

Addis Ababa University

School of Graduate Studies

The Practices and Challenges of Clinical Practice in Private Technical
and Vocational Education and Training: The Case of Health Colleges
and Co-operating Health Care Institutions in Addis Ababa

By

Bayissa Eteffa

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**A Thesis Presented to the School of Graduate Studies, Addis Ababa University in
Partial Fulfillment of the Requirements for the Degree of Master of Arts in
Management of Vocational Education**

By

Bayissa Eteffa

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Addis Ababa

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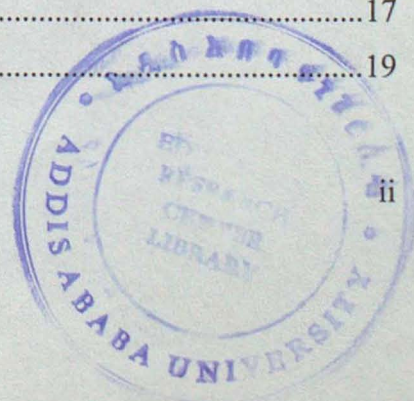
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Acronyms/Abbreviations

CO	Cooperative Training
CPP	Clinical Practice Program
CPA	Clinical Placement Agency
EBT	Enterprise Based Training
ESDP	Educational Sector Development Program
FNG	Federal Negarit Gazeta
GTZ	German Technical Zone/ Deutsche Gesellschaft fur Technishe Zusammenarbeit
ILO	International Labor Organization
ESDP	Educational Sector Development Program
MOE	Ministry of Education
NGO	Non-Government Organization
TVET	Technical and Vocational Education and Training
UNESCO	United Nations, Educations, Science and Cultural Organization

Abstract

The major goal of this thesis was to conduct a study on the practices and challenges pertaining to clinical practice program in private TVET Health Colleges and the respective cooperating health care institutions in Addis Ababa City Administration. To achieve the goal, this research attempted to focus on the administrative, social, economical and practical problems of both private TVET Health Colleges and health care institutions providing clinical practice. To this end, a descriptive survey method was employed to conduct the research. The major tools used during data collection were questionnaires and interviews and documents were also consulted. Unstructured observation was also made. Data analysis was conducted by using percentages and Chi-square test as needed. While data secured through interview, observation, and open ended questions and document review was summarized and analyzed qualitatively in a narrative way. The information used in the data analysis was obtained from 6 vocational counselors, 37 supervisors, and 218 trainees of the six private TVET Health Colleges. While no sampling was needed in selecting vocational counselors, deans, for their manageability, sample respondents of trainees and workplace supervisors were selected using stratified and purposive sampling techniques respectively. The results of the study indicated that there are no adequate willing health care institutions with the necessary readiness to cope up with the requirements of clinical practice program. Those found have little or no awareness about the benefits of the training owing to the absence of collaborative work relationships with private TVET Health Colleges. Thus, Supervisors were unwilling and incompetent in carrying out their roles and responsibilities in relation to the training. There was lack of proper placement, support, guidance and evaluation of trainees. Thus, it is concluded that clinical practice program is entangled with a set of problems from both sides of the training providers. The problems range from personal factors of willingness and competence, through administrative factors (improper placement, poor follow-up and support, lack of promotion, etc.), to institutional problems (poor coordination). Therefore, it is recommended to create strong awareness among all provides of clinical practice program about the mutual benefits to be derived from it; providing trainings to workplace supervisors; reschedule the overall programs; and establish stronger links with a few and able organizations in the vicinity of the TVET Colleges Lastly new alternative mode of deliver is forwarded to solve the problems. .

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Following the issuance of the New Education and Training policy of Ethiopia in 1994, Technical and Vocational Education and Training (TVET) is being given alongside the college preparatory program. The Technical and Vocational Education and Training participation which was about 2% of secondary students before the year 2002 has increased dramatically (MOE, 2002, MOE, 2005). Technical and Vocational Education and Training Institutions have increased in number and the training areas have been diversified (MOE, 2009:54). Similarly, TVET enrollment is expanding at 21.3% annually, and staff and schools are increasing at almost the same rate. The total enrollment in TVET in the academic year 2001/02 was only 38,176. As of the academic year, 2007/08, enrollment has increased to 229,252 (Ibid).

Ethiopia is committed to participating in the competitive global market economy. A well designed and implemented TVET program indeed is one way of producing competent manpower, especially in countries like Ethiopia where the need for skilled manpower is evident. The relatively fast increase in the number of graduates from academic or general secondary schools is not only a demographic phenomenon. It is also an economic entity to the extent that people are educated but cannot be employed because of lack of skill required by the employing agencies. The remedy for this obvious problem was, as noted by Grima, Meharie, and Nigatu (1994:10-11), introducing a curriculum which enables students to acquire employable skills and improving the skill standards to the required level.

Hence, the primary objective of the new TVET programs in Ethiopia is to provide various skill training for the present and future labor force in order to adapt to the requirements of the labor market. The ultimate objective of TVET program is to equip students with different skills which would enable them to join the labor market (Wanna, 1998). To realize these objectives, the technical and vocational education and training programs are organized in three different packages. These are: (a) basic vocational training programs – intended to provide crafts level training for people who dropout from the primary school level (in fact who have attained basic literacy); (b) junior technical and vocational training programs – intended to provide junior level technical and vocational training for the primary school graduates or secondary school dropouts; and (c) middle level technical and vocational education provide education and training, perhaps for the general education graduates on grade 10, for the aim of producing a middle level technical workforce. The revised middle level TVET programs were into 10+1, 10+2, and 10+3 programs which eventually lead to a certificate standard I, certificate standard II, and College diploma qualifications, respectively (FNG, 2004). This program was re - revised into five levels which ranges from level I to Level V which leads to a certificate standard I – standard V (MOE, 2006).

Improving the supply of qualified staff in the health workforce is critical to meeting the public's expectations of safe, timely and accessible health service. Increasing and sustaining the number of students studying health courses will be central to achieving this goal. Ethiopia has increased availability and continued to encourage uptake of TVET qualification in the health sector in areas such as clinical nursing, midwifery, health extension, etc. Although the growth is welcome it places an increased burden on health services due to increased demand for clinical placements, which form an essential component of most TVET courses.

The implementation strategy of the middle level TVET programs, both in the government and private TVET institutions, is expected to follow mastery – learning training strategy with a heavy emphasis on practice – laden instruction in all fields of study including health which requires more attention relatively. Their instructions are expected to be

conducted through the use of three different instructional schemes: (a) in – school training scheme, which involves a 30% theoretical and 70% practical instructions; (b) practical project work in the TVET institution and (c) clinical practice – that provides practical work experiences in different health care institutions. It is usually carried out during the end of every academic year (MOE, 2003).

The central rationale of the clinical practice program is to reinforce the students' skills that they acquire from the school – based training. The curricula require all regular program students to practice skills in different actual working sites (FNG, 2004; MOE, 2003), during the summer vacation after the training in the institutions have been fully covered or flexibly (MOE, 2007) side by side with classroom instruction. In the revised curriculum the time allotted for practice is not the same among different fields of study. The time allotted for clinical practice and practical training done at TVET institution is left to be decided by TVET provider institution. The total practical hours allotted for the package is distributed among the main courses. The time given for clinical practice program is almost half of the total time allotted for the major courses (MOE, 2007).

In recent years, private and enterprise – based TVET provision schemes are largely encouraged by many educators including the experts of the World Bank for providing quality and efficient occupational training. They are considered to be the most effective means of providing skilled labor with the qualification needed for employment and for increased productivity. On the contrary, school based TVET provision schemes are largely discouraged for being less effective because: (a) they are considered to be less efficient in matching their training with the jobs available in the employment market and, (b) their programs are proved to be extremely costly.

In this regard, both the reports of the World Bank (1991) and ILO (1998) in Atchoarena and Esquieu (2002:45-46) recommended that the private and in plant provisions, rather than public and school – based ones help to boost quality in any TVET system.

Ethiopia began its reform of the technical and vocational education (TVET) system (MOE, 2007) since November 2005 with the support from the Engineering Capacity Building Program (ECBP). ECBP consists of four reform components; one of it is TVET system reform (MOE, 2007:9). In the context of TVET reform, a new TVET strategy (2006) was developed as an outcome of this reform component that replaces an older version adapted in 2002. The strategy anticipates movement from a supply-driven, input-based training system to one that is demand-driven and outcome-based (MOE, 2007, 2008). According to this strategy document, the reform offers a vision of TVET in Ethiopia that would create competent and self-reliant citizens to contribute to the economic and social development of the country. As part of the reform, the strategy anticipates that the public and private sector will join in partnership to deliver cooperative training (CT) which encompasses all forms of training, which are conducted through collaboration of TVET institutions and enterprises, i.e. training that takes place alternatively in a school environment and in the real-life environment of the workplace (MOE, 2007).

Clinical practice is considered as one of the elements of co-operative training that takes place alternatively at TVET Health Colleges and at workplace in health care institutions. In support of this Macleod and Hughes (2006) state that, clinical practice program combines the development of theoretical knowledge about a particular occupation or range of occupations with practical experience gained from doing the job. Clinical practice should lay the foundation for occupational competence and the capacity to add to this as required throughout working life. The major advantage of clinical practice (and more generally cooperative TVET delivery forms) is its vicinity to the world of work. Trainees are systematically exposed to the world of work and learn the occupational practice in a real life situation (MOE, 2008).

1.2 Statement of the Problem

The current Ethiopian government considers TVET as one of the core development strategies through which it believes to achieve social and economic prosperities for its citizens. Currently, it is carrying out an intensive expansion and restructuring works in

the sector in order to boost both quality and enrollment. As a result, the total enrollment, both in the government and private training institutions, is continuously increasing since 1994.

According to Addis Ababa City Administration TVET Agency, in Addis Ababa City Administration there are 209 Technical and Vocational Education and Training (TVET) colleges and institutions. These institutions and colleges are providing training in business, industrial, construction, medical and other fields of training. They are registered pre-accredited and accredited by Addis Ababa City Administration TVET Agency. These institutions and colleges provide training to young people, to equip the youth with employable skills at different levels. The TVET program should focus on creating quality and demand-driven system that can produce skilled human power to the market.

There are many difficulties in applying this system in developing countries like Ethiopia. One of the reasons for this is it requires first and foremost that enterprise be willing to provide training and consider it as a long term investment in human resource development. If such training is to give young people a true immersion of trainees the willingness of the enterprises where workplace training takes place is required. These conditions, not always met in developing countries, are hardly satisfied in most of sub-Saharan Africa (Atchoarena and Andare, 2002:60).

Since TVET system in general and clinical practice program in particular is relatively a new endeavor in Ethiopia, the process of its implementation is not likely to be an easy task where there is no sufficient materials, financial, manpower and health care institutions where clinical practice takes place in and even they may not be in good position to utilize the existing resources more wisely and in proper way.

Based on the educational and training policy of Ethiopia, the curriculum development for middle level TVET program provided for a new scheme of clinical practice program that become functional throughout the country. According to Logsam and Mankend (1995:6), as cited in Engida (2007), in developing countries like Ethiopia, due to the weak and nature

of industrial base there are normally not enough places to absorb all the students during workplace learning. The large number of students compared to the available opportunities and reluctance of enterprises to cooperate is the prominent problems in conducting workplace practical training in these countries.

In consideration of this fact, the student researcher believes that the extent, to which the current clinical practice program conducted in different health care institutions to the quality of private TVET health graduates in response to the need of the labor market, is a subject worth studying. The purpose of this study is therefore, to investigate challenges, obstacles and best practices in organizing and coordinating clinical practical program as well as identifying organizations, assigning of training and follow-up system in selected private TVET Health Colleges in Addis Ababa City Administration.

More specifically, the study is intended to answer the following basic questions.

1. Is clinical practice program properly implemented according to the specifications stated in the legal documents?
2. What type of institutional supports and management mechanisms need to be implemented for efficient and effective clinical practice program?
3. Are there factors that the private TVET Health Colleges take into consideration to select health care institutions for clinical practice program?

1.3 Objectives of the Study

1.3.1. General Objective

The general objective of this study is to investigate the practices and challenges in health care institutions for clinical practice, clinical placements and follow-up of clinical practice program in selected private TVET Health Colleges in Addis Ababa City administration.

To this end, the specific objectives of the study were targeted towards providing solutions to the basic questions.

1.3.2. Specific Objectives

The following are the specific objectives of the study:

1. To explore the practices and to address the challenges of the implementation of the clinical practice programs;
2. To examine the existing legal frameworks, incentive mechanisms, monitoring and supervising practices in implementing clinical practice;
3. To assess the state of availability, capability and readiness of health care institutions to provide clinical practice program effectively;
4. To assess criteria considered in selecting health care institutions for clinical practice program;
5. To assess the financial, materials and human factors that adversely affect the private health colleges' clinical practice programs;
6. To pin point mechanisms of planning organizing, coordinating and evaluating clinical practice program for its effective implementation.

1.4 Significance of the Study

Well implemented clinical practice program helps to turn health trainees having better skills and better ability to integrate into the world of work. In light of this fact, it is imperative to conduct a study to identify challenges encountered in applying clinical practice program as to improve the quality of health TVET in general and that of clinical practice program in particular. Accordingly, the study has the following contributions:

1. By revealing clinical practice program implementation difficulties in health areas, the study may bring them to the attention of TVET authorities and other concerned TVET stakeholders for appropriate action;
2. The study may contribute some knowledge in the area of such TVET delivery mode particularly relating to the conditions of its implementation in health areas;
3. The study may also provide an alternative approach or solution to the problem under study;

4. It may also provide some important points, such as the reasons why clinical practice programs are facing implementation difficulties and its impact on private TVET Health Colleges and health care institutions, which can serve as a spring board for further in-depth studies.

