	23 (24.7)	2 (100)	5.720	**0.017**

5. Availability of insulin				
Health centre	**10 (31.2)**	**5 (7.9)**		
Dispensaries	22 (68.8)	58 (92.1)	8.675	**0.003**
Public	28 (87.5)	49 (77.8)		
Private	4 (12.5)	14 (22.2)	1.306	0.253
Rural	30 (93.8)	40 (63.5)		
Urban	2 (6.2)	23 (26.3)	10.020	**0.002**
6. Availability of metformin				
Health centre	14 (24.6)	1 (2.6)		
Dispensaries	43 (75.4)	37 (97.4)	8.247	**0.004**
Public	42 (73.7)	35 (92.1)		
Private	15 (26.3)	3 (7.9)	5.038	**0.025**
Rural	38 (66.7)	32 (84.2)		
Urban	19 (33.3)	6 (15.8)	3.619	0.057

DISCUSSION

Facilities readiness in providing non-communicable disease services

Current study shown that health centre have NCD equipment by 94% which were assessed compare with 77.6% in dispensaries whereby public health facilities were more equipment by 79.6% compare with private were 41.8% furthermore facility located in rural setting have more NCD equipment 82.8% compare with urban setting in which they have 63.4% respectively.

Furthermore study shown that health centers has 77.3% essential drugs compare with dispensaries has 51.3% whereby private show higher by 58.3% compare in Public 55.2% and rural setting shown have more drugs 57% compare in urban setting with 51%.In terms of availability of NCD clinics shown that no facilities have NCD clinics and only 26.7% of trained personnel available in health center and only in public health facilities. Different previous study done in Nepal shown that 75% of primary health facilities have NCD clinics (Aryal et al., 2018)

Other study done in Zambia in assessing capacity and readiness to manage NCD in primary care setting shown that all 46 primary health facilities assessed doesn't reach to the maximum of WHO score which was > 60% by (Mutale W, et al 2018.).Other study conducted in Tanzania shown that 42% of primary health facilities have equipment's in providing non-communicable disease services in which 51% available in health centre while 40% available in dispensaries in which 72% shown readiness in providing non-communicable services (Bintabara & Mpondo, 2018)

Furthermore government health facilities shown readiness to provide NCD services compare to private, contrary study done northern Tanzania on assessing facility readiness in provide health services reviled that private facilities shown readiness compare to public health facilities the differences was occurred due to the nature of study population, in which previous study were deal with regional and district facilities and current study were deal with primary health facilities (Shayo & Shayo, 2019)

But also previous study budget allocation were few compare with current situation facility received direct funds from ministry of health according the targeted goal and priorities. Seconds differences occur because of management discipline of equipment and supplies between private and public at previous study in public were insufficiency and current the health providers in public facilities was well maintained.

Health facility located in rural setting shown significant readiness in providing non-communicable disease services compare health facility located in urban setting. Different in study done in Uganda shown that non-communicable disease services more readiness in urban compare in rural setting These differences was occur for the reason that in Tanzania primary health facilities health centre and dispensaries located in rural setting as evidenced in current study 77% of facilities studied located in rural setting.

As the study done on assessing of health facilities in Nepal shown that medical equipment for NCDs, and medical supplies , with additional of training health workers on NCDs, compliment quality of non-communicable service, differing in current study shown even though equipment available, essential medicine availability still no initiative of NCDs clinics. Therefore more efforts required from Governments(Aryal et al., 2018)

Tanzania government toward respond global target to reduce NCDs burden by 25% by year 2025 many strategies and reforms had be introduce, including strengthening community awareness, introduction of NCDs guideline, construction and renovation of health facilities, increased skilled health workers and direct health facilities financing and increased of health services funds, still effort of political will was needed as done in infectious diseases. (Leonard, Masatu, Herbst, & Lemiere, 2015)

Conclusion and Recommendation.

The current study recommended the local government to pray their rule in allocation of budget in non-communicable disease services to ensure health provider were update information through training and informal training like workshop and seminar and national conference.

Clinics for non-communicable disease should be mandated by political recognition to be available as others programme like malaria and HIV to all health facilities and should have accountable personnel to coordinate the services.

Integrated outreach health services should be in place to all facilities to ensure hard to reach area the irrigable clients accessed the services during out –reaching services.Council health management team should ensure quarterly bases should conducting provide meeting to assess the progress of NCD services in locality area to avoid over expenditures of facility budget.

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