International Training and Education Centre for Health (I-TECH)

ANALYSIS OF STUDENT RECRUITMENT, SELECTION, PLACEMENT, ENROLLMENT, AND CERTIFICATE VALIDATION PROCESS AT HEALTH TRAINING INSTITUTIONS IN TANZANIA

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Contents

List of A	Abbreviations	i
List of T	Tables	iil
Acknow	ledgements	iii
Executiv	ve Summary	iii
BACKGR	OUND OF THE ASSESSMENT	1
1.1	Selection Process for Public Allied Health Students	1
1.2	Certificate Verification Process	2
1.3	Definition of Terms	2
1.4	Rationale for the Assessment	3
OVERAL	L STUDY PURPOSE AND OBJECTIVES	4
2.1	Goal of the Assessment	4
2.2	Specific Objectives of the Assessment	4
2.3	Assessment Questions	4
2.4	Potential Use of Study Findings	5
2.5	Study Locations	5
METHO	DS OF THE ASSESSMENT	6
3.1	General Approach	6
3.2	Study Population and Sample Size	6
3.3	Inclusion and Exclusion Criteria	6
3.4	Data Collection and Analysis	7
RESULTS	S OF THE ASSESSMENT	8
4.1	Recruitment	8
4.2	Selection	12
4.3	Placement	15
4.4	Enrollment	15
4.5	Certificate Verification	17
4.6	Cross-Cutting Challenges	18
LIMITAT	TION OF THE STUDY, DISCUSSIONS AND RECOMMENDATIONS	21
5.1	Limitation of the Study	21
5.2	Discussions	21
5.3	Recommendations	23

List of Abbreviations

CA	Clinical assistant
CDC	U.S. Centers for Disease Control and Prevention
CO	Clinical officer
DE	Distance education
FY	Fiscal year
HCWs	Healthcare worker
I-TECH	International Training and Education Center for Health
M&E	Monitoring and evaluation
MOHSW	Ministry of Health and Social Welfare
NACTE	National Accreditation Council for Technical Education
NECTA	National Examination Council of Tanzania
MOEVT	Ministry of Education and Vocational Training
HTIs	Health Training Institutions
PMTCT	Prevention of mother-to-child transmission
RMA	Regional medical assistant
IPs	Implementing Partners

List of Tables

Table 1: Selected HTIs for the Study by Regions and Zone.	.5
Table 2: Study Population and Sample Size	.6

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Executive Summary

Tanzania is faced with a shortage of health care workforce which has made it challenging for the government to meet its aims of improving the social wellbeing of its people. To address this problem, the Ministry of Health and Social Welfare (MOHSW) developed several strategies, one of them being increasing enrollment in the Health Training Institutions (HTIs) in the country. This strategy faced several challenges including inefficiencies of the recruitment processes and in some cases students were enrolled with forged certificates.

In year 2010, 93 out of 1,613 students (6%) were identified with forged certificates and expelled. This situation forced the MOHSW to use its scarce resources supporting students who were unqualified and consequently, it ended up not meeting the set objectives. To improve the recruitment process, I-TECH conducted a study on student recruitment, selection, placement, enrollment, and certificate verification. This study was aimed at identifying gaps and advocating to the MOHSW to consider implementing the recommendations in the development of strategies on how to streamline and increase student recruitment.

The study was cross-sectional and descriptive in nature and used a qualitative approach. A total of 56 students, 14 tutors and 7 principals were interviewed from eight HTIs. In addition, 6 high level informants from NECTA, NACTE and MOHSW provided information for the study.

The assessment confirmed the existence of communication gaps between the central ministry and the HTIs, cases of forged certificates, errors in selection, non-reporting of students to the HTIs and a long-turnaround time in the certificate validation process.

Developing a guide and a Standard Operating Procedures (SOP) for student recruitment and empowering the HTIs to participate in student recruitment, selection, placement, enrollment and certificate validation are the main recommendations of this assessment.

Section 1.0 Background of the Assessment

Tanzania experiences an acute shortage in the health care workforce which has hampered the government's ability to meet its goals to improve the social and economic well-being of its population. This shortage restricts the efforts of the government to increase the quantity and quality of health care services available throughout the country. To address this problem, the Ministry of Health and Social Welfare (MOHSW) has developed several strategies, one of which is increasing the number of qualified health care workers in the health care sector by increasing the number of students enrolled in Health Training Institutions (HTIs). I-TECH has supported the MOHSW to implement this strategy with activities including providing student aid and hiring full-time tutors for HTIs where enrollment has already been scaled-up through various interventions. HTIs in Tanzania include Clinical Assistants Training Centers (CATC), Clinical Officers Training Centers (COTC), Nurses Training Centers (NTCs), Medical Laboratory Schools (MLS), Dental Officers Training Centers (PTC), Ophthalmologists Training Center (OTC), and Pharmacists Training Centers (PHTC).

1.1 Selection Process for Public Allied Health Students

In 2009 and 2010, I-TECH conducted situational analyses of nursing, CA/CO, and laboratory schools to inform the MOHSW's strategies for increasing the numbers of graduating students. The recruitment process for nursing and CA/CO schools was described in these situational analysis reports. The report of the student selection and placement process indicated that an assessment focusing specifically on examining the student recruitment, selection, placement, enrollment, and certificate verification is needed. The descriptions from the 2009 and 2010 assessments point to areas where, due to inefficiencies and in some cases forgery, the MOHSW uses its scarce resources supporting students who are unqualified for admission to an HTI. If the totality of the recruitment, selection, placement, enrollment, and certificate verification process is better understood, recommendations for streamlining, tightening, and strengthening the process could be made to the MOHSW and donors.

The selection process for allied health professional students at public institutions is managed by the Directorate of Human Resource Development (HRD) at the MOHSW. All interested candidates apply directly to the central MOHSW where applications are reviewed and credentials verified. The selection process is two-fold. During the "first selection," the MOHSW produces the list of students accepted to each institution and notifies candidates. The number of students accepted at each institution is more than what individual HTIs can accommodate because each year between 15% and 30% of accepted students from the first selection decide not to attend.