1.5 Delimitation of the Study

Currently, the TVET institutions have increased in number, training areas have diversified and enrollment has gone up. In the country, there were a total of 458 TVET institutions (MOE, 2009), about equally divided between government and non – government sponsorship. As stated earlier, these institutions enrolled a total of 229,252 trainees in regular, evening and distance programs. Addis Ababa takes the largest share followed by Oromiya. It worth if the study was conducted at national level. For the manageability reasons, the study was delimited to Addis Ababa City Administration.

Presently, in Ethiopia, a number of TVET programs at different levels are offered, which lead to different certificate levels which ranges from Level I to Level V. From these middle level technical and vocational education and training programs, level IV certificate was selected. Though the problem behind the technical and vocational education and training is not limited to one type, level, or location, taking time and financial constraints into account, this study is confined to private TVET Health Colleges in Addis Ababa City Administration. In addition, the study was confined to the practice of only one field of study and year two trainees of the selected field for practical reason. That is, during the time of the study it would be possible to find only year two trainees who attended clinical practice during their first year training (2008/09 academic year). Whereas, year one trainees were not sent for clinical practice, because, they had to complete year one study at their colleges. Moreover, third year trainees, those who were taking their training by 10+3 program which had two year experience in clinical practice was deliberately excluded from the subject because they were the last to study the program.

1.6 Limitation of the Study

Since the study was conducted on the TVET health area where there was no research conducted on its training part, there was limited resource. The student researcher is forced to use more of general literature rather than using those on health training. Furthermore, the absence of adequate and comprehensive domestic research work in the area under study also counts against the attempt of a more substantial research work. Secondly, the private TVET Health Colleges assigned their trainers as workplace supervisors. These workplace supervisors assigned by the private TVET Colleges were not accessible during this study because trainees were not on clinical practice during the study period. To overcome the limitations the researcher used many sources of literatures which were focused on developing countries.

1.7 Operational Definition of Terms

Co-operative training “cooperative training” encompasses all forms of training, which are conducted through collaboration of TVET institutions and enterprises, i.e. training that take place alternatively in a school environment and in the real –life environment of the workplace (MOE, 2007).

Clinical practice an internship like program that provides practical work experiences in different actual working sites particularly in health care institutions such as hospitals, health centers and/or clinics.

Employability is one's status which results in the existence of job enhancement of quality jobs, and sustainable employment.

Stakeholders All role players in the TVET system, including TVET providers and institutions, teachers and instructors, employers (trade unions), Trainees, parents, policy makers (government), NGOs and other institutions involved in training and human resource development, educational institutions, donors, etc.

Technical and Vocational Education and Training (TVET) – a training program provided by training institution with a view to acquiring or upgrading his/her technical and vocational skills (FGN, March 1, 2004, No. 391, 2004:2553).

1.8 Organization of the Study

The study consists of five main chapters. Chapter one consists of introduction, statement of the problem, delimitation of the study, limitation of the study, definition of terms and how the study was organized. Chapter two presents the review of the related literatures. Chapter three deals with research design and methodology employed in conducting the research. The fourth chapter was used for the presentation, analysis and interpretation of the data. Finally, the last chapter presents the summary, conclusions and recommendations of the study. In addition to these, bibliography and appendices are attached to the last part of the study.

CHAPTER TWO

REVIEW OF RELATED LITERATURES

2.1. The Concepts of TVET

TVET is concerned with the acquisition of knowledge and skills for the world of work. Throughout the course of history, various terms have been used to describe elements of the field that are now conceived as comprising TVET. These include: Apprenticeship Training, Vocational Education, Technical Education, Technical-Vocational Education (TVE), Occupational Education (OE), Vocational Education and Training (VET), Professional and Vocational Education (PVE), Career and Technical Education (CTE), Workforce Education (WE), Workplace Education (WE), etc. Several of these terms are commonly used in specific geographic areas.

The second International Congress on Technical and Vocational Education held in Seoul in 1999 decided that the best and most comprehensive term to use is Technical and Vocational Education and Training (TVET) (Borgen and Hiebert, 2002:16). This is reflected in the name of the UNESCO-UNEVOC International Centre in Bonn, Germany, which was established in 2000 as a direct result of recommendations arising from the Seoul congress in 1999. Hence, TVET is an education, training and learning activity leading to the acquisition of knowledge, understanding and skills which are relevant for employment or self-employment. TVET serves here as an overarching term to describe all kinds of formal, non-formal and informal training and learning provided by or in all different institutions, providers and learning locations.

Work is a major feature in most people's lives. Not only does it provide them with the means of survival in terms of food, clothing and shelter, but also the type of work undertaken by individuals and groups has a major impact upon their self-identity, social status and standard of living.

One of the important distinctions that traditionally occur in any consideration of work, and education for the world of work is between work that has a largely intellectual component, and that which is highly practical in nature and requires the individual concerned to work 'more with their hands than their head.' Thus, the traditional distinction between 'white collar employment,' which generally means the professions and semi-professions, and work in offices, and 'blue collar' work, which involves technical skills in the various crafts and trades, and technicians and technologists, in productive enterprises. In the emerging Information Age, both the nature of work and preparation for work are undergoing major changes, so that such black and white distinctions have become problematical.

Originally, the direct preparation for work was the main goal of TVET, and this remains prominent in many developing nations. However, with the technological revolutions and innovations in science and technology, during the 20th century, new domains of knowledge and new disciplines have become important at all levels of education and training. Further, the upward differentiation of TVET from first to second level and then to the third level of education has been an important development of the 20th century and sets the stage for the 21st century. The current focus is increasingly upon preparing knowledge workers to meet the challenges posed during the transition from the Industrial Age to the Information Age, with its concomitant post-industrial human resource requirements and the changing world of work.

Technical and vocational education serves different purposes. Smith (1990:262) writes,

[---] it is used to (a) provide skills and experience considered valuable by students; (b) facilitate the mastery of both non-vocational and vocational skills needed by students; (c) provide hands on learning opportunities; (d) provide curricula that are closely related to everyday life needs of students; and (e) serve as an alternative for potential school dropouts.

The current rationale for the indispensability of TVET rests on four arguments. McNeil (1996:332) indicated that first, it serves a national interest by (a) conserving and developing resources; (b) promoting a more productive agriculture, (c) preventing waste

of human labor, and (d) helping to meet an increasing demand for trained workers. Second, it helps in realizing equity by helping the youth, the refugees and the hard-to-employ to find a place in the economy through training in general or specific occupational skills and the related work habits. And finally, it helps in facilitating the students' understanding about various issues related to society, technology, work, environment, and their own future career developments.

2.2. Health and Economic Development

Historically human capital has been defined in narrow terms as educational accomplishment and little attention has been paid to the relationship between health and growth. More recently, however, the importance of health to human capital has become widely acknowledged. Health is one of the most important assets a human being has. It permits the people to fully develop his/her capacities. If this asset erodes or if it is not developed completely, it can cause physical and emotional weakening, causing obstacles in the lives of people. Developing capable, motivated and supported health workers is essential for overcoming bottle necks to achieve national and global health goals. At the heart of each and every health system, the workforce is central to advance health (WHO, 2006).

Health is a key component of human capital, which in turn is an important determinant of economic growth. Improved health can enhance workers' productivity by increasing both physical and mental capabilities. A higher labor supply, improved skills that results from increased access to education and training, and capital formation, through higher savings, are ways in which health can contribute to economic growth (WHO, 2001).

Health and growth are now seen to interact in ways that: (a) good health enhances workers' productivity by increasing their physical capacities, such as strength and endurance, as well as their mental capacities, such as cognitive functioning and reasoning ability. Empirical evidence clearly shows that health has a major impact on the raising of

labor productivity. Some studies estimate that a single percentage point increase in the adult survival rate increases labor productivity by as much as 2.8 percent (Bloom, et al., 2002). (b) good health can improve the effective supply of labor minimizing absenteeism due to ill-health, inducing those whose health improves to (re)enter the labor force and enabling existing workers to remain in active employment for years, without needing to take early retirement due to illness.

A decline in fertility can also contribute to an increase in the labor supply, as women who face lower demand for childcare can devote more time to work. (c) improved health in children as a direct impact on school attendance and student performance by improving cognitive ability and the capacity to reason. Children with poor health have significant lower educational attainment and as adults have poorer health and lower social status (Case, et al., 2005). Furthermore, children with poor health receive fewer years of schooling. Those with the most severe health problems obtain about 20% fewer years of schooling than their healthier counterparts.

Moreover, reduced schooling has a direct impact on incomes: One study showed that it lowers hourly earnings by about 17% directly and indirectly (Perri, 1984). (d) reductions in both visits to the doctor and the use of medicines inevitably have a positive impact on the budget of an individual and government. As such, improved health in an individual or a nation can lead to saving in health expenditure. Although individual preferences can bring about an increase in consumption, a part of such savings can be expected to be used for investment. Higher incomes resulting from improved health can also lead to higher capital formation.

TVET is important as it enriches a person for life and it provides the competencies which are necessary in a society. Evidence from World Bank studies (World Bank, 1988, 1991) and case studies of TVET in the African region (Kerre, 1995) clearly point out investment in TVET is worthwhile no matter what the economic status of the country may be.

Further evidence from the newly – industrializing countries show that TVET is largely responsible for providing a pool of skilled human resources essential for such critical sector of the economy as agriculture, manufacturing, construction, communication, transportation and commerce (Kerre, 1997:25).

To enhance productivity, stimulate competitiveness, and bring about economic development, skill development is important. Technical and Vocational Education and Training (TVET) is the provision of skills, knowledge, attitude, and values needed for the place of work. In contrast to general education, learning in TVET is centered on applied as opposed to academics, practical as opposed to theory, and skills as opposed to knowledge. TVET is meant to prepare learners for careers based on manual and practical activities (Amkombe, 2000). TVET is provided at different level both by public and private institutions within the formal education system as well as outside it. The major objective of TVET today is directly or indirectly to meet the challenges of preparing the workforce that plays effective role in economic development of a country.

Without having adequate workforce with the necessary knowledge, skills and attitudes, one cannot imagine changes that lead to development in the social and economic sectors. Several educators claim that education is the cornerstone for any development. Tucker (1992) in Mekonnen (2004), for instance, writes, the quality of the economic performance of a country is a function of the quality of its human resources; and that, in turn, is a function of the performance of its education. While strengthening this, Atchoarena and Esquiú (2002), on their part, also contend that no country can give up training its young people because their technical skills are needed to increase productivity both in the formal and informal sectors of its economy. Therefore, it is justifiable that every government's economic development policy usually includes human resources development component, most of which will be realized through education in one form or another.

Indeed, among the different categories of education it is the technical and vocational education and training (TVET) that is largely believed to determine the competitive

strength of a county's workforce. As to this, TVET national strategy (MOE, 2008), states that TVET is geared towards enhancing the competitiveness of all economic sectors through a competent workforce and towards improving people's employability in the labor market and with regard to self-employment.

Basically, if people lack in technical skills, knowledge and entrepreneurial skills, the natural resources will tend to remain unutilized, underutilized or even miss-utilized. Jhingan, (1985) argues that undeveloped human resources are an important obstacle to economic development of the least developed countries. According to him, the economic quality of production remains low when there is little knowledge of available natural resources, possible alternative production techniques, necessary skills, existing market conditions and opportunities, and institutions that might be created to favor economizing effort and economic rationality.

The above contribution of middle level workforce to the development of one country is impossible without technically skilled middle level health workforces which indirectly contribute the economic development. Hence, health is a key component of human capital, which in turn is an important determinant of economic growth. Improved health can enhance workers' productivity by increasing both physical and mental capabilities. A higher labor supply, improved skills that results from increased access to education and training, and capital formation, through higher savings, are ways in which health can contribute to economic growth (WHO, 2001).

2.3. TVET Delivery Modes

Countries plan for TVET provision to operate in a variety of ways, and such programs are provided by a broad assortment of institutions. The various approaches that have been adapted to organize and provide technical and vocational education and training around the world are classified differently by different authors. The variation among authors emanates from their preferred basis of classification.

Modern TVET programs can be organized in either of two schemes: school-based and/or, enterprise-based TVET provision schemes. In recent years, private and enterprise-based

TVET provision schemes are largely encouraged by many educators including the experts of the World Bank for providing quality and efficient occupational training. They are considered to be the most effective means of providing skilled labor with the qualification needed for employment, and for increased productivity. On the contrary, public and school-based TVET provision schemes are largely discouraged for being less-effective because: (a) they are considered to be less efficient in matching their training with the jobs available in the employment market, and (b) their programs are proved to be extremely costly.

2.3.1. School Based Training

School based training refers to a range of separately institutionalized training as to duration, depth of skills taught, and degree of integration with mainstream secondary schooling, i.e., education and training which takes place within an educational institution. As Lauglo (1993) stated, school based training can be only of prevocational character or it can aim at entry level skills. This category is made depending on the balance in the curriculum between general education and vocational subjects. But, it is only the training aimed at entry level skills of some kind that can truly be regarded as vocational training. Again, in this study the concern was with training rather than with the modest prevocational variety, which is also found in schools.