Two to three weeks after the reporting date for the new students, the HTIs report to the MOHSW the number of students that arrived at the institution during first selection and the number of spaces remaining to be filled. During "second selection," the MOHSW reviews the list of qualified candidates, selects another set of students, and invites interested students to report to their respective institutions. During this selection, principals of HTIs also recommend qualified local students to increase local representation at the institution.

The time between when the first selection students report to the institution and when the second selection candidates arrive can take up to two months. Often, more students are enrolled than many institutions can support resulting in overcrowding and a high student to tutor ratio.

1.2 Certificate Verification Process

The process of validating certificates for the students who qualified to join the HTI begins when students arrive at the assigned institution. Upon arrival, students present original certificates of their academic qualifications to school principals. The certificates or copies, depending on the institution, are sent to the MOHSW headquarters in Dar es Salaam for validation. The MOHSW relies on the National Examinations Council of Tanzania (NECTA), a body under the Ministry of Education and Vocational Training (MOEVT), to validate the certificates. From start to completion, the validation process can take up to nine months, and many certificates are found to be forged. Almost a year and in some cases longer into their respective programs, students are disqualified and expelled from the HTI.

Data on the HTI enrollment process generated during the situational analysis of HTIs conducted by I-TECH in 2009 and 2010 found that the lengthy process involved in submitting and verifying students' qualifications leads to unqualified students being dropped very late in their program, often as much as one year into their studies. Additionally, the situational analysis found very high numbers of forged certificates among candidates. Certificates are discovered to be forged during the validation process when NECTA finds that certificates are not in its records. For instance, within two years preceding the assessment, 59% of the students dropped from the Enrolled Nursing program were dropped due to forged certificates. This amounts to 93 students out of the total of 1613 students enrolled as of March 2010, or 5.7%.

1.3 Definition of Terms

Recruitment: refers to the process of attracting students to apply for admission to a public health training institution. It is the process of the health training institution and the MOHSW reaching out and finding potential students who would like to apply for admission to a health training institution. The process begins when new recruits are sought and ends when their applications are submitted. The result of recruitment and submitted applications is a centralized pool of applications from which new students are selected to be offered admission to a health training institution.

Enrollment: refers to when students register at the health training institution where they were offered admission. It is a result of the recruitment and selection process.

Placement: refers to the process of allocating selected applicants to the training institutions according to the individual preference and upon availability of vacancies in the specific training institution and the course applied.

Selection: refers to the process of getting the best and most qualified candidates from the pool of potential students.

1.4 Rationale for the Assessment

Given the aforementioned challenges and the important role student recruitment, selection, enrollment, and certificate validation plays in increasing the number of health care workers in Tanzania, I-TECH, in collaboration with the MOHSW and with support from the United States Centers for Disease Control and Prevention Global AIDS Program (CDC GAP), conducted an indepth assessment of the student recruitment, selection, enrollment, and certificate validation processes at the HTIs. As the capacity for enrolling more students is increased at the HTIs through initiatives such as infrastructure improvement and tutor hiring, the issues related to student recruitment, selection, placement, enrollment, and certificate verificate verification process might take longer and hence further delay the removal of students with forged certificates. This assessment has documented gaps and challenges in the recruitment, selection, placement, enrollment, and certificate validation processes and suggested ways to improve student enrollment at HTIs.

Section 2.0 Overall Study Purpose and Objectives

2.1 Goal of the Assessment

The goal of this assessment is to identify gaps and provide recommendations to the MOHSW in order to improve and streamline the recruitment process to sustain enrollment of eligible students at HTIs.

2.2 Specific Objectives of the Assessment

- 1. To describe each step of the process of recruitment, selection, and enrollment of students to health training institutions and identify the various organizations/stakeholders involved in the processes.
- 2. To identify the gaps and challenges in the process of recruitment, selection, and enrollment of students at health training institutions.
- 3. To identify and document challenges of academic credential verification during the health training institution recruitment, selection, and enrollment process.
- 4. To describe similarities and differences in the recruitment, selection, and enrollment process according to each cadre of allied health professionals.
- 5. To determine any best practices in the recruitment, selection, and enrollment process at health training institutions.
- 6. To provide recommendations for improving the process of student recruitment, selection, enrollment, and certificate verification based on findings from the assessment.

2.3 Assessment Questions

- 1. What does each step of the recruitment, selection, and enrollment process entail?
 - a. What is the timeline for each part of the process? (How long does it take, when does it happen?)
 - b. What is the average number of students involved in each step of the process?
 - c. Which are the various organizations involved in the recruitment and selection process and what are their roles?
 - d. Does the process differ by cadre of allied health profession?
- 2. What are the successes and challenges of the student recruitment and selection process?
- 3. What advice do stakeholders have for improvement in the recruitment, selection, and enrollment process?
- 4. Why are students opting not to attend after being accepted?
- 5. What is the role of school principals in selection?
- 6. Could the verification of students' original certificates happen earlier in the process?
- 7. Would involved ministries/organizations be willing to adjust their processes based on information from this assessment?

8. What is the loss per student due to enrollment of unqualified candidates at each of the following cadre of health care workers: Nurses, Lab Assistants, Clinical Assistants, and Clinical Officers?

2.4 Potential Use of Study Findings

The primary intent of this assessment is to produce recommendations to the MOHSW of ways in which they can streamline and strengthen their processes of recruiting, selecting, placing and maintaining students at HTIs. The MOHSW may choose to take these findings and make changes to their current standard processes.

2.5 Study Locations

This assessment included one HTI in each of the various cadres of allied health professionals. These HTIs were Clinical Assistants Training Centers (CATC), Clinical Officers Training Centers (COTC), Nurses Training Centers (NTCs), Medical Laboratory Schools (MLS), Dental Officers Training Centers (DOTC), Health Officers Training Centers (HOTC), Physiotherapist Training Centers (PTC) and Pharmacists Training Centers (PHTC).

Due to logistical and resource constraints four zones were purposefully selected (Table 1) to include at least one HTI for each of all the eight different cadres of allied health professionals to be included in the study sample. Private health training institutions, including faith based institutions, were not included in the assessment. In addition to respondents from the HTIs, data was also collected at the national level from respondents at MOHSW, NECTA, and the National Council for Technical Education (NACTE).

	ZONE	REGION	HEALTH TRAINING INSTITUTION	
1		MBEYA	Mbeya Dental TC	
	SOUTHWESTERN	MBEYA	Mbeya Physiotherapist TC	
		SUMBAWANGA	Sumbawanga Clinical Assistants TC	
2		DAR-ES-SALAAM	Muhimbili Pharmacy TC	
	EASTERN	COAST	Kibaha Clinical Officers TC	
		COAST	Bagamoyo Nursing TC	
3	CENTRAL ZONE	SINGIDA	Singida Medical Lab School	
4	NORTHERN ZONE	TANGA	Tanga Health Officers TC	

Section 3.0 Methods of the Assessment

3.1 General Approach

The assessment was descriptive and cross-sectional and used a qualitative approach to data collection, analysis and interpretation. Three qualitative data collection methods were used in gathering data; semi-structured face-to-face interviews, focus group discussions, and in-depth interviews. The assessment was designed and led by the I-TECH Tanzania M & E team with inputs and oversight from the I-TECH Tanzania Human Resources for Health Scale-Up Programme. In addition, I-TECH collaborated with the MOHSW, NACTE and NECTA in protocol development and in the design of the assessment.

3.2 Study Population and Sample Size

Respondents were purposefully selected based on their affiliations to respective HTIs and their role in the student recruitment process. Respondents from the institutions selected included principals, tutors, administrators and current students enrolled at HTIs. Details of the study population and sample size can be found in Table 2.

	Type of Data Collection	Group of Respondents	Sample Size
1	Semi-structured face-to-face interviews	Principals	7
		Tutors	14
2	Focus group discussions	Students	56 students (7 FGDs)
3	In-depth interviews with stakeholders	MOHSW	2
		NECTA	2
		NACTE	2

Table 2: Study Population and Sample Size.

Source: HRH Assessment, 2014

3.3 Inclusion and Exclusion Criteria

Respondents who consented to participate in the study and were conversant with the operations of HTIs in Tanzania were included in the assessment. With the exception of students currently enrolled at HTI programs, all respondents were associated with HTIs for at least two years. Any

individual who did not have experience or knowledge of the recruitment, selection, placement, enrollment, and/or certificate verification processes were excluded from the assessment.

3.4 Data Collection and Analysis

The main methods of data collection included the following:

- 1. Semi-structured face-to-face interviews to gain key informants' perspectives on the recruitment, selection and certificate verification process.
- 2. Focus group discussions to generate views and opinions from students who were enrolled at HTIs during the study. In each HTI visited, at least 6-7 students were purposefully selected for the focus group discussion.
- 3. In-depth interview with stakeholders including MOHSW, NACTE and NECTA officials to clarify the student recruitment, selection, placement, enrollment, and certificate verification processes.

The data collection instruments were pre-tested during orientation and training of data collectors. All interviews were tape recorded for transcription and analysis. Informed consent was requested and obtained from the respondents before the audio recording. Names were not recorded to protect the confidentiality of participants. A consultant was commissioned to transcribe all the audio scripts verbatim from Kiswahili to English.

The transcribed data was analysed by the I-TECH M & E team using an agreed upon coding scheme for consistency of codes. Atlas.ti was used for qualitative coding and analysis.

4.1 Recruitment

As defined above, recruitment refers to the process of attracting students to apply for admission to a health training institution (public). The health training institution and the MOHSW engage in this process to attract and recruit potential students who would like to apply for admission to one of the health training institutions. The process begins when new recruits are sought and ends when their applications are submitted. One objective of this assessment was determining the qualifications of the applicants, challenges they encountered during recruitment process and to solicit any suggestions they had to improve this process. Below are some of the issues revealed from the data.

4.1.1 Application Process

The application process for courses taught at these health training institutions typically starts with course advertisements through various communication media such as letters to the district councils and through the internet. Data collected from the interviews with tutors showed that the advertisements for the course were made through newspapers and website. Applications were then submitted directly to the MOHSW.

4.1.2 Course Advertisement

The MOHSW is primarily responsible for advertising the training courses through several media sources including radio, print media (newspapers) and through the internet. However, both principals and students shared concerns that the accessibility of these advertisements was biased towards people living in towns. One student said, "*What is important is the whole issue of information, when they advertise the course. When I take a quick look they have focused to those people who are in towns because they are advertising on the website, in the internet and on newspapers and not all people who have that access."* Principals also shared similar concerns that potential rural students may not be receiving the course announcements. For instance, one of them said, "*I am not sure if rural applicants get enough information. You can well see this information favors applicants who stay in towns or those who have means to internet but there are people who do not have these things.*"

The channel of communication was cited to be a potential concern for applicants from rural areas. Several students noted that the usage of the internet and newspapers for course advertisement was favoring those who live in towns. This was raised by one of the students from Kibaha COTC who said, "...all this information should be provided through Dispensary walls and district government in different villages instead of processing all the information through the internet and government regional hospitals." (Kibaha COTC FGD) Principals also raised the issues of communication, "Another gap is internet network connectivity. The

internet network has a poor signal in rural areas, " expressing the concern rural students may not be able to apply via the internet.

4.1.3 Application Systems

Two systems are used for students to apply for training: one is for in-service applicants and the other for students who are fresh from school. The in-service applicants use application letters directly to the MOHSW where as those applying directly from school fill in application forms and submit them directly to the MOHSW or through the respective zonal resource Centre's office. The in-service applicants are subjected to a pre-entry examination which isn't applicable to applicants applying directly from schools. One principal described a change to the process that happened within the last year that may have made things easier for the applicants. He said, *"To reduce some of the costs associated with the applications, the MOHSW has provided an opportunity for the application forms to be submitted to the Zone instead of the MOHSW."*

4.1.4 Entry Qualifications for Training

Students in the Focus Group Discussions (FGDs) shared their recruitment experiences and said that recruitment is highly dependent on the qualifications of the student and performance on pre-entry examination. One of the students in the FGD reported that "*To pursue Diploma, the first thing, you must be a form six graduate, even if you are a form four graduate with 7 points with division one, you will not be allowed to join this level of education unless you're a form six graduate.*" (Kibaha COTC FGD) Generally, the minimum qualification to be accepted for the course is a form four level. Potential applicants seemed aware of this information as this was cited by one of the students interviewed in Mbeya: "...*from now onwards the Ministry has set principles that you cannot go to a certain medical course unless you have completed form four. It could reach a time when other people won't get a change to upgrade because of form four certificates."* (Mbeya Students AMOTC FGD)

However, students in the FGD pleaded to the Ministry to consider applicants who are nonform four leavers who have been affected by the change of the entry qualification policy. One student said, "I know that Ministry of Health is going through different changes but ministry should also consider the person who is affected by these changes. Example currently they are saying that for someone to become a nurse or those in health training institutions must have reached form four with at least good pass mark in science subject so they should consider those people who are affected by these changes." (Mbeya Students AMOTC FGD).