School based training is characterized by several features which makes it distinct and or similar with other modes of training. For instance, such training typically occurs prior to employment (self employment). Consequently, the training in such model usually includes the provision of some general education subjects (Middleton, 1996). Besides, the recent well organized forms of school based training such as the one conducted in Sweden have elements of some supplementary work experience through placing students in industries. Moreover, evaluation systems of students in school based training are internal to the school system, unlike other modes of training which may lead to external system of trade tests.

According to Hultin (1998), the first of these varieties, diversified secondary schools, gives a mix of general education and broad vocational skills in a particularly setting such training mode could be particularly effective for industrially advanced economies. For Hultin, there are stages of economic development that roughly matches training objectives, and the latter evolve from well defined specialized skills, through pre-vocational training and attitude change, to meeting the requirements of an economy that is increasingly based on information Technology.

The advocates of training in integrated secondary school had faith in the capacity of schools to promote the attitudes of being able to work together, resolve conflicts and behave responsibly, which also industry had stressed so strongly.

However, the idea of such diversified secondary schools was put in fire, particularly in relation to the problems with this mode being severe in low incoming countries.

On the other hand, Lauglo (1989) in Lauglo (1993) suggested that, if a concerted effort is made to support the trainings' development in a limited number of schools, and if the skills taught are related to high status modern technology, the problems associated with this mode of training can be minimal.

The second variant of school-based training has to do with specialized technical or vocational secondary schools. According to Middleton, et al (1996), these more specialized secondary schools have the advantage of being able to concentrate training resources in a smaller number of schools. Among the key features of these schools including: intermediate depth of skills taught (compared to the other two variants of schools based training-diversified schools and trade schools); a path to higher education is usually accessible to the graduates; and provide better visibility to employers.

However, such vocational secondary schools are not without criticisms. The most commonly voiced limitations of training in these schools is that it connects poorly with work, yet, specialized technical and vocational schools compared to training in

diversified schools, usually perform better in the labor market both in terms of access to related work or to jobs more generally (Lauglo, 1996).

Unlike the two variants of school based training and training centers, are fully devoted to vocational training only. Characteristic features of this variant of school based training, as put by Luaglo (1993), are summarized, thus: it does not prepare for further academic education or further higher studies; it considers basic education as the minimum entrance requirements; it is heterogeneous in terms of skills levels, education of courses and extent of integration with a national system and links with employers; and the courses are usually pre-employment.

Generally, school based vocational training, regardless of the variants mentioned, has been fiercely criticized for two basic reasons: the system is expensive and the match between training specialties and later work is poor (Middleton, et al., 1996). These criticisms pave the way for a renewed interest in training based at the work place clinical practice program with school based components. In a latter sub-session, an attempt will be made to elaborate clinical practice program in a little more detail, for the study specifically focuses on this mode of TVET provisions. The discussion of clinical practice program will resume after a short description of the second mode of TVET training employees.

2.3.2. Enterprise Based Training

Enterprise based training is learning that takes place within the workplace using tasks or jobs for instruction and practical purposes. It may be formal and structured using instructional plans, or informal. Work-based learning is learning a contextual teaching and learning approach in which work place activities are integrated with classroom content (Smith, 2001, as cited in Berns & Erickson, 2001). Approaches involving work-based learning proceed from the premise that learning set in the real-world context of work not only make academic learning more accessible to many students but also increases their engagement in schooling (Wonacott, 2002). School activities help

reinforce and extend the learning that occurs at the worksite while students develop attitudes, knowledge, and skills from both work and school experiences and are able to connect learning with real-life work activities (Lynch & Harnish, 1998). Enterprise-Based Training (EBT) (Grierson, 2002:4) is a straightforward notion. It involves the delivery of both structured and unstructured training to employees (and in some cases to customers and customer's employees) in the private sector workplace. The distinguishing feature of EBT is that it takes place in active on-going enterprises.

However, workplace environment also has some significant limitations. The amount and quality of the training that they receive varies considerably from one industry to another and from one firm to another within industries. In many instances the goals, method, idea and strategies of business enterprises are very different from those of learning institutions. The former is concerned with productivity and survival, the latter with learning and professional growth (Harris, 2000:34). Thus an enterprise (especially small business) is not primarily concerned with learning and in particular the sort of training (learning) that might lead to qualification.

In addition, some employers might be required to work in isolation and have no one to learn from; or that experts may not be available or effectively skilled or willing to teach learners. In line with this, UNESCO (1983:48), report states that "apprenticeship programs often cited as strength area still suffers in many countries from lack of appropriate workplaces and qualified supervision". In some cases working environment are not practicable for teaching purpose (e.g. noise) and access to a range of suitable activities are lacking in some enterprises (Evans, 1971:8).

On balance, work-place learning environment makes a valuable contribution to the development of trainees as a trade person but a better understanding of the conditions for its implementation needs special attention. Therefore some attention to the content of the work-based component in effect teaching learning principles at work-place is necessary. If a work-based program is narrowly devised, then a trainee is likely to have inadequate

skills as work changes, if, on the other hand, it provides the deeper understanding of work process, long run effects should be positive.

2.3.3. Clinical Practice

Human resources of the organizations are taking the connotation of human capital instead of mere labor. Access to and maintenance of skilled human resources will play the decisive role in quest for productivity and competitiveness among the nations and organizations in a global marketplace. So, training is sine qua non for business establishments particularly in perspective of the tough competition where survival of the fittest has become the rule. The challenges confronting nurses in today's rapidly changing health care environments have highlighted the necessity for graduating students to feel both competent and prepared for practice. This necessity has in turn highlighted the increasing significance of the nature and quality of student clinical learning experience (Adams, 2002; Chan, 2002; Cope et al., 2000; Dunn et al., 2000; Zhang et al., 2001). As graduates, students will be required to have adequate knowledge and skills and to be able to transform competencies into effective performance (Zhang et al., 2001). It is during their clinical placement that students are expected to develop the relevant knowledge, skills and competence (Chan, 2002), to develop their capacity for "knowing how" as well as for "knowing that" (Cope et al., 2000; Dunn et al., 2000).

The purpose therefore of planning clinical experience is to enable students to develop clinical skills, integrated theory with practice, apply problem solving skills, develop interpersonal skills and become socialized into the formal and informal norms, protocols and expectations of the nursing profession and the health care system (Conway and McMillan, 2000; Hutchings and Sanders, 2001; Jackson and Mannix, 2001). A recent national study conducted in Australia (Clare et al., 2002) found that nursing students and health care staff both desire clinical placements which provide students with quality learning experiences that meet the growing demands placed upon graduates on completion of their studies.

2.3.3.1. Clinical Placement

Since nursing education was moved from hospitals to TVET Health Colleges the development of strategies to bridge the theory-practice divide has been an ongoing concern. Clinical experience in the workplace enables students to integrate theory learnt in the classroom, apply problem-solving skills, develop interpersonal skills and become 'socialized into the formal and informal norms, protocols and expectations of the nursing professional and the socio political health care milieu' (Clare et al., 2003). Clinical education, almost universally organized as clinical placements, is also recognized as the most challenging component of the pre-registration nursing curriculum (Clare et al., 2002). Many of these challenges are financial and organizational, and the Australian National Review of Nursing Education recommended a reform of funding models for clinical placements (Heath, 2002).

There are also substantial pedagogical challenges in clinical placements. There is evidence that student time on clinical placements is not always used in an educationally effective way (Clare et al., 2002) and that links between theory and practice are not always made on the job. The assumption that quantity of clinical practice necessary correlates with the development of competent nursing graduates has been challenged (Ogle et al., 2002).

The discussion paper for the National Review of Nursing Education of Victoria acknowledged that working partnership between education and the settings of practice are essential for effective clinical placements (Heath, 2001). The report argued that strong links between theory and practice are achieved when students' clinical experiences are jointly designed by academic educators and practitioners and the experience take place in the practice context (Heath, 2002).

Clinical placements need to be designed and implemented in ways that maximizes the opportunities for student learning. In designing clinical placements decisions must be made about objectives, student activities, assessment, timing duration and type of

placement. But, the best designed placement can still founder if it is ineptly managed with in health care setting. The ability to develop and foster if it is effective partnerships with health care organizations is undeniably a strong determinant of success. When the students are placed to have actual work experience such opportunities enable them to develop specific attitudes, occupational and skill training on the job. But it also helps them to know the world of work and in particular to know what one could do that employer would pay for it. Even more basic is it enable to feel the integrity involved in doing a job and exercising a talent to comprehended the integrity of work and to discover how vocation can a route to employment (Ipaye, 1986:110).

2.3.3.2. Importance of Clinical Placements

In a review of the literature, Chun-Heung and French (1997) found that the clinical education setting is the most influential in the development of nursing skills, knowledge and professional socialization; stressing the importance of the learning climate within the clinical education environment. These authors, who focused on the perceptions of students, noted that a supportive clinical environment is of the greatest important in optimizing the teaching and learning process. This view is supported by Calpin-Davies (2003), who indicates that a nursing and supportive environment can be created when the divergent but compatible organizational aims of the service and educational sectors are merged in a climate that encourages collaborative learning, trust and mutual respect.

Clearly, clinical placement environments not only play an important role in the development of students' competence but also students' confidence, organizational skills and preparedness for practice. In addition, the clinical environment will influence students' satisfaction with their placements and the degree to which their experiences are regarded as positive. There has been recognition of the influence that individual ward or unit environments have on students' experiences and career intentions (Clare et al., 2002).

2.3.3.3. Worksite Mentor Identification and Training

As one of the requirements of workplace learning, employers are expected to assign a supervisor and/or an in-company trainer for being a coordinator to follow-up and support trainees in real work environment. Large companies might have a supervisor for training and educated trainers for in-company training as well. Smaller companies might have experienced workers/employees working as instructors (MOE, 2002:11)

In these companies, the supervisor is responsible for the overall planning, follow-up and evaluation of in-company training. Compared with these trainers for in-company training is responsible to train and guide the trainees at the workplace. The workplace training is assuming increasingly critical position in the provision of training opportunities. Trends in both developed and developing countries suggest that this shift will become enshrined as a central element in skill formation policies in the near future, as more initiatives seek to achieve the twin goals of making training an attractive undertaking for employers and of ensuring that training is relevant and useful for workers (Harris, 2000:36).

The quality of work-based learning is heavily dependent on who provides the training (Bailey & Merritt, 1993). Work-based learning must be carefully planned and monitored by people who understand both the work setting and what is to be learned if it is going to not only expose students to the workplace and give them an opportunity to acquire specific procedural skills but also achieve broader goals (Stern, 1997a). Worksite mentors assist in the cognitive, personal, and professional development of the students. Though sequencing learning opportunities and making connections between what is learned at school and the worksite, worksite mentors increase students' ability to become independent thinkers and workers (Evanciew and Rojewski, 1999). Worksite mentors must ensure their worksites have educational value (Bailey, et al., 2000).

Workplace mentoring has been identified as important aspects of work-based learning. By establishing relationships with caring and competent adults who can provide emotional support and facilitate skill development, less-experienced youth are more

likely to bridge the gap between school and work. As in other endeavors, workplace mentoring requires planning, training, monitoring, and assessment to ensure that individuals being mentored will achieve successful outcomes (Brown, 2001).

When a student engages in work-based learning in real world setting, it is assumed that people in the workplace pass on their knowledge (Moore, 1999). The facts that knowledge is available does not necessary mean a student will engage it in any significant way. The learning process depends on the extent to which the student wants, is expected, and has the opportunity to engage various forms of knowledge-use (Moore, 1999). Worksite mentors must (a) provide instruction to the students on how to perform a task; (b) demonstrate how a task is performed; (c) coach the student as the task is performed; (d) explain why the task is done in a particular way; (e) challenge the student to perform well; (f) initiate the student into the workplace culture; and (g) affirm the student's value as a person and talent as an employee (Evanciew & Rojewski, 1999).

Wallace (as cited in Butler and York, 1971) stated few training stations start out perfect. Worksite mentors must have a commitment to education and the capability of providing effective on-the-job learning. Butler and York's (1971) study brought up a serious potential defect of cooperative education programs in the early years of these programs being established. Their study revealed employers viewed the student essentially as a part-time worker, expected effective work performance and productivity, and expected the student to bring many qualifications to the job. Students, on the other hand, expected the experience to have educational significance and to learn many things on the job that the employer expected them to already know. Finally, greater knowledge and awareness of training is required in enterprises in order to make wise decision concerning training. The critical issue is to what extent workplace trainers (especially in micro and small enterprises) are ready, willing and able to meet this enhanced commitment and to fulfill this important role.

2.3.3.4. Memorandum of Agreement

In most countries, clinical practice functions nowadays within the framework of statute law while in other, one or more pieces of legislation defines what clinical practice is and what is not – i.e., providers for the legal definition of occupational coverage and training content – and provides powers for its governance and adaptation. The best known is Germany's Vocational Training Act of 1969, though built upon previous statutes and limited to workplace training by non-artisan employers, provided the framework for the contemporary regulation of training quality and educational contribution in apprenticeship for industrial and commercial occupations.

Clinical practice program in health care institutions is based on an agreement between a training institution, the trainee and health care institutions. In principle, the participation will be voluntarily and be promoting by program of mutual benefits, incentives and in mutual respect. Clinical practice program is a win-win situation because it is a partnership between the health care institutions, the TVET health institutions and trainees for mutual advantage. Since the interests of industry and TVET institutions are complementary, they call for partnership and increased awareness of their interdependence (Petter, 1987:34).