Another student in the FGD from Muhimbili reported that students may forge certificates if they do not meet the minimum qualifications for admission to the HTIs. He said, "*Cheating has got so many reasons…one of them might be the person has not met the qualification needed…..he might be having "F" grade and the college wants students with Grade "D" so*

one might want to forge so as to meet the criteria needed. Also peer pressure could be one of the sources of forging certificates to meet entry qualifications." (Muhimbili School of Pharmacy FGD)

Some principals expressed concerns about students who may even have their form four certificates, "Even if the student has a form four certificate you may find he has gotten an" F" in all subjects, maybe he only has one or two D's or three, therefore we are getting difficulties in understanding their capabilities." Another principal was concerned about the applicant not having studied specific subjects that would qualify them for the program, "you find they did not study some of the subjects [in secondary school] that would have made them qualify."

4.1.5 Recruitment Challenges

There were a number of challenges that were mentioned by various groups and individuals in the interviews conducted. Some of the challenges related to recruitment included timing and issues with the recruitment procedures as detailed below.

4.1.5.1 Recruitment Process is Too Long

Many of the tutors that were interviewed stated that the recruitment process is too long. In addition, HTIs do not play a role in the recruitment process even though they are tasked with training the selected candidates. One of the tutors said "*If possible we do advise the MOHSW so that we can be given mandate as HTI or ZHC to conduct the whole recruitment process as we know who qualify and who doesn't because many times MOHSW recruit unqualified applicants.*" (Tutor 1 from Kibaha COTC & Tutor 2 from Sumbawanga CATC)

4.1.5.2 Variable Recruitment Procedures

Part of the challenge is the existence of various recruitment systems. These processes differ from institutions owned by the government versus those that are privately owned. The system used by private institutions helps the colleges easily eliminate unqualified applicants as compared to the system used by the government. In addition, the recruitment processes can differ even within the government systems depending on the course. For example, the pharmacy course from Muhimbili has its own system different from others. This process should be systematized to avoid biases during selection. One tutor in the interview said, *"Mmh recruitment procedures are not the same, let me be specific in terms of colleges that are for bachelor. The whole process is under college supervision from advertisement, selection until when the names of selected students to join the college are released. Of course it is supposed to be like that because they have been given mandate something that is not applicable to us because in our side all colleges are under the ministry of health and social welfare. We are not independent*

HTIs and we don't have authority to do it by our own even the law does not approve that. When you're talking of other institutions like Muhimbili University or Ruaha University College (RUCO) or else where they have mandate of doing each and everything by themselves due to the reason that are qualified." (Tutor 1 from Mbeya Dental School)

4.1.5.3 Burden of Recruitment Procedures on the HTIs and Tutors

Principals expressed some unique challenges with the recruitment processes including the burden that the process puts on HTIs and the tutors. Often times even if the procedures of the application process are well explained, students still have many questions. These questions are typically posed by the students to the principals or to the tutors of the HTIs during the course of the student application process. Also, the HTI often downloads and prints the application form for students to fill out and often it is hard to estimate the number of applications that will be needed. Sometimes, the number of applications downloaded and printed can be overestimated. As one principal said, *"You can prepare the forms, about a thousand of them, but then a thousand of them might not come and so you remain with a lot of them and you don't know if there will be some changes to the forms the following year."* In addition, the principals and tutors play an active role in reviewing a student's application process. One principal said they often work very late into the evening during the recruitment process.

4.1.5.4 Application Challenges

Challenges with the application process were reported by both students and principals. A number of challenges were encountered by applicants during the process of applying for the course that they were pursuing. In addition, principals had good knowledge and experienced some of these challenges with the students when they were applying for school and during the certificate validation process. Some of those challenges related to application are detailed below.

4.1.5.5 Inaccessibility of Information about the Course

FGDs with students showed that the recruitment process starts by students applying for the course preferred. The information about the availability of the course is shared differently across the regions and districts in the country. Accessing information about the course was reported to be a challenge. Potential applicants reported accessing information in different ways, many of which were through informal means. For instance, some of the students got information about the course from friends. One student said, "*I got the information from my friend, until I finished my form six I didn't know actually there is a diploma in medicine.*" (Mbeya Students Dental School FGD) Another student said, "*So it reached a stage, I decided to contact one of my friends who*

was studying Nursing, then he told me that he was at Masasi, so I said to myself let me go to Masasi to see how to go about the application processes." (Bagamoyo Student NTC FGD) The inaccessibility of the course advertisement to rural students was echoed by principals who were interviewed. One principal said "Most of them [students] do not have access to information simply because they are in rural areas, therefore I am very sure that most of them do not have access to this information unless they hear from their friends who are in town that there is an opportunity in a particular newspaper for which they can apply."

The challenges during the application process were said to be caused by various other reasons such as difficulties in accessing the application form, unavailable or poor internet service, colleges are not known (need publicity) and even an unclear schedule for further training.

4.1.5.6. Multiple applications

It was revealed from interviews with stakeholders and principals that some students apply concurrently to more than one institution to increase their chances of being admitted to at least one of the programs. One principal said, "*These days what students care about is to get enrollment first, so you might find students applying for several institutions*." In addition, the selection happens at different times depending on the program. One of the stakeholders from NACTE explained some of the inefficiencies associated with this process, "*A person has send applications in more than one place so he may be selected in more than one institution. He may decide to go to one of the colleges he/she has been selected. But some students do not give timely information that I won't be coming to this college as I have been selected to some other place... so you wait until the studies have started in 14 days." (NACTE Official 1)*

4.2 Selection

4.2.1 Selection Process

Student selection is determined primarily by a committee made up of MOHSW members. This committee is mandated to select candidates who meet the training course criteria for different HTIs in the country. During the FGDs, students reported that the selection criteria is not made clear. Some students did not know if selection was based on the pre-examination performance or if it was dependent on the availability of vacancy at the college. For instance one of the students said, "On my side I have done this exam so many times. Most of the times the exams are not difficult but still at the end some candidates are not selected. You may have all the confidence that you have done well and am going to pass but at the end you're not selected." (Muhimbili School of Pharmacy FGD) Principals also expressed a lack of knowledge of the selection criteria. They explained that this is a process led by MOHSW and

that the HTI does not give input. One principal said, "I have never attended the selection process so I don't know what criteria they use."

Some students felt that the colleges seemed to have their own roles in the selection of students while the Ministry has its own procedures. There is little coordination between these two entities which makes students unclear of the process. One of the students confirmed this finding in the FGD by saying that, "*There should be flow of information from the ministry to college on selection criteria, which should be familiar to all sides unlike the way things are now the ministry has its own criteria on selection of candidates and the college have their own.*" (Muhimbili School of Pharmacy FGD).

4.2.2 Selection Best Practices

Stakeholders identified collaboration with zones during the selection process as a best practice. They also however, pointed out some key challenges. One of them said, "enhee there has been collaboration with zones in this whole process of selection, but there have been some challenges, shortcomings and concerns. That, during selection, geographical location has not been taken into consideration i.e. a person might be staying in Bukoba (far north) but he is selected to join let say a training institution in Mbeya or Mtwara. (Southern part of Tanzania)...or a person staying in Kibaha and he is selected to join an institution which is very far, but if geographical location will be considered, it will simplify some things i.e. save costs. Also it will support local retentions...a person may later be employed there. A person has studied in that particular area and he is employed at the same place it will be easier and that readiness spirit will be there instead of shifting a person from one part of the country to the other." (MOHSW Official 1)

4.2.3 Selection Challenges

Some of the selection challenges that were mentioned by various respondents in different groups are detailed below.

4.2.3.1 Unclear Selection Criteria

One of the high level stakeholders interviewed reported on the challenges involved in the selection process. He said, "The selection is done by some people, and I have already attended such selection process meetings once, but if you look closely on the process, it's rather vague; it's just like you're given a big basket full of application letters and maybe photocopies of certificates, and most of the time decision making is difficult. As if that's not enough, once students are selected and placed into Colleges, they are required to bring their certificates for verification again; Colleges have the process of receiving the certificates and sending them to the Ministry, or National Examination Council of Tanzania (NECTA), I'm not sure by what means, then the Council sends the reply back to the Ministry or the Colleges ... this has proved to be a tedious process, to the students and to the Colleges because someone has to leave everything and follow up on the certificates, and the student worry about the safety of their certificates." (NACTE Official 2) Principals also expressed general challenges with the selection process, including it taking too long and poor communication of results back to students.

4.2.3.2 Selection Biases by the Committee

Some tutors expressed concerns that the MOHSW selection committee might be selecting unqualified candidates. One of the tutors said, "If there is a system where people have to abide, that is where corruption arises. They tempered the system because there are people who might want their children selected in these medical colleges, but they had no access. Many unqualified people got such chances; the ones qualifying never got those chances." (Tutor 1 from Mbeya Dental School) Several principals expressed similar views that the HTI and Zonal Health Centers should be more involved in the selection process. One principal suggested "the zone should review and process candidates for selection," as opposed to it being a purely MOHSW led process. Another principal felt that direct involvement by the principals on the selection committee would be beneficial.

4.2.3.3 Timing for Selection

Another major concern around selection had to do with timing. Students reported that it takes about four months from the time of application to actually receive the outcome of the application. This lengthy turn-around time causes a lot of applicants to apply to more than one institution. Multiple applications can in turn cause some of the institutions to fail to get the required students on time. One of the students in the FGD from Mbeya substantiated this by saying that "Aah other reasons are that one might have been selected by more than one college so one selects where to go. Also economic status is a reason since fees varies from one college to another, some are low and some are high, so one goes where s/he can afford" (Mbeya Students Dental FGD). Another student said, "There is an issue of multiple applications whereby a person apply to more than one college i.e. Sengerema and Bugando and he might be selected in all those college (multiple selections) he can't go to all those colleges so she/he has to choose one college that's where the problem arise" (Muhimbili School of Pharmacy FGD). Principals also expressed a need for the student selection to be a more timely process. One principal made the following recommendation regarding selection, "First of all, selection should be conducted early, students should be informed early and there should be ample time between selection and the college opening. Probably not less than one month perhaps a month and a half."

4.2.3.4 Errors in the Selection

During selection there are a high number of applicants who do not actually qualify for the course for which they are admitted. Records from some of the admitted students show some of them failed in form four or form six while some don't even have a background in science even though the qualifications for entry are clearly stated. One of the tutors said, "*Ok* ...*First, typical example of students' recruitment experience,* most of them who are coming to HTIs really are not all qualified...because what I believe is that there must be criteria for student's selection. But surprisingly most of students their certificates are not impressive." (Tutor 1 from Mbeya AMOTC) Another tutor from Bagamoyo said, "They don't have criteria's for joining the school because students were just told to go even though had got D! For that reason you cannot even teach how to provide a first aid or to treat a wound." (Tutor 2 from Bagamoyo NTC).

4.3 Placement

4.3.1 Placement Process

The issue of placement of applicants who qualified and had been selected to join the training institutions was discussed in the FGDs. The MOHSW via the department of Allied Health Training allocates students who qualify for a particular course to where that particular training is offered. This means there is no consideration of where the person comes from. This was a concern which was raised by the discussants in the FGDs.

4.3.2 Placement Best Practices

Students felt that proximity to the training institutions should be considered when allocating students to particular locations for training. One of the students in the FGD said, "They could have taken us to Tanga it is not far, instead of taking us all day long from Dar es Salaam to Mbeya; the bus fare itself is 45 thousand shillings." (Mbeya AMOTC FGD Students) Another student in the FGD in Mbeya said, "Challenges, first I used to see if they were considering where the student comes from and in placement I mean it should not be far because there are those from Mbeya and have been placed in Tanga and those from Northern zone we were placed in Mbeya, economically it's unfair for normal Tanzanians." (Mbeya AMOTC FGD Students) Several students discussed the economic hardships they encountered in the current placement process.