In this context, clinical practice contract is an agreement concluded among health training institutions, trainees and health care institutions based on mutual interest. All concerned partner should sign a memorandum of agreement about clinical practice program so that the tripartite partnership can become more mutually influential. Such an agreement determines the content of clinical practice as well as the duties and responsibilities of the parties. For instance, in German dual system (Parey, 2008:7) apprentices and firms write a contract which is registered and supervised by the Chambers of Industry and Commerce or the Chamber of Handicrafts. The contract typically specifies an initial probationary period, after which firing from the firm's side is difficult. A school leaver sign a training contract with the employer stating the duration of training, the content of training, training

courses outside the training establishment, amount of payment (pocket money), length of holiday, length of working day.

2.3.3.5. Timing, Duration and Variety of Clinical Placements

There are a verity of views on duration, distribution and variety of clinical placements in the literature. While at present there is support for a model of diverse experience for students through a range of clinical placements, there is a concern that short stays in multiple health care environments do not result worthwhile clinical education experience (Heath, 2002). According to Heath (2002), the National Review of Nursing Education of Victoria report offers more support for longer period of placement in the one setting rather than a succession of short-term placements. This allows time for the supervisors to address the students' needs in the workplace (Heath, 2002).

2.3.3.6. Certificates of Completion

Trainees who have undergone various technical and vocational education and training programs, whether formal or non-formal, if through evaluation criteria applied by the training institution, they are found meeting the profiles prescribed for various levels of training, they shall be issued certificates evidencing completion of the training (FNG, 391/2004). When apprentices finish their training, they receive certificates of completion of apprenticeship. As to the experience of many countries, these are issued by the state apprenticeship agencies or, are those states not having such an agency, by the Bureau of Apprenticeship and Training in accordance with is recommended standards.

2.4. Vocational Counselor in TVET Institute

The vocational counselor's job in at TVET health institutions is to work with training coordinators and health care institution (trainers in partner hospitals, health centers and clinics) to implement the clinical practice program. These staffs at TVET institutions are instrumental in facilitating apprenticeship and preparing youth for apprenticeship training

(MOE, 2008). It is also focal point in organizing self-employment support for TVET graduates.

2.5. Partnerships

The importance of strong collaboration between education and service sector for the provision of effective clinical learning experiences is well highlighted in the literature. The literature indicates that the culture of the private TVET Health Colleges and Health Care institutions, relations between TVET Health College staff, clinical staff, students and the organizations are significant determinants of successful and unsuccessful clinical education experience (Clare et al., 2002:94).

As cited in Gabb (2005), despite recognizing its importance, both tertiary and service sectors find collaboration challenging. Many research studies identified poor relationships between TVET Health organizations and the health sector as a key area of concern (Clare et al., 2002). While this is partly to do with financial constraints it is also a product of well recognized tension between the two sectors. The study on focus group participants in Australia highlighted 'inadequate linking of theory and practice with knowledge divorced from practical skills, lack of teaching realities of professional practice, insufficient contribution by clinicians to theoretical teaching, out of dated or out of touch academic staff' as areas of concern (Clare et al., 2002). The two sectors also have quite different expectations and needs. For instance the service sector tends to expect graduates to be able to 'hit the ground running' whereas the education sector believes that the expectations of the service sector are unrealistic (Clare et al., 2002).

2.6. Financing Clinical Practice Program

The trainee, the employer and the government (the nation) are prominent stakeholders of clinical practice program. The first one gets financial benefits directly in the form of stipend/salary while the other two bear the expenditures on the scheme partly or wholly

(Asghar & Siddi, 2008:12). In most of the countries founds for the training are chipped in both by the employer and the government (Asghar & Siddi, et al., 2008).

Clinical practice schemes vary widely through the world. And thus the operational features or forms of clinical practice program provide the basis for its surrounding financial arrangement. Asghar & Siddi, (2008), for example, in Germany, there are normally no direct financial transfers of public money to firms with respect to apprenticeship. Finance for apprentices' in-firm training is provided by the firm. There are tax breaks for companies that train. In a small number of sectors (e.g., construction) the sector has agreed to a self-imposed levy on all firms to finance work-based training. There are also a number of arrangements in various sectors and localities for the setting up of joint training facilities. These are normally funded by employers directly through fees paid and indirectly through levies paid to the Chambers of Commerce.

German employers voluntarily bear the greatest share of overall vocational training costs. This contrast with many other countries, where, these costs are mainly, borne by governments. Some considerations encourage employer to sustain their high training investment through dual system. First appreciation of trainees' productive work brings certain saving. Secondly, firms' training expenditure is made eligible by the government for deduction from their taxable profits. Thirdly, training enterprises save money on administration and by introduction of employees into the work process, as well as reducing the risk and costs of recruiting employees in the labor market. Fourthly, in the dual system employers have a strong influence over training content, methods and quality (Gasskov, 1994:136). It is widespread opinion that the dual system is highly efficient because of its built-in flexibility and because it is essentially demand-led. Employers consider their deep involvement in training as an important prerequisite for sustaining their competitiveness in international market.

Currently, many governments are considering setting up national training funds to address the training needs of industries. This fund is intended to provide financing of work-based allowances among other benefits. The money will be raised from a levy

imposed on enterprises. The new trend is to elicit active participation of the private sector in co-financing trainees. With this arrangement, the private sector is expected to wield more influence on training policies than at present. This seems to be logical, as the total output of publicly subsidized work-based learning is absorbed by the private sector. Government intervention in training would be limited to the role of regulator (Gasskov, 1994:148).

2.7. Duration of Work-based learning

In Ethiopia, the training is planned to be 70% practical based and 30% theory oriented and this has to be maintained throughout the training programs in all training areas (MOE, 2001:2). Besides, in-company apprenticeship training is compulsory at this level (FNG, 391/2004:2558).

The former implementation strategy of the TVET program requires 30% theoretical and 70% practical training. The school based training, which is planned to be executed in full-time schools, is assisted by project works and by what is referred to as 'apprenticeship' program in different actual office and enterprises. The central rationale of the apprenticeship training is to reinforce the students' skills that they acquire from the school-based training. The curricula require all regular program students to practice skills in different actual working sites for 312 hours every year (FNG, 2003; MOE, 2003).

In the reformed Ethiopian TVET – system the time allotted for practical hours at institution and for apprenticeship training is not differentiated. As to the practical hours, (MOE, 2007), including practical training done at the TVET – institution and in the form of internships at companies, assignment of hours to be decided by TVET provider. As long as the required nominal learning hours as specified in the curricula are retained, the training can be flexibly adopted according to the prevailing conditions and provisions as far as organization, venue and scheduling of the training is concerned (MOE, 2007).

2.8. Legislation in TVET

The importance accorded to TVET in a given society is reflected in the existing legislation establishing it. It can be observed that legislation dealing with technical and vocational education in most countries came into effect much later after the promulgation of education Acts. Technical and Vocational Education may have been mentioned as was the case with the Ashby Commission of Nigeria in 1960 and in the Kenya Education Act in 1988, but effective policy implementation was to become much later on (UNESCO – BREDA, 1995). In connection to this the experience of most of African countries reveal that much concern was not given to facilitate the legal ground.

Several countries in Sub-Saharan Africa have introduced legislation stipulating the need to develop programs focused on the practical aspect of training by organizing in – firm internship. In Cameroon, for example, the official programs governing TVET institutions provide for practical internship/apprenticeship in enterprises during the holidays at the end of the school year. The objective of pupil's internship/apprenticeship must be clearly defined and communicated to companies training officers. The company training officer should also receive instructions from the TVET institutions about methods of monitoring and evaluating the internship/apprenticeship of the pupil concerned. Ghana, Kenya, Cote d'Ivoire, Senegal and Uganda have also taken measures to facilitate in-firm internships for TVET pupils (Atchoarena and Andre 2002:61). Thus, it can be inferred from this practice that the aim of internship/apprenticeship and dual systems is related to each other, for whose primary objective is to familiarize trainees with the real world of work, which in many countries tied with the legal frameworks.

In Ethiopia, in regard to TVET there were different mandates given to different ministries. Previously, there was no mandate for national body that could control and manage the system. For example, in labor proclamation No. 42/85 and proclamation No. 41/87 mandates and responsibilities were given to the ministry of Labor and Social Affairs and the MOE respectively. There were also responsibilities of the Ministry of Trade and Industry and others regarding financial and vocational education and training

(ILO, 1997:9). It was only on the 1st March 2004 that TVET law was promulgated for the first time in Ethiopia. This law devotes one of its parts fully for the apprenticeship training. In this part of the document duties and responsibilities of organizations, trainees and TVET institutions during apprenticeship training were given full coverage. Besides, the main elements in the contract of apprenticeship training that shall be concluded among the TVET institution, an organization and an apprentice were listed in the law (FNG, 2004, No. 391/2004).

This proclamation No. 391/2004 through article 3 revised the importance of establishing a system under trainees undergo apprenticeship training in the productive and service rendering organizations in order to ensure that a TVET program produces capable man power. To this end, the duties and the responsibilities of TVET institutions, employers and trainees are clearly defined in the legal document. Moreover, the main elements that should be included in the memorandum of agreement/apprenticeship contract are spelled out in this TVET Act (F NG, No. 391/2004).

2.9. Health in Ethiopia

Ethiopia is a developing country where about 85% of the total population lives in the rural area, while the advancement in socio economic political and technological developments remained very low. Besides this, widespread poverty characterized by large family size, low educational levels as well as inadequate access to clean water, sanitation facilities and health services have contributed to the alarming level of health parameters such as infant and maternal mortality, morbidity and average life expectancy. (MOE, 2002).

Reference to the aforementioned facts above, calls for subsequent measure to improve the poor health condition of the country through the provision of basic health services and giving due attention to the prevention of common communicable diseases.

Thoroughly examining the nature, magnitude and root causes of the prevailing health problems of the country, the health policy of September 1993 proposes realistic goals and means for attaining them. Among the means, the policy suggests appropriate emphasis to the need based development of capacity building of the health sector. One of the priority undertakings as the policy envisages is, "development of human resources with emphasis on expansion of the number of frontline and middle level health professionals with community based, task-oriented training."

Along with this the education and training policy of April 1994 gives due attention to the provision of education and training to satisfy the country's need of skilled manpower among which the health sector takes significant share.

According to the head of the World Bank's Global HIV/AIDS Program, Ethiopia has only 1 medical doctor per 100,000 people. However, the World Health Organization in its 2006 World Health Report gives a figure of 1936 physicians which comes to about 2.6 per 100,000. Ethiopia's main health problems are said to be communicable diseases caused by poor sanitation and malnutrition. These problems are exacerbated by the shortage of trained manpower and health facilities. There are 119 hospitals (12 in Addis Ababa alone) and 412 health centers in Ethiopia.

Table I
Number of Health Personnel by Region (2006/07)

Region	Doctors	Health Officers	Nurses
Tigray	59	163	2094
Afar	10	16	208
Amhara	133	273	1973
Oromia	149	522	3278
Somali	53	23	476
Benishangul Gumuz	6	18	397
SNNP	155	150	2143
Gambella	4	10	156
Harari	41	11	277
Addis Ababa	332	25	12583
Dire Dawa	31	8	226
Total	973	1219	23811

Source: Aynalem Adugna, www.Ethio.DemographyAndHealth.Org

Ethiopia has an incredibly low life expectancy at birth with current average age being 45 years old. In addition to the life expectancy rate being so low there is also a very high infant mortality rate with over 10 percent of babies dying after or shortly after birth. WHO (2006) has identified shortage of health workforce in Ethiopia. Health worker/population ratios, for example are 3 to 4 times lower than even the East African standards. In 2005, there were 2453 medical doctors (MD), 776 health officers (HO) and 18,809 nurses. Currently Ethiopia only has 3 doctors per 100,000 people. There is a shortage of health workforce in Ethiopia in all categories but more marked in middle level which is very crucial for the health of health sector workforce. There should be optimum number and professional mix of human resources for the effective coverage and quality of the intended services. To alleviate this serious problem the enrollment in public and private TVET health institutions has increased. The number of clinical nursing,

health officers and community health specialist has been increasing significantly (MOH, 2007). The number of private TVET institutions has increased dramatically. For example, according to Addis Ababa TVET agency annual abstract (2010) in Addis Ababa City Administration there are 26 TVET health colleges out which only one is owned publicly.

2.10. Current State of TVET in Ethiopia

Ethiopia like many other countries on the African continent, is a developing economy with a population of about 74 million (MOE, 2008), out of which 50.5% are males and 49.5% are females. Of the population 55% is below the age of twenty. Eighty-five percent of the population lives in rural areas and most of them are engaged in agriculture, (Ethiopian – Central Statistical agency, May 2007). The balance (15%) lives in urban areas where there are high levels of unemployment. The high level of illiteracy (67%) has impacted negatively on the rate of economic development of the country. Consequently Ethiopia is one of the poorest countries in the world with an average per capita income of US\$ 100 per annum. Some 31 million of the people live below the defined poverty datum line of US 45 cents per day (MOE, 2008).

The national TVET strategy, (MOE, 2008), states that traditionally, Technical and Vocational Education and Training (TVET) has been fragmented and delivered by different providers at various qualification levels. Public TVET institutions under the education sector were concentrating on producing middle level technical graduates at post Grade 10 level. In parallel with this, public and private companies have had their own TVET programs, as have NGOs and private TVET providers. Meanwhile, in non-formal TVET programs, public institutions, NGOs, and private institutions offer employment-oriented TVET programs to various target groups, including school leavers, people in employment, school drop outs and marginalized groups in the labor market. This idea is further supported in AU Final Draft TVET Strategy (2007:18), as another important characteristic of TVET is that it can be delivered at different levels of sophistication. This means that TVET institutions can respond to the different training

needs of learners from different socioeconomic and academic backgrounds, and prepare them for gainful employment and sustainable livelihoods. The youth, the poor and the vulnerable of society can therefore benefit from TVET. Unlike formal TVET, these programs are not yet systematically delivered. Informal (on-the-job) training is widespread, but due to the absence of a systematic assessment and certification system there are currently no mechanisms to recognize informal occupational learning.

Traditional apprenticeships in the small and micro enterprise sector constitute another presumably important, yet entirely un-researched, training environment. Public and private training schemes planned to produce administrative and health personnel to the market in sufficient quantity. Agriculture TVET programs, which have been massively expanded during recent years, are disconnected structurally with non – agriculture TVET programs (MOE, 2008:9-10).

Presently, the TVET system in Ethiopia is in a reform process. According to the new education and training policy, the new organization of TVET has a broad base and multi-level foundations. Moreover, in current TVET system, a number of TVET programs at different levels are defined which lead to different certificate levels. These comprise post-grade 10 middle level trainings, post-grade 8 junior level training, as well as basic level trainings accessible to school drop-out after completion of grade 4 (MOE, 2003c:3). The aim of all these programs is not only to train manpower for the development program that the country is in process of implementing but is also intended to encourage the trainees to create jobs themselves and contribute to the national development effort (MOE, 2002b:94). The education and training that occurred is best embodied in the Chinese proverb: ‘Give a man a fish and he will eat for a day. Teach him how to fish and he will eat for a life.’

Middle level technical and vocational education and training (MLTVET) programs comprises five levels – level 1 to level 5. The detail is presented in the diagram that shows the Structure of the Ethiopian Education System.

As stated in chapter one, the current Ethiopian government considered TVET as one of core development strategies, through which it believes to achieve social and economic prosperities for its citizens. Currently, it is carrying out an intensive expansion and restructuring works in the sector in order to boost both quality and enrollment. As a result, the total enrollment, both in the government and private training institutions, is continuously increasing since 1994.

For instance, according to the Ministry of Education 2009, Education Statistics Annual Abstract, in 2000 E.C. (2008), there were a total of 458 TVET institutions in the country, about equally divided between Government and Non-government sponsorship. These institutions enrolled a total of 229,252 students in regular, evening and distance programs. Addis Ababa and Oromiya had the largest programs followed by Amhara regional states.

Table II

Profile of TVET by Region – Enrollment, Centers and Teachers

Region	Enrollment – 2000 E.C. (2007/2008)			No. of TVET Center	No. of Teachers		
	Male	Female	Total		Male	Female	Total
Tigray	6,550	7,537	14,087	45	768	88	856
Afar	553	317	870	2	40	1	41
Amhara	16,569	15,659	32,228	57	1,076	162	1,238
Oromiya	33,251	26,232	59,483	155	1,761	387	2,148
Somale	Not Reported						
Benishangul Gumuz	1,197	847	2,044	14	116	4	120
SNNP	19,336	12,663	31,999	53	987	165	1,152
Gambella	611	436	1,047	2	38	5	43
Harari	2,283	2,345	4,628	11	157	24	181
Addis Ababa	36,720	42,375	79,095	105	2,443	592	3,035
Dire Dawa	2,053	1,718	3,771	14	183	13	196
Total	119,123	110,129	229,252	458	7,569	1,441	9,010

Source: Educational Statistics Annual Abstract 2000 E.C. (2008 G.C.)

Having this policy, one of the strategies of realizing the education and training policy in the area of TVET is developing apprenticeship training program for the middle level skilled workforce preparation. Based on this fact in designing the curriculum more emphasize should be given to develop practical skills than theoretical knowledge so as to make trainees confident, and productive citizens having the readiness for either self or wage employment. The Technical and Vocational Education and Training (TVET) Strategy (MOE, 2008:30-31) states:

The major advantage of apprenticeship training (and more generally cooperative TVET delivery forms) is its vicinity to world of work. Trainees are systematically exposed to the world of work and learn the occupational practice in a real life situation. Experience shows that this

leads to significantly better train outcomes practice skills, work attitudes and theoretical comprehension of the occupational requirements. Furthermore, enterprises get to know the trainees which often lead to employment after graduation through cooperative TVET schemes companies can also contribute to the further development of TVET system. Finally, apprenticeship and other forms of cooperative training tend to be more cost effective than school based TVET as TVET institutions need not invest sophisticated machinery and training period in the institutions will be shorter.

2.11. Emerging Issues and Challenges

The new TVET strategy replaces the one that was adopted in 2002. It reflects an important paradigm shift of recent years which place quality and relevance of TVET as its priority. Global experience has shown that the mere expansion of TVET does not solve the problems of unemployment and low productivity of the economy. TVET has to respond to the skills needs of the labor market and create a competent, motivated and adaptable workforce capable of driving economic growth and development.

The new and main trust of the strategy is that TVET development relies on an outcome-based system and dedicated and trusting co-operation among stakeholders. The curricula were developed based on the Ethiopian Occupational Standards (EOS) (MOE, 2007). As to the mode of delivery, as long as the required nominal learning hours as specified in the curricula are retained, the training can be flexibly adopted according to the prevailing conditions and provisions as far as organization, venue and scheduling of the training is concerned. The curriculum guide recommends cooperative training. Co-operative training bringing TVET institutions and enterprises together with training taking place in both venues – in the school environment and the place of work (MOE, 2007). The training takes place alternatively in a school environment and in the real life environment of the workplace. Most of the training occurs in the enterprise where practical skills and applications of theory take place. The schedule may include three to four days per week, or alternatively, a cycle of three weeks in the enterprise and fourth week in TVET institute (MOE, 2007).

CHAPTER THREE

Research Design and Methodology

This sub section presents, the selection of the sample colleges and health care institutions cooperating in providing clinical practice program, the description of the subject of the study, justification for the selection of the institutions and the subjects, the data collection instruments used, the sampling techniques, and the procedures followed to analyze the data.

3.1. Research Design

Descriptive survey research method was employed to conduct this research study. Because this method is appropriate when the aim in the study is to explore the current status of the problem using data collected from a relatively large sample size. This method was found to be appropriate which enabled the student researcher to investigate the current practices and challenges of clinical practice program. Accordingly the following data sources, instruments, techniques and procedures were employed to collect and analyze the data.

3.2. Sources of Data

The data for this study was obtained from primary and secondary sources. In order to get first hand information, primary data was collected from trainees, health care institutions cooperating in providing clinical practice program (workplace supervisors and head nurses) and assigned supervisors, deans of the selected private TVET Health Colleges, vocational counselors and department heads. Books, journals, universal and national proclamations and documents related to clinical practice and workplace training was reviewed.

3.3. Sample Population, Sample Size and Sampling Method

As already stated in chapter one, the research study was delimited to selected private TVET Health Colleges in Addis Ababa Administration. The data for this study was collected from trainees, the selected private TVET Health College officials, clinical practice providing health care institutions and supervisors of clinical practice at workplace and assigned by private TVET Health Colleges. According to the information obtained from TVET Agency, there are 209 TVET colleges out of which 26 were health colleges. Out of these, there was only one government TVET Health College in Addis Ababa City Administration. The private TVET Health Colleges for the study were found in almost all the ten sub-cities of Addis Ababa City Administration as indicated in table III.

After identifying the total number of colleges in each sub city, six of the sub-cities (Arada, Bole, Gulele, Kirkos, Lideta, and Yeka) for the study were selected purposely based on high concentration of the colleges in each sub cities. One college from each of the selected sub-cities (Arada Gorgis Medical College, Universal Medical College, Rift Valley University College, Central University College, Tropical Medical College and Kea Med Medical College) were selected based on the year of experiences the colleges had by excluding repetition of the same college in case the colleges had two or more campus in the selected sub-cities. As to the health care institutions co-operating in clinical practice program, three hospitals those which commonly provide clinical practice (Tikur Anbesa, Minilik II and Yekatit 12 Hospitals) were selected purposely.

Table III

**Private TVET Health Colleges in
Addis Ababa City Administrative by Sub – city**

No.	Sub – city	No. of TVET Institutions
1	Addis Ketema	1
2	Akaki	0
3	Arada	6
4	Bole	4
5	Gulele	1
6	Kirkos	6
7	Kolfe Keraniyo	1
8	Lideta	5
9	Nifas Silk Lafto	1
10	Yeka	7
Total		25

Source: Extracted from Addis Ababa City Administration TVET Agency Annual Statistics (Unpublished)

Regarding the selection of officials, it was employed by using purposive sampling methods. Because the researcher selected purposively the one who had sufficient information about the practices and challenges of clinical practice program. Similarly, clinical nursing trainees were selected for the reasons that almost all the private TVET Health Colleges had this clinical nursing as the field of study. Secondly, trainees, patients and workplace supervisors meet in one room for different interest – patients to get service, trainees to work or to see what is going on and work place supervisors to provide service and to supervise trainees. Because of these two major reasons, the student researcher selected clinical nursing as the subject for study. The researcher believes that, this and other conditions make the challenges more severe to the clinical nursing students. From the different years of trainees, second year nursing trainees were taken for this study. Year one and three trainees are deliberately excluded from the study because year one trainees have no experience of clinical practice and year three trainees which have two times experience of clinical practice were not considered as the subject of this study due to the curriculum they were taking was revised.

In the six selected private TVET Health Colleges there was a total of 727 second year trainees who participated in clinical practice program in different health care institution out of which 240 (33%) of the population were included in the sample. The trainees were selected using multistage round sampling. On the other hand, because of their manageability, all the deans, vocational counselors and department heads in the selected private TVET Health Colleges and head nurses in the selected hospitals were incorporated in the sample by using available sampling techniques.

3.4. Instruments of the Data Collection

To secure reliable and adequate information, selection of appropriate data collection instrument is essential. Questionnaire was the main data gathering instrument in this study; since the study was a descriptive survey. Questionnaires are used to elicit data from the large number of respondents (Gay, 2000:25). A questionnaire of closed and open ended items was prepared in English for three groups of respondents: trainees, workplace supervisors and vocational counselors. Almost all the contents of the question items are similar for the three groups of respondents except in few cases where certain question items are specific to one or two groups of respondents. Most of the question items were closed end for simplicity and to get definite answers. The open ended question items were also not by-passed to have the overall ideas of the respondents.

To supplement the information gathered through questionnaires, unstructured interview was conducted with deans and nursing department head of the selected private TVET Health Colleges and head nurses of the selected hospitals. A short list of concepts were prepared and given to them some minutes earlier to the interview session to enable them prepare themselves to respond to the questions properly. Unstructured observations and document analysis were also made to supplement the data obtained through questionnaire and interview.

Pilot test was carried out on one private TVET Health College on trainees having similar background in actual respondents of the study. The purpose of the pilot study was

assessing the relevance of the instruments designed to collect data for the study. The aim was also to find out ambiguities, omissions and misunderstandings of each item. Then, student researcher tested the validity and appropriateness of the instrument. After corrections made according to the validity, the corrected questionnaires were distributed to respondents.

3.5. Data Analysis

The data collected was analyzed and interpreted both qualitatively and quantitatively. The data collected through questionnaire was analyzed using percentage and Chi-square tests as needed. While the data secured through interview, observation, open ended questions and document review was summarized and analyzed qualitatively in a narrative way. While quoting the views of my research participants for interview, I used only pseudonyms (fictitious) in the whole parts of the report where names are required.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

This chapter deals with the presentation and interpretation of the data gathered from the sample trainees, vocational counselors, deans and department heads of the private TVET Health Colleges, and workplace supervisors and head nurses at the hospitals cooperating in clinical practice program. The data obtained through questionnaires, interviews and documents were analyzed and interpreted in view of the basic questions raised in chapter one. Out of the 240 questionnaires distributed to trainees 218 (90.8%), out of 42 questionnaires distributed to workplace supervisors in the selected hospitals 37 (88.1%) and all 6 (100%) of the questionnaires distributed to vocational counselors were filled and returned. Interview was conducted with deans, and nursing department heads of the selected private TVET Health Colleges and head nurses of the selected hospitals. The findings of each interview questions were discussed under the relevant tables when needed. Based on the responses obtained from the sample respondents the analysis and interpretation of the data is presented immediately following each tables.

Table IV**Trainees by Sex, Age, and Occupation of Parents**

S. N	Response	Response	
		N	%
1	Sex		
	A. Male	26	11.9
	B. Female	192	88.1
	Total	218	100
1	Sex		
	A. Male	26	11.9
	B. Female	192	88.1
	Total	218	100
2	Age		
	A. <17	-	-
	B. 17-20	76	34.9
	C. 21-25	106	48.6
	D. 26-30	29	13.3
	E. >30	7	3.2
Total	218	100	
3	Occupation of Parents		
	A. Office work	120	55.0
	B. Farming	16	7.3
	C. Trade	55	25.2
	D. Other	27	12.4
Total	218	100	

Table IV was constructed with the aim of describing the trainees involved in clinical practice program with the specific emphasis on sex ratio, age categories, and their family's occupation. As indicated in Table IV item 1, female trainees comprise 192 (88.1) of the total trainee respondents. This shows that the majority of the respondents were females. This figure is inconsistent with the data released by TVET Agency and the MOE indicating the participation rate of females (46.7% and 48.0%) in Addis Ababa (MOE; 2005/06:105, 2009) respectively. Thus, it is possible to rightly deduce that nursing as a field of study is female dominated.