4.4 Enrollment

Currently, enrollment of students is conducted at the HTIs. Students who pass and get selected and placed by the MOHSW are assigned to different HTIs according to the course they applied to for training. The respective HTI registers the students accordingly. Prior to reporting for school, students are given instructions to report to the HTI and bring their original certificates for validation purposes. However, findings showed that many reported without having these certificates.

4.4.1 Enrollment Challenges

Enrollment challenges that were identified in the process of analyzing data are detailed below.

4.4.1.1 Late Access to Information

Students who participated in the FGDs reported that one of the major reasons for a delay in their enrollment could be due to a delay in receiving the message about their placement from the MOHSW. For instance one student said, "Then here is the challenge ... I applied for the first time in 2009 by that time, I was a form four graduate. I was selected but unfortunately, I failed to report on time because of the information was received late. However, I went to the ministry of health and I was told that, I was two weeks late and that they couldn't admit me. Therefore, I should wait till the coming year whereby in 2009 the Kibaha CTC was given 60 student while they were capable of holding only 40 students, so what they did was to accept only those who reported early and as for those 20 who came late were told to wait till next year, and I was among the 20." (Kibaha COTC FGD) A student from Mbeya School of Dentistry said, "Personally I came to report ready for my studies in December while others started in October. Therefore from March is very long time until November and December when I started my studies." (Mbeya Students Dental FGD) One of the principals also raised this issue saying, "One of the problems is a communication barrier, people are being selected but they do not get the information or news."

4.4.1.2 Non-Reporting

Despite having cases of late reporting to colleges, there are also many incidences of not reporting at all. Some of the students attributed this to the difficulties of getting released by their respective employers. Many employers want their employees who go for further studies to sign a contract that they would come back to their positions after completing their studies. Some of the students do not like this arrangement. Some of the students reported that family matters caused them to not report at all to the colleges. Due to the late sharing of results many students also apply to more than one institution as a safety net which causes non-reporting at other institutions.

4.5 Certificate Verification

4.5.1 Certificate Verification Process

Certificate verification is a prerequisite of student recruitment because there is a high possibility of forged certificates. Currently certificate verification is conducted electronically by the NECTA. Initially, certificate verification was conducted by MOHSW as mentioned by one of the key informant from the ministry of health: "Verification and selection of students were done here at the ministry, but with certain development the number of students who want to join colleges increased, many of them have completed secondary education level. So that system of asking the National Examination Council to provide us with the files of examination result was not possible. This was due to increasing number of students; increasing number of secondary schools, Verification of certificate at the Ministry was no longer possible. We no longer sit as a panel and verify certificates; NECTA took over with the computerization system." (MOHSW interview)

There are several types of common certificate forgery tactics that are used by students. One way students can forge a certificate is by altering the scores on their own certificates such as changing a grade "F" to a "C". Another common tactic is one student impersonating another student by using their certificate. One of the high level stakeholders said, "*First, there is forgery of information of certificates 'results, <u>"yaani</u>" a person has done seven subjects for ordinary level maybe, a person has scored C,B,A, one way of forging is changing <u>yaani</u> a place scored F is keeping D, a place scored C is keeping B that is the first type of forgery." (MOHSW Official 1)*

"Another type of forgery is that, a person is changing, for example previously certificates which had passport is changing facial expression, by scanning the passports, is removing of Neema's and replace with Asha, so the results remains as they are, the name becomes Neema, but facial expression is for Asha, so when you see the certificates you will find Asha, while in actual fact is not for her. The other type, of taking your certificate, and taking all information found together with names and everything, then go and scan everything as it is, then we get two certificates, being two Jonathan having two certificates containing the same information, therefore if I studied at Pugu secondary, he will also be seen as a student from Pugu secondary, the same year, the same subjects and the same marks as mine." (MOHSW Official 1)

The verification process involves collecting the certificates of students who are recruited for a particular HTI. The certificates are then sent to the MOHSW who then send to NECTA for verification. This has reduced the delays in getting the verification results which used to be a big challenge when the manual system was being used at MOHSW.

4.5.2 Challenge of Certificate Verification

Although the process has now been simplified by having an electronic system at NECTA that verifies certificates, there are a number of challenges that remain and were described by interviewees. The major challenges were cited to include late collection of certificates at the HTI. Some students do not bring their original certificates when they report to the HTI and other students do not have their original certificates. Delays in student submission can result in a delay of the HTI submitting them on time to the MOHSW for verification.

Another challenge is a delay in getting the results of the certificate verification from NECTA due to the large amount of certificates they are attempting to verify in a short period of time. One of the interviewees from MOHSW said, "Certificate validation is done to all institutions both private and government, the challenge is on submitting the certificates on time before deadline as there are some institutions submit certificates very late and when the submission is done late the ministry also submits those certificates late to NECTA which obvious will prolong the time of getting feedback. So feedback is brought late i.e. a year may be, so the students may complain why making him stay all the way at the college incurring all the cost then fired at the middle of his studies so that is the biggest challenge. Another challenge is when the college he may use his relative certificate which are closely related and hard to make comparison of which is which, .i.e. a person is called Mangula Samson has a kid Known as Mangula Samson another family members has a child named the same Mangula Samson so this may bring confusion, so it is in such kind of scenario." (MOHSW interview)

The delay in certificate verification results from NECTA can cause an economic hardship for the HTIs. One principal described this by saying, "So you can find a person has already paid school fees, has stayed in class and wasted his time for almost half of a year then they bring the verification report and discover that person has forged his certification."

Students and principals requested the period of certificate verification be shortened. One student said, "*it took like six months, because there was a certain Student who left after we have finished the first semester*" (**Muhimbili school of Pharmacy FGD**). One principal said, "One should have his/her certificate cleared before they report for studies."