As shown in item 2 of the same table, 106 (48.6%) and 76 (34.9%) of the respondents were in the age category of 21-25 and 17-20 respectively. This indicates that, as far as the age is concerned, almost all of the respondents were in the age categories they can sign

contract with the hospitals as well as they were in a position to respond to the questions and give appropriate answers that enable to attain the purpose of the study. Regarding the occupation of trainees' parents, 120 (55.0%) of them were earning their living from wage employment, 55 (25.2%) and 16 (7.3%) were engaged in trade and farming respectively. Significant number, 27 (12.4%) respondents responded that, their families were engaged in different activities. This finding seems that the majority of the trainees' parents do have awareness about trainings made at workplace in health care institutions even during the night shift. It indicates that trainees may not face family problem in making clinical practice out of their private TVET Health Colleges in health care institutions.

Table V

Description of Supervisors and Vocational Counselors

S. N	Response	Respondents			
		Workplace Supervisors		Vocational Counselor	
		N	%	N	%
1	Sex				
	A. Male	12	32.4	1	16.7
	B. Female	25	67.6	5	83.3
	Total	37	100	6	100
2	Age				
	A. <26	3	8.1	2	33.3
	B. 26-30	6	16.2	1	16.7
	C. 31-35	6	16.2	1	16.7
	D. 36-40	2	5.4	-	-
	E. >40	20	54.1	2	33.35
Total	37	100	6	100	
3	Qualification				
	A. Diploma	24	64.9	2	33.3
	B. BA/BSc	11	29.7	4	66.6
	C. MA/MSc	2	5.4	-	-
	D. PhD	-	-	-	-
Total	37	100	6	100	
4	Service year				
	A. <5	-	-	4	66.6
	B. 5-15	2	5.4	1	16.7
	C. 16-25	7	18.9	-	-
	D. 26-35	11	29.7	1	16.7
	E. >35	17	46.0	-	-
Total	37	100	6	100	
5	Type of Employment				
	A. Permanent	37	100.0	6	100
	B. Contract	-	-	-	-
Total	37	100	6	100	

It has been revealed on Table V item 1, that the majority of the supervisors at workplace 25 (67.6%) who took the responsibility of guiding and follow-up the day to day

activities of trainees while they are in hospitals were females. This strengthens the inference reached from the trainees respondents that nursing is female dominated. Only 11 (29.7%), 2 (5.4%) of work place supervisors had BSc and MSc respectively. While, the substantial number 24 (64.9%) of the workplace respondents were college diploma holders. Therefore, from the academic qualification of workplace supervisors it is possible to deduce that the majority of them did not attain the academic qualification that allow them proper implementation of clinical practice program by sharing experiences that were developed through training.

Concerning the service year of the respondents, item 4 of Table V reveals that the great majority 28 (75.7%) of the supervisors have served for more than 25 years. This service year of supervisors explains that they acquired sufficient and relevant practical skills that gained through long years of services. Thus, in contrary to the above deduction, from this it can be deduced that the work-place supervisors can offer rich practical experience to their trainees during their clinical practice at the workplace in their hospitals.

Table VI
Legislation for Clinical Practice

N	Items	Respondents							
		Trainees		Vocational Counselor		Workplace Supervisors		Total	
		N	%	N	%	N.	%	N	%
1	Where there any laws supporting implementation of clinical practice? A. Yes B. No Total	73 145 218	33.5 66.5 100	2 4 6	33.3 66.7 100	27 10 37	73.0 27.0 100	102 159 261	39.1 60.9 100
2	If 'yes' which of the following was applied? A. TVET law B. Apprenticeship training Act C. Clinical practice guideline D. Labor proclamation Total			- - 2 -	- - 100 -	5 15 7 -	18.5 55.6 25.9 -	5 15 7 -	18.5 55.6 25.9 -
3	Did all concerned parties sign Memorandum of Agreement during clinical practice? A. Yes B. No Total	3 215 218	1.4 98.6 100	- 6 6	- 100 100	9 28 37	24.3 75.7 100	12 249 261	4.6 95.4 100

Clinical practice program links private TVET Health Colleges with the health care institutions. In so doing it provides ample opportunities to trainees to improve their

practical skills. Thus, this important aspect of training needs to be supported by law. As cited in the literature of this thesis, from the experiences of many countries it can be learned that the legal foundation for training is different for each places of learning.

In light of the above discussion, under item 1 of Table VI, respondents were asked to indicate the availability of laws supporting implementation of clinical practice program at workplaces. The majority of the respondents, 145 (66.5%) of trainees and 4 (66.7%) of vocational counselors in the selected hospitals replied negatively, showing the non-existence of legal frameworks on which clinical practices was based. Contrary to this, the great majority 27 (73.0%) of workplace supervisors confirmed the presence of laws. Those who positively responded to the existence of law affirmed that the law applied was apprenticeship Act. Thus, based on the responses of the majority; it is safe to infer that the management of the private TVET organization was not discharged their informational role to be played that the trainees and vocational counselors were not informed the existence of the laws. During my observation at the selected private TVET health colleges the curriculum guide and FGN, 391/204 were not found in the library. They were found in some of the deans' office. The Curriculum guides were also found in the registrar office and in some of the colleges with department heads. There were no any of these documents found at the health care institutions which can be used for workplace training/clinical practice.

Item 3 of the same table was intended to examine whether or not a contract was signed among the three parties: trainees, private TVET Health Colleges and hospitals. Accordingly, all vocational counselor, the great majority of trainees 215 (98.6%) and 28 (75.8%) of workplace supervisors ascertained the non-existence of legal framework on which clinical practice program was based respectively. Clinical practice program is a partnership between health care institutions, private TVET Health Colleges, and trainees or their families. All these partners should sign memorandum of agreement so that the tripartite partnership can become mutually influential. Therefore, all the above finding indicated the absence of legal documents that determine the basic requirements under

which clinical practice program smoothly functions within clearly defined duties and responsibilities of all parties.

Table VII
Organizations Selection Procedures and Trainees Assignment

N	Items	Respondents							
		Trainees		Vocational Counselor		Workplace Supervisors		Total	
		N	%	N	%	N	%	N	%
1	Were there any criteria set to select hospitals that could cooperate to conduct practical training? C. Yes D. No Total	97 121 218	44.5 55.5 100	6 - 6	100 - 100	26 11 37	70.3 29.7 100	129 132 261	49.4 50.6 100
2	If 'yes', what were the criteria determined to select health care institutions that shall participate in the provision of clinical practice? A. The number of employees B. The amount of capital C. Type of ownership D. Other Total	25 18 49 5 97	25.8 18.6 50.5 5.5 100	1 - 4 1 6	16.7 - 66.7 16.7 100	12 2 12 - 26	46.2 7.7 46.2 - 100	38 20 65 6 129	29.5 15.5 50.4 4.6 100
3	Who assign trainees to each selected hospitals? A. The vocational counselor B. The department head C. Through trainees' personal contact Total	9 195 14 218	4.1 89.4 6.4 100	- 6 - 6	- 100 - 100	13 24 - 37	35.1 64.9 - 100	22 225 14 261	8.4 86.2 5.4 100
4	What criteria were used to assign trainees to respective hospitals? A. Distance B. Interest C. Chance/Lottery D. Other Total	29 8 174 7 218	13.3 3.7 79.8 3.2 100	3 - 3 - 6	50 - 50 - 100			32 8 177 7 224	14.3 3.6 79.0 3.1 100
5	How was the total number of trainees assigned to each hospital determined? A. By each organization unilaterally B. By TVET Colleges on the basis of present criteria C. By the agreement between TVET Colleges and hospitals D. On the basis of the statement of law E. There is no formal procedure Total	8 27 147 - 36 218	3.7 12.4 67.4 - 6.5 100	- - 5 - 1 6	- - 83.3 - 16.7 100	2 - 31 - 4 100	5.4 - 83.8 - 10.8 100	10 - 183 - 41 234	4.3 - 78.2 - 17.5 100

Clinical practice program is a system involving the coordinated efforts of TVET Health Colleges and health care institutions such as hospitals, health centers and clinics, which are to offer work-based practical training to trainees. For the program to operate effectively, health care institutions should be selected for cooperation (partnership) on the basis of pre-determined criteria which suit the purposes envisioned in the training program. With the view of examining the availability and nature of procedures employed in selecting health care institutions for clinical practice program, respondents were first asked whether or not the criteria were set to select health care institutions which participate in the provision of clinical practice.

In light of the above discussion, on Table XII item 1, more than half 121 (55.5%), of the trainee respondents' ascertained the selection of the health care institutions was not based on predetermined criteria. On the other hand, all 6 (100%) of the vocational counselors and the majority 26 (70.3 %) of workplace supervisors confirmed the presence of such pre-determined criteria.

The situation was clearly reflected in the interview conducted with the deans and department heads of the private TVET Health Colleges that the private health institutions were lacking willingness to accept and place the trainees in their health care institutions for clinical practice. For example, Sister Esete (March 22, 2010), the nursing departments head of Universal Medical College stated, "Private TVET Health Colleges which had their own hospitals and clinics did not place their students in their own hospitals or clinics." According to her, the colleges assign their students to government hospitals and health centers. The reason for this as stated by her was customers (patients) were not willing to be served by trainees; therefore, they did not want to drop their business. Therefore, the private health care institutions were not the part of their choice for clinical placement. The interview further confirmed that clinics were also not their choice, according to their explanation because they were not well equipped and did not provide the necessary workplace training required for the trainees. In addition the type of major courses covered and the type of services (the relevance of activities) the health care institutions engaged in were also among the criteria as to the interview. Therefore, it is logical to conclude that the private TVET Health Colleges have certain criteria for the selection of health care institutions to co-operate with for clinical practice program. The trainees might not have awareness of the criteria on which the private TVET Health Colleges base in the process of health care institution selection for partnership. During my observation I asked the department heads if they had criteria set in written form. None of the department heads in the selected private TVET Health Colleges able to show me the documents.

In item 2 of the same table, the respondents who confirmed the presence of selection criteria were asked to indicate the specific criteria employed. Accordingly, almost half 49 (50.5%) and 4 (66.7%) of the trainees and vocational counselors ascertained that the 'the type of ownership,' was the most important criteria set, to select the health care institutions. 'The number of employees and 'the type of ownership was rated equally 12 (46.2%) by the workplace supervisors. The information obtained during interview with deans and department heads of the selected private TVET Health Colleges confirmed the private health care institutions were purposely excluded due to their unwillingness to cooperate with the TVET health colleges in providing workplace learning at their health care institutions. Only government hospitals and health centers were their target for clinical practice program. Therefore, one can safely deduce that the private TVET Health Colleges have criteria to select health care institutions for clinical placement.

On item 3 of Table VII, respondents were asked to indicate an authority in charge of assigning trainees to each selected hospitals. Thus, the majority 195 (89.4), all 6 (100%), and 24 (64.9%) of the trainees, supervisor and vocational counselors respectively identify the responsible body in charge of assignment were department heads.

As far as item 4 of Table VII was concerned, 174 (79.8%) of the trainee respondents replied trainees were assigned based on lottery method. On the other hand, equally 3 (50%) of vocational counselors replied they were assigned to the hospitals by lottery method and distance. In the open ended question, significant number of trainees suggested that their problem was not considered during the clinical placement and they suggested rather than using the lottery method the college should consider trainees' residential proximity to the hospitals where they are placed for clinical practice. Trainees were the direct victim of this kind of arrangement. Thus, it seems that the trainees replay is more acceptable than the vocational counselors. This was discussed during the interview with the deans and department heads of the selected TVET Health Colleges that to the contrary of the responses of vocational counselors, to be rational in their assignment, only exceptional cases were considered. Therefore, it is possible to deduce

that trainees' problem was not considered and it seems inconvenience was created upon trainees during their clinical practice program.

Item 5 of Table VII was constructed to identify the mechanisms employed to fix the total number of trainees to be sent to each hospitals for clinical practice. To this end, the majority 147 (64.7%), 5 (83.3%) and 31 (83.8%) of the trainees, vocational counselors and workplace supervisors responded that the number of trainees assigned to each hospital was by agreement between the private TVET Health Colleges and the hospitals, respectively. This was also confirmed from the interview conduct with head nurses of the selected hospital and department heads of the selected private TVET Health Colleges. Thus, the hospitals authorities have discretionary power, to determine the total number of trainees that will be assigned to its hospitals or not to accept at all or from some of the private TVET Health Colleges.

This opens the door for the possibility of unequal treatment of the private TVET Health colleges. In the open ended questions, the workplace supervisors indicated the number of trainees that the hospitals accept at a time from one college ranges from 20-25. The interview held further indicated that degree students were also a part of this number in the same workplace. From this it is possible to infer that (a) it overcrowds the accommodation of the workplace (b) the mode of workplace training for theses different levels is also different (c) role conflict might exist. Hence, private TVET Health Colleges were faced with increased intakes, decreased clinical placements and a shortage of patient availability to practice. TVET health trainees were competing with other learners in the work place (e.g. medical students and others) to gain the essential knowledge and skills. This condition enables to conclude that trainees go back to their relative colleges without gaining the required skill in real life situation. Therefore, this influences the possibility of getting cases and utilization of the effective utilization of clinical practice program.