4.6 Cross-Cutting Challenges

There were a number of cross-cutting issues that were noted in the course of analyzing data for all interviews and FGDs conducted. The major challenges cited included the following:

4.6.1 Low Reporting Rate at the HTIs

An interview with one of the MOHSW staff revealed that the reporting rate is too low compared to the number of students selected for the training. He said, "Actually this year students who report at their respective institution after two weeks were 40%. That is the percentage of all students who report out of 100% can you imagine that situation....though we have computation during selection but it's hard to predict that because this students has the highest marks then well they won't come, things do not go that way."

4.6.2 Late Release of Examination Results

One challenge commonly cited by students was a delay in knowing their examination results. This delay inhibits some students to submit an application for further study due to not knowing if they would qualify for the program. For instance one of the students said, "*Our advice is that ministry should be releasing names as soon as possible what I believe is that from April when people are doing exams there is no any other means to stay more than five month waiting for examination results while it can stay for only one month and give out results so that people can have enough time to prepare themselves." (Mbeya AMOTC Students FGD)*

4.6.3 Late Reporting to the Training Institutions

Stakeholders interviewed from the MOHSW shared concerns of students reporting very late at the selected institutions. For example one of them said, "*That's one thing, the other is student not reporting on time. The date of admission and deadline for admission may be known earlier but due to some issues the student report very late..., i.e. when the students receive joining letter some arrangements have to be done for their studies, which sometimes are not completed on time as candidates are coming from families of different background so some students may not report on time this gives out some challenges not only to the admission process but also to the whole recruitment process.*" (MOHSW interview)

4.6.4 Inadequate Communication between MOHSW and HTI

Data from the assessment showed that the communication between HTI/ZHC and MOHSW has not been efficient in all aspects of recruitment and placement of students at the HTIs. Both tutors and principals felt that the processes of recruitment and placement would benefit from stronger collaboration between the MOHSW and the HTIs and their respective ZHCs. Some of the tutor interviews revealed that at times they feel they receive orders from the MOHSW as opposed to being brought into decisions regarding recruitment and placement. The tutors feel that they could make significant positive contributions to these processes as they are the ones who work and interact with students on a daily basis.

4.6.4 Cost of running the HTI

Under normal circumstances, the MOHSW is supposed to pay a certain percentage of total running costs of the HTIs to support students during their stay at the institution. The remaining costs are paid in student fees. When the institutions prepare their budgets and submit them to MOHSW they do not always receive the requested amount. As a result, the institutions often struggle to cover the regular costs of operating the HTI. One of the tutors said, "Honestly...the budget is minimal, can you imagine that...if I want to give a test to the students, I have to write on the board!, I just write on the board and the student has to come with their own paper to do the test...there is no paper nowadays...indeed there is no paper." (Tutor 2 from Bagamoyo NTC) Another tutor from Mbeya had the following to say, "I mean we have students who are coming through this process but soon after they report to the college it remains a problem to the college, principal, teachers and supporting staff. Serious, I can say ministry of health pays less attention to the institutions, that they have sent students to the college that they need to eat, and accommodation enable them to study.Yaah but I don't know how. Even yesterday we were doing clinical exam, we brainstormed to see how we can do it. Of course, it is known that there is a financial crisis in the government but it has been now too much especially in academic part, it is forgotten because there are no working facilities" (Tutor 1 from Mbeya Dental school).

The principals also commonly expressed concerns about the lack of resources at the HTI. They expressed concern over a wide spectrum of issues including the unfinished building structures, not having the proper equipment to use in teaching, and being unable to provide students with the basic necessities of food that they would need during the course of their studies at the HTI. One principal said, "*Maybe we should discuss the incompletion of buildings because our intention is to recruit many students but the MOHSW has just started a building and left it incomplete and it cannot be used and has no furniture in it.*"

SECTION 5.0 LIMITATION OF THE STUDY, DISCUSSIONS AND RECOMMENDATIONS

5.1 Limitation of the Study

The study encountered some limitations which had various implications to the intended results as follows:

- i) The availability of key stakeholders for interviews was difficult given their responsibilities. This made it impossible to have them all convened in a large group for discussions within the given timeframe. Additionally, participants from the Ministry of Education and Vocational Training were not available for interviews.
- ii) The process of getting credentials from NACTE for students and of verifying them took longer than anticipated. This process was therefore not accomplished which means that the objective regarding credential verifications was not accomplished.
- iii) Due to time constraints and the busy schedule of the study participants, there was no opportunity to combine different groups (tutors, students and principals) to form a mixed FGD group. This mixed group could have brought healthy discussions in support or against an individual's ideas.

5.2 Discussions

This study confirms the processes of recruitment, selection, placement, enrollment and certificate verification and also revealed underlying challenges associated with each process. These challenges limit the ability of the HTIs to train the required number of students to adequately meet the expectations of the Ministry of Health and Social Welfare.

The findings from this assessment indicate that student Recruitment, Selection, Placement, Enrollment, and Certificate Validation Processes suffer challenges in each stage. Whereas the purpose of the ministry is to enroll more students in the training institutions, this ambitious aim is faced by a number of challenges. Recruitment, for example, takes a considerable amount of time due to cumbersome procedures and delays in students having access to information related to the courses. Poor and delayed communication to potential students was found to be a major issue. For example, potential students get information regarding their application erratically. Several students interviewed estimated the duration from the time one applies to the time to the time they receive the results to be approximately four months. This can result in applicants feeling uneasy and insecure resulting in them applying to many institutions in order to increase their odds of being successfully accepted to at least one.

Information regarding the start date of the recruitment process is released by the MOHSW through advertisements in different communication media, especially on MOHSW's websites. Findings

show that the accessibility to such information among applicants, especially those staying in rural areas, was a significant challenge. Most of the potential applicants who get timely information are those staying in urban centers and have access to the Internet. Findings further illuminate that students must use their personal initiatives to get information about vacancies at different HTIs. Many of them ask their friends, others call the principals directly if by luck they happen to know the right contact, and several others go straight to the Ministry and inquire about such information in person. This results in potential students including spending more money on transport and missing out on qualified candidates that may not know about the vacancies.