Table XIII

Degree of Co-operation between TVET Colleges and Health Care Institutions Participated in Clinical Practice Program

N	Items	Alternatives					
		High		Medium		Low	
		N	%	N	%	N	%
1	Joint organization and management of clinical practice program preparation of curricula and rules and regulations for clinical practice	-	-	-	-	6	100
2	Common and complementary use of training personnel, materials and equipments	5	83.3	1	16.7	-	-
3	Participation in evaluation and testing of trainees	5	83.3	1	11.7		
4	Financial support for clinical practice purpose	4	66.7	-	-	2	33.7
5	Giving allowances to trainees and covering other expense	-	-	-	-	6	100
6	Participation in development of qualified staff	-	-	4	66.7	2	33.3

The items on Table XIII were constructed to examine the degree of co-operation between private TVET Health Colleges and health care institutions. To this end, among the given cooperation areas majority of the respondents 5 (83.3%) of vocational counselors responded common and complementary use of training personnel, materials and equipments, participation in evaluation and testing of trainees as well as 4 (66.7%) financial support for clinical practice program were rated as high.

On the other hand, other co-operation areas such as joint organization and management of clinical practice program, preparation of curricula and rules and regulations for clinical practice program and giving allowance to trainees and covering other expenses were rated low. Participation in development of qualified staff were rated medium by 4 (66.7%) of the total respondents. From this finding, it is possible to deduce that there were areas on which the two willingly co-operating institutions co-operate. The most important area of clinical practice program, 'the joint organization and management of clinical practice program', were given less attention which might be adversely affects the success of the program.

Table IX**Availability and Adequacy of Follow-up Activities during Clinical Practice**

N	Items	Responses	
		N	%
1	Were supportive workplace supervisors assigned for you?		
	A. Yes	127	58.3
	B. No	91	41.7
	Total	218	100
2	Did the professional from your TVET Health Colleges follow up the clinical practice and the trainees' progress?		
	A. Yes	162	74.3
	B. No	56	25.7
	Total	218	100
3	If 'yes', how frequently was the follow-up activity?		
	A. Daily	98	45.0
	B. Once in a week	85	39.0
	C. Once in two weeks	5	2.3
	D. Once in a month	20	9.2
	E. Once in two months	10	4.6
	Total	218	100

A workplace supervisor assumes an increasing critical position in the implementation of clinical practice program. To realize the overall advantages of clinical practice program, health care institutions are expected to assign supervisor or an in-company trainer to follow-up and support trainees at the workplace. Based on this, Table IX was constructed to investigate the availability of the supervisors in the hospitals cooperating to participate in clinical practice program. Thus, more than half, 127 (58.3%) of the trainees confirmed that the workplace supervisors/trainers were assigned to guide and support the trainees during clinical practice program. On the contrary, significant number 91 (41.7%) of the respondent trainees conformed that the workplace supervisors were not assigned to guide and support the training during their clinical practice program.

Interview was also conducted with the head nurses of the selected hospitals whether the hospitals assign workplace supportive supervisors or not. The reply of this interview came with three practices: (a) the hospital assign supervisors and the supervisors were remunerated for their additional supervision tasks assigned to them (b) the private TVET Health College assign external supervisors to supervise trainees at workplace or made

agreement with personnel from other department of the same hospital (c) assign its instructors to supervise trainees at workplace in the hospital as a workplace supervisor on day to day basis. According to this interview, most of the external supervisors did not have experience in the world of work, but rather they have teaching experience in training institutions as stated by most of head nurses. Sister Addis (March 17, 2010), of Tropical Medical College stated, "only Yekatit 12 Hospital did not allow external work place supervisors, all the other hospitals allow external supervisors to supervise trainees at their hospitals." This strengthen the significant number of trainees response who replied the work place supervisor was not assigned to supervise their day to day activity is taken as true as they were not the workplace supervisors.

With regard to the manpower profile, as indicted on the literature the supervision should be undertaken by competent and qualified journey – level workers on the job who are responsible for the work being performed. Therefore, it is possible to infer that there were possibilities that training was undertaken by the supervisors not in the real world of work in that particular workplace and there were also possibilities to be supervised by supervisors who do not have workplace experience.

The health care institutions and the workplace supervisors at the health care institutions are not the only ones to be blamed for the poor quality of practical training provided to trainees during clinical practice program. This is so because; the regular follow-up made by the private TVET Health College staff can bring a difference in this regard. After placement decisions were made trainees should not be left for the impulse of workplace supervisors only, but rather they need regular and frequent follow-up from their TVET Health Colleges. So that uncertainties and difficulties encountered could be referred to on time and improved accordingly.

Items 2 and 3 of Table IX were prepared with the objective of examining the availability and adequacy of such follow-up activities by private TVET Health College trainers. To this end, the majority of the total respondents 162 (74.3%) ascertained that the private TVET Health Colleges assigned supervisors to hospitals to follow-up the clinical practice

program. With regard to the frequency of follow-up, in item 3 of the same table, respondents who confirmed the assignment, 98 (45.0%) of the total respondents stated that the assigned supervisors visit the trainees daily; while 85 (39.0%) of the respondent replied once in a week. From this daily follow-up we can infer that the assignment of external supervisor holds true. This indicated that external supervisors were assigned and trainees were supervised by them. Therefore, trainees were not supervised by real workplace supervisors. As the interview conducted with Sister Telile (March 17, 2010), head nurse at Tikur Anbesa Hospital showed, “the supervisors assigned from the private TVET Health Colleges were there only to check the way the trainees dress and to see their presence.” Thus from this it can be inferred that clinical practice supervision by the relative college seems geared to fulfill the requirement in the curricula, without any significant effort to drive the potential benefits out of it.

Table X
Capabilities and Willingness of Workplace Supervisors

Item	Alternatives							
	High		Medium		Low		Total	
	N	%	N	%	N	%	N	%
How do you rate the following qualities supervisors should possess?								
A. Knowledge of the subject matter (theoretical knowledge)	29	22.8	80	63.0	18	14.2	127	100.0
B. Skills on presentation	25	19.7	68	53.5	34	26.8	127	100.0
C. Skills on giving practical training	32	25.2	58	45.7	37	29.1	127	100.0
D. Skills on giving appropriate tasks for practical training	25	19.7	69	54.3	33	26.0	127	100.0
E. Follow logical procedure for teaching trainees	39	30.7	42	33.1	46	36.2	127	100.0
F. Recognize that trainees are students and co-workers	23	18.1	34	26.8	70	55.1	127	100.0

Supervision is a key element of the training contract between an employer and their trainees. Supervision in the workplace is critical to enabling the trainee to become competent within a safe work environment. By providing training opportunities, the supervisors, can play an essential role in maintaining the integrity of trainees to the

workplace environment and building the workforce of tomorrow. Effective workplace supervisors can facilitate the development of independence, self-confidence, job satisfaction, and critical thinking skills in the student. A positive relationship also decreases anxiety and improves confidence in clinical practice. Yet, the critical issue is to what extent workplace trainers are ready, willing and able to meet these enhanced and committed to fulfill this important role.

In light of the above discussion, on Table X, the trainees who replied positively regarding the assignment of the supervisors were asked to rate the competences of the supervisors aids transfer of skills to trainees in the framework of appropriate learning principles.

Accordingly, the majority of the respondents 80 (63.0%), 68 (53.5%) and 69 (54.3%) ascertained that their supervisors' knowledge of the subject matter, skills on presentation and skills on giving practical training were rated medium to low. On the other hand, the majority of the respondents 46 (36.2%) rated the supervisors' following the logical procedure for teaching trainees low. Recognition of trainees as a student and co-worker was rated low by 70 (55.1%) of the respondents. Therefore, these findings reveals that the supervisors did not have the necessary theoretical background and pedagogical knowledge to support trainees based on the steps of active learning process which comprises planning, practical training and respect for trainees. The interview conducted with department head at the selected TVET Health Colleges and head nurses at hospitals confirmed the absence of any rules and regulations to be followed. The Interview held with Nurse Abay at Minilik the II Hospital indicated that there were no learning outcomes communicated to supervise trainees accordingly. Trainees see what they able and can see. Hundred percent competencies required for graduates taking CoC test to be licensed and registered by Addis Ababa Health Bureau to be employed. As the finding indicated, the practical training they got at workplace was not conducted as intended to make them competent.

More than fifty percent of the respondents indicated in their reply to open ended questions the absence of a number of conditions from the workplaces where they assigned. A range of the following complaints were common.

1. The evaluation criteria and process were not clearly communicated between the supervisors and trainees;
2. The evaluation was undertaken by the head nurses, not by the immediate supervisors;
3. Lack of fair and equal treatment of trainees from different private TVET Health Colleges;
4. Lack of opportunity to practice rather than mere observation without touching the patient;
5. Lack of fair and objective competency – based practical assessment procedures of trainees;
6. Due to lack of supplies contamination was common;
7. The workplace supervisors consider us as if we know nothing;
8. They are not willing to transfer to us what they know because they fear to be replaced by us;
9. Evaluation was not continues, but simply the form of evaluation was and sent to their relative colleges;
10. Lack of places to put personal property and private rooms to change clothes.

The above data obtained from the open ended questions clearly indicated that the clinical practice program of private TVET Health Colleges in Addis Ababa City Administration currently being run are loosing their workplace training, therefore, they are less likely to achieve the intended goal.

Table XI

Adequacy and Appropriateness of the Timing of Clinical Practice

No.	Items	Respondents								DF	Table Value X ²	Calculated X ²
		Trainees		Vocational Counselor		Workplace Supervisors		Total				
		N	%	N	%	N	%	N	%			
1	What is your opinion towards the adequacy of the time devoted to clinical practice? A. Highly inflated B. Adequate C. Few D. Very few Total	22 62 55 79 218	10.1 28.4 25.2 36.2 100	- 2 3 1 6	- 33.3 50.0 16.7 100	- 12 19 7 37	- 32.4 51.4 18.2 100	22 76 77 87 262	8.4 29.0 29.4 33.2 100	6	12.59	34.42
2	The time when clinical practice was undertaken: A. During training period B. During summer vacation Total	38 180 218	17.4 82.6 100	- 6 6	- 100 100	- 37 37	- 100 100	38 223 261	14.6 85.4 100			
3	Was this period convenient for clinical practice? A. Yes B. No Total	139 79 218	63.8 36.2 100	1 5 6	16.7 83.3 100	16 21 37	43.2 56.8 100	156 105 261	59.8 40.2 100			

The curriculum developed by MOE (2007) for middle level TVET program allotted training hours for the three years practical training hours and theoretical hours. The time allotted for practice is not the same among different fields of study. The time allotment for clinical practice at health care institutions outside of the training institution and for practical training at the TVET institutions were left to be decided by TVET provider intuitions (see the Appendix). From this one can easily deduce that lack of uniformity may create disparity among institutions on its implementation of school based practical training and practical training at workplace in health care institutions. Because of attaching the trainees to the health care institutions incur cost to the private TVET Health Colleges per month; less proportion of practical training hours were allotted for the clinical practice at workplace and much of practical training time were given to in school practical training at the respective colleges. As it was indicated in the open ended questions almost all the private TVET Health College send their students for practical training at workplace for two months. As the interview held with the department heads indicated, the private TVET Health Colleges continued with the tradition of the previous curriculum clinical practice hours. As the document analysis shows the loophole was

created from the revised curriculum guide of 2007 which combined training practical hours with clinical practice at the workplace and the assignment of hours to be decided by TVET-providers.

Item 1 of Table XI was constructed to gather opinion on whether or not the time trainees devoted for clinical practice program was sufficient enough to equip them with the necessary skills. Accordingly, the majority 79 (36.2%), of trainees, 3 (50.0%) respondents of vocational counselor and 19 (51.4%) workplace supervisors confirmed that the time was very few and few, respectively to allow trainees cover areas of training that were supposed to be practiced. In general the respondents rated the adequacy of the time allotted for clinical practice were not adequate. The finding strengthens the above finding through interview question and document analysis as the time allocated was not fully utilized obviously to contents of the curriculum relating to clinical practice would not be covered. A chi-square test revealed that for 6 degree of freedom at 0.05 level of significance the critical value of X^2 was greater than the obtained chi-square implying that there were no statistically significant differences in opinions regarding the adequacy of the time for clinical practice. Therefore, the finding reveals that the time allotted for the clinical practice program were not sufficient to equip trainees.

In response to item 2 of the same table, the majority 180 (82.6) of the respondents affirmed that the clinical practice was undergone during the summer vacation. Item 3 of the same table showed, 139 (63.8%), of trainees responded positively, while 5 (83.3%), 21 (56.8%) of vocational counselors and workplace supervisors responded negatively as sequenced. Thus, this finding demands that trainee's preference to pass their vacation time on work. To the contrary, the time was not convenient for vocational counselors and workplace supervisors. Therefore, it is safe to infer that the inconvenience of the time affects the quality of supervision at workplace. As indicated in table IV most of the trainees' parents' occupation were office workers and they may not have other engagement to be occupied during their summer vacation.