Due to delays in communication between the Ministry and potential students there are many cases of non-reporting to the training institutions. Various Focus group discussions and in interviews with key informants confirmed that students apply to more than one HTI. It appears that the HTIs are not receiving updates when a student applies or joins another college which makes it difficult for that HTI to seek out and select other potential students. Another reason that students fail to report to the selected HTI is that they are not receiving timely results from the MOHSW, and this is especially true for those students who do the pre-entry examination. Such delays make the applicants fear that they might have failed the examination and might not get selected. For this reason they apply to other institutions besides the HTIs as a safety net. Apparently, other institutions while they are in the HTI application process. As a result, such vacancies remain unfilled causing fewer students being recruited and/or compromising the quality of students being recruited at the HTIs.

This study found that the centralized selection system used by the MOHSW is faced by with several challenges including selection biases, selection errors and communication delays at various stages. The decentralization of the selection process or the involvement of the school principals in the selection of the students could be a promising first step towards improving this process. The findings of this assessment reveal that principals at the HTIs have no role when it comes to the recruitment, selection and enrollment of students at their respective institutions. The findings also demonstrate that the principals could be helpful in the recruitment process. This whole situation has painted an unpopular picture of HTIs and there is a lack of clear information related to recruitment, selection and placement. In addition, the decentralization of the recruitment process to the specific zones was seen to be more effective in terms of information dissemination and selecting appropriate students.

The system of certificate verification has moved a step further from originally being manually verified at the MOHSW to now being electronically verified by the NECTA. Although this process is more accurate, the findings indicate that certificate verification has not solved the issue of students presenting and entering the HTI with forged certificates after having already been enrolled in the program for several months. The timing of the certificate verification process is less than

ideal since certificates are being collected only after students report to the HTIs. Although this assessment could not establish the number of forged certificates in circulation for the past two years prior to the study, this issue remains as a concern among students, tutors and principles. To avert this situation, the certificate verification should take place before a student enrolls at the HTIs.

5.3 Recommendations

Basing on the findings, this assessment has the following recommendations to the MOHSW to consider strengthening the process of student recruitment, selection, placement, enrollment, and the certificate validation process.

- 1. Consider developing a guide and a Standard Operating Procedure (SOP) for student recruitment, selection, placement, enrollment and certificate validation in order to streamline these processes and make them clear and consistent across the HTIs.
- 2. Empower the HTIs by giving them a role in recruitment so that the MOHSW can act as an overseer to the process. This decision would promote publicity to the available training institutions and trigger effective and efficient communications to potential students.
- 3. Consider changing the timing for certificate verification from the current practice of collecting certificates from students when they register at HTIs to making certificate verification a part of the selection process or a pre-requisite for selection to avoid students enrolling and starting classes when they may have a forged certificate.

Appendices

B-1 Key Informant Interview Guide

Instructions to interviewer: *Introduce the reason for the study and explain the consent form to them.*

1. What do you see as the process of recruitment, selection, placement, and enrollment of students to Health Training Institutions?

Instructions to Interviewer: *After this questions, show the key informant the flow diagram that was developed and continue with the questions below.*

- 2. This is the flow diagram we have put together, do you agree with the flow diagram?
- 3. Are there any changes you would make to the diagram? Anything you would add?
- 4. From your experience, where are the gaps and challenges in the process of recruitment, selection, placement, and enrollment of students to Health Training Institutions?
- 5. Is there one part of the process that presents more challenges than the others?
- 6. Which parts of the process are working well?
- 7. From your experience, what are the gaps and challenges in academic credential verification process? What are the barriers to completing certificate verification earlier?
- 8. Does this diagram reflect the processes for all cadres that you know of?
- 9. Why do you think some students decide not to attend after being accepted?
- 10. If you were asked to provide recommendations for improving the process of student recruitment, selection, enrollment, and certificate verification, what recommendations would you make?
- 11. In your opinion, would involve ministries/organizations be willing to adjust their processes based on information from this assessment? Why? Why not?
- 12. Is there anything else you would like to add that we have not talked about yet today?

B-2 Focus Group Discussion Guide

Target respondents: Students at HTIs

Introduction (~10 minutes)

- Summary of Assessment, Overview of goals and purpose of assessment
- Participants introduce themselves their year of study and the course taking

Rapport Building (~10 minutes)

Question:

1. Since we are here today to discuss the student recruitment process, please tell us one success and one challenge you personally faced during your application to attend a Health Training Institution.

In-Depth Discussion

Questions:

- Can you describe each of the steps you went through during your application and acceptance to your HTI? Probe: What was the timeline for each part of the process? (How long did it take, when did it happen?)
- 2. Which are the various organizations that you came into contact with during the recruitment and selection process? What was the role of each?
- 3. From your experience, what worked well in the recruitment, selection, and enrollment process when you applied to attend this institution?
- 4. From your experience, what are the gaps and challenges in the process of recruitment, selection and enrollment of students to health training institutions?

Probe:

- a. What is lacking/ missing in the process?
- b. What are the problems in the process?
- 5. What can be improved about the recruitment process? What are your recommendations?
- 6. What are some of the reasons some students decide not to attend after they are accepted?

B-3 Key Informant Interview Guide- Central level

Instructions to interviewer: *Introduce the reason for the study and explain the consent form to them.*

- 1. What do you see as the process of recruiting, selection, placing and enrollment of student in Health Training institutions?
- 2. From your experience, where are the gaps and challenges in the process of Recruitment, Selection, Placement and Enrollment to Health Training Institutions?
- 3. Is there one part of the process that presents more challenges than the others?
- 4. Which parts of the process are working well?
- 5. Please discuss how the processes of student recruitment, selection and placement have changed over time.
- 6. From your experience, what are the gaps and challenges in academic credential verification process? What are the barriers to completing certificate verification earlier?
- 7. If you were asked to provide recommendations for improving the process of student recruitment, selection, enrollment, and certificate verification, what recommendations would you make?
- 8. *(For MOHSW and NACTE interviewee only)* Are you aware of multiple selections of candidates to HTIs. If yes, what could be the reasons for this?
- 9. (For MOHSW and NACTE interviewee only) What are your suggestions or recommendation to avoid occurrence of multiple selection?
- 10. In your opinion, would involved ministries/organizations be willing to adjust their processes based on information from this assessment? Why? Why not?
- 11. Is there anything else you would like to add that we have not talked about yet today?