Table XII**Relevance of Activities in the Hospitals for the Field of Study**

No.	Items	Response	
		No.	%
1	How do you rate the relevance of the activities you have under gone during clinical practice to your occupational training?		
	A. High	44	20.2
	B. Medium	117	53.7
	C. Low	57	26.1
	Total	218	100
2	If your response is 'low' which of the following could be adequate reason?		
	A. Shortage of trainers	55	96.5
	B. Low skills of trainers	48	84.2
	C. Shortage of training materials	30	52.6
	D. Shortage of inputs for practical training	46	80.7
	E. Shortage of reference materials	19	33.3

In item 1 of Table XII, trainees were asked to rate the state of relevance of activities between the workplace training at hospital and the training acquired in the private TVET Health Colleges. Accordingly, more than half 117 (53.7%) of the trainees ascertained that, the relevance between the contents of the two training places (at their relative private TVET Health Colleges and hospitals) were rated average. Whereas, 57 (26.1%) and 44 (20.2%) rate the relevance of the activities low and high. The majority of the respondents (more than 75%) rated average to less than average. This indicated that it was below the desired quality because when the medium and the low ratings taken together it accounts for 79.8% of the total respondents. As the main reason, the majority of the respondents 55 (96.5%), 48 (84.2%) and 46 (80.7%) were in their response indicated shortage of trainers, low skill of trainers and shortage of inputs for practical training was rated respectively low in their descending order. From this one can deduce that the quality of practical training could not make the trainees competent practically. From this one can safely infer that trainees might be less competent or not competent in their CoC test and/practically in the world of work in-general. Trainees cannot get their professional license unless the pass 50% theoretical and 100% practical competency test. Therefore, it is possible to conclude that it leads to more health graduates unemployment the possibility of losing the experience gained through their education and training. My

observation at the selected hospitals also strengthened this conclusion that I found large number of 10+3 graduates giving free service to get work experience without payment even pocket money.

Table XIII
Performance of Trainees during Clinical Practice

Items	Alternatives							
	High		Medium		Low		Total	
	No.	%	No.	%	No.	%	No.	%
A. To diligently perform the tasks entrusted to him/her as a part of training								
Vocational Counselors	3	50.0	1	11.7	2	33.5	6	100
Workplace Supervisors	13	35.1	23	62.2	1	2.7	37	100
B. To be acquainted with work method to the hospital								
Vocational Counselors	3	50.0	1	16.7	2	33.3	6	100
Workplace Supervisors	15	40.5	17	45.9	5	13.5	37	100
C. To utilize wit care and economy materials								
Vocational Counselors			4	66.7	2	33.3	6	100
Workplace Supervisors	6	16.2	26	70.3	5	13.5	37	100
D. The ability to perform practical activities								
Vocational Counselors	1	16.7	5	83.3	-	-	6	100
Workplace Supervisors	13	35.1	17	45.9	7	18.9	37	100
E. The ability to cooperate with other employees								
Vocational Counselors	3	50.0	1	16.7	2	33.3	6	100
Workplace Supervisors	12	32.4	25	67.6	-	-	37	100
F. Ability to utilize input efficiently								
Vocational Counselors	3	50.0	1	16.7	2	33.3	6	100
Workplace Supervisors	7	18.9	27	73.0	3	8.1	37	100
G. The quality of services they produce								
Vocational Counselors	-	-	6	100	-	-	6	100
Workplace Supervisors	5	13.5	31	83.8	1	2.7	37	100
H. The ability to use office equipment								
Vocational counselors	-	-	-	-	-	-		
Workplace Supervisors	2	5.4	34	91.9	1	2.7	37	100

The item in Table XIII, were designed to examine the extent to which the training acquired in the private TVET Health Colleges prepared trainees for the real world of work. Thus, among the given indicators of the trainees' performance while doing practical work at workplace, half 3 (50.0%) , of the vocational counselors rated trainees diligence and willingness to perform task assignments, willingness to work according to

the methods of the hospital, the ability to cooperate with employees and the ability to utilize inputs efficiently rated high. The remaining 50% of those who rate high is distributed over the two rating scales that is it ranges from medium to low. The great majority 5 (83.3%) of the vocational counselors and 17 (45.9%) of the workplace respondents rated, the ability to perform practical activities as medium. Therefore, from these findings it sounds logical to infer that during the course of clinical practice, the trainees were motivated enough to engage in practical activities. Yet, their actual job performance under real work conditions was further remote, which reflects the status of skill acquired in the private TVET Health Colleges. This implies low internal effectiveness, which is off course the cumulative effect of staffing inadequacies, inadequate recruitment of suitable trainees, inadequate materials and poor implementation of the practical hours according to the curriculum guide.

The current TVET Program implementation strategy requires teachers to deliver practice-laden instructions in the subjects they teach. However, as the interview held with the department heads showed, in the colleges under study, the curricula are not implemented as they have been designed in the implementation strategy. The selected colleges present their lessons by lecturing method, where the students mostly become passive to their teachers' theory-laden instruction. Concerning the existence of the discrepancy between the planned strategy and the actual implementation on the ground, Sister Metasebia (March 19, 2010), the nursing department head of Central University College, said,

Honestly, we are not implementing the curriculum as it is indicated in the curriculum guides. Even though, the implementation strategy demands 70% practical and 30% theoretical instructions, I do not think we have reached even up to 30% and 40% practical instruction. I do not believe this could be realized in our existing situation .

Table XIV

Factors Affecting Placement, Retention and Completion of Clinical Practice

N	Items	Respondents							
		Trainees		Vocational Counselor		Workplace Supervisors		Total	
		N	%	N	%	N	%	N	%
1	Were there some trainees forced not to attend clinical practice? A. Yes B. No Total	70 148 218	31.1 67.9 100	5 1 6	83.3 16.7 100			75 149 224	33.5 66.5 100
2	If "yes" which one of the following were the reasons? A. Absence of adequate hospitals B. Inconvenience of the time for clinical practice C. Reluctance of the trainees D. Shortage of manpower to organize clinical practice E. Other Total	2 15 38 10 5 70	2.9 21.4 54.3 14.1 7.1 100	1 - 4 - - 5	20.0 - 80.0 - - 100			3 15 42 10 5 75	4.0 20.0 56.0 13.3 6.7 100
3	Did some trainees quite clinical practice? A. Yes B. No Total	141 77 218	64.7 35.3 100	6 - 6	100 - 100	31 6 37	83.8 16.2 100	178 83 261	68.2 31.8 100
4	If 'yes', what were the reasons for the observed attrition? A. Assignment on duties other than field of training? B. The period overlaps with trainees engagement in other activities C. Financial Problem D. Other personal problems (such as health problems, mirage, etc E. High distance to hospitals	45 12 105 111 91	31.9 8.5 74.5 78.7 64.5	1 - 3 5 -	16.7 - 50.0 83.3 -	- - 9 28 5	- - 29.0 90.3 16.1		
5	Distance between your residence and the hospital A. 1-10 kms B. 11-20 kms C. 21-30 kms D. 31 & above Total	61 44 69 44 218	28.0 20.2 31.7 20.2 100.0					61 44 69 44 218	28.8 20.2 31.7 20.2 100

The items in table XIV were designed to identify factors that contributed negatively for the completion of clinical practice. On item 1 of this table, respondents were asked to verify whether or not some legible trainees were completely excluded from clinical practice due to the factors beyond their control. Accordingly, quite the great majority 5 (83.3%) of the vocational counselors ascertained that some trainees were forced not to attend clinical practice completely. On contrary to this 148 (67.9%) of trainee respondents confirmed that there were no trainees forced not to attend clinical practice.

Item 2 of the same table was purposefully constructed to investigate the main reasons that compelled trainees from engaging in clinical practice. To this end 38 (54.3%) and 4 (80.0%) trainees and vocational counselors ascertained reluctance of the trainee as a major reason. Thus, from this it can be safely deduced that there were trainees were forced not to attained clinical practice because of their reluctance to attend it.

Trainees need, support from their families; they often provides money, transport and other basic necessities without which clinical practice program would not be possible. Thus, the absence of these and related factors discussed earlier will undoubtedly force the trainee to quite clinical practice.

As to this, in item 3 of Table XIV, the majority 141 (64.7%), 6 (100%) and 31 (83.8%) of trainee, vocational counselor and workplace supervisor respondents indicated the existence of trainees quit the clinical practice, respectively. Many trainees spoke of having to bear two or more negative aspects over their clinical practice. Out of the factors impeding retention and completion of clinical practice, personal problems such as health, marriage, etc. 111 (78.7%), financial problem 105 (74.5%), high distance to hospital 91 (64.5%) and assignment on duties other than field of training come to the list according to their descending order. On the interview conducted one of the nursing department head stated that trainees assigned to hospital quit the clinical practice because she was in the last month of her pregnancy stage; whom she take care off as the department head stated. From the finding, it can be inferred that factors that negatively affected successful completion of clinical practice program emanated from both social and administration factors and lack of financial support and co-operation from stakeholders were the main factors that affect retention and completion of clinical practice. Therefore, during organizing and planning clinical practice the need for involving all stakeholders, so as to minimize problems to be encountered and guarantee ease of implementation, in the process were not given due consideration. It seems the vocational counselor did not discharge its responsibility.

Item 5 of the same table was constructed to examine the extent to which the trainees were geographically remote from the hospitals co-operating in offering clinical practice. To this end, the majority 69 (31.7%) of the respondents confirmed that they were expected to traveled 21-30 kilometers away from their residence to make clinical practice. The respondents whose residences situated between 11- 20 kilometers and above 30 kilometers away from the hospitals participated in clinical practice accounts for 44 (20.2). Trainees were made clinical practice by using at least two taxi stops. Thus, from this one can easily deduce that the majority of the trainees incurred additional expenditures for transportation and other subsistence costs during the course of clinical practice program. Hence, the finding implies that the financial requirements for the clinical practice are not only those costs directly associated with the training at their private TVET Health Colleges but extra personal expenses of the trainees. Therefore, if this problem remained unsolved, it could cause high rates of dropouts and complete exclusions from the training at workplace.

Table XV

Roles and Responsibilities of Health care Institutions Participating in Clinical Practice Program

Item	Respondents					
	Trainees		Vocational Counselors		Total	
	N	%	N	%	N	%
Which of the following duties and responsibilities were not practiced by the hospital providing clinical practice?						
A. To receive and provide clinical practice to trainees	37	17.0	2	33.3	39	17.4
B. To assign the trainees in the place appropriate to his/her training to ensure that the trainee acquire proper work experience	121	55.5	5	83.3	126	56.3
C. To assign a capable supervisor who would enhance the skills of the trainee and should follow up the day to day performance of the trainee	148	67.9	4	66.7	152	67.9
D. To give orientation about the rules and regulations of the hospitals as well as advice about safety rules	70	32.1	1	16.7	71	31.7
E. To provide raw materials, tools and other necessary inputs for trainees	133	61.0	3	50	136	60.7
F. To evaluate the performance of the trainee and submit the result to the TVET College	42	19.3	-	-	42	18.8
G. To Co-operate and work in coordination with the Private TVET Health Colleges	47	21.6	4	66.7	51	22.8
H. The job trainees assigned to was routine and remained unchanged throughout clinical practice period in the hospital	21	9.6	-	-	21	9.4

Since clinical practice demands the coordinated and willful participation of health care institutions and TVET Health colleges, education which appears to negate such willful participation will undoubtedly impede its successful implementation. As stated in the literature review section of this thesis, for partnerships between TVET Health Colleges and health care institutions become fruitful, the roles and responsibilities of each party need to be clearly identifies and made public on time so that they would carry out their respective roles and responsibilities of those involved in planning, organizing and

implementing clinical practice program. To this end, the items in Table XV were constructed to examine the extent to which effectively realize their roles and responsibilities, which were nationally endorsed as national obligation to every organization participating in training endeavors.

As shown in the Table XV, the majority of the total respondents, 152 (67.9%), 136 (60.7%) and 126 (56.3%) identified the roles of "to assign a capable supervisor who would enhance the skills of the trainee and should follow up the day to day performance of the trainee," "To provide raw materials, tools and other necessary inputs for trainees" and "To assign the trainees in the place appropriate to his/her training to ensure that the trainee acquire proper work experience," respectively as top lists of roles and responsibilities which were not realized as intended. From the result it can be inferred that the organizations participating in clinical practice program did not discharged their roles and responsibilities as intended. This may have implications for the absence of awareness rising activities geared towards enabling organizations see the shared values to be generated from clinical practice. On the other hand, trainees were not provided with the attention and support they deserved as a result of the hospitals' carelessness in placing them at a place where they could gain the maximum possible knowledge and practical skill. All these have to do with the lack of proper coordination and activities related to the promotion of training program in general clinical practice program in particular.

Table XVI

Awareness and Promotional Activities

		Workplace Supervisors		DF	Table Value of X ²	Calculated X ²
		N	%			
1	Were your hospital made familiar with issues relating to clinical practice? A. Yes B. No Total	29 8 37	78.4 21.6 100			
2	If 'yes' how was the hospital made familiar with the issue? A. By providing clinical practice guideline to the hospitals B. Through discussion with higher officials of the organization on the meeting held for one day C. Through training of workplace supervisors in the form of workshop (seminars) D. Other Total	3 28 4 2 37	8.1 75.7 10.8 5.4 100			
3	How do you rate the interest of your hospital to provide clinical practice in the future? A. High B. Medium C. Low Total	13 22 2 37	35.1 59.5 5.4 100	2	5.99	16.27

TVET provisions in general and clinical practice in particular, are at their infancy at a national level. The problems accountable for the relatively lower rate of development in the area include the social and economic context of the country. To cope up with these longstanding attitudinal problems in the society as well as to raise the willful participation of health care institutions and other stakeholders, the role of coordinated and continuous promotion of clinical practice program is of paramount significance.

Consequently, Table XVI was prepared with the purpose of examining the availability and nature of activities targeted towards promoting clinical practice program. As can be seen in item 1 of Table XVI, 29 (78.4%) of the supervisors ascertained the presence of

promotion activities in relation to clinical practice program. Therefore, this finding indicated that the existence of awareness by health care institutions about clinical practice program seems helps to run the program. However, 28 (75.7%) of the respondents who indicated the presence of such promotion activities further showed that the promotions were undertaken through forums where the participants were only higher officials of the health care institutions.

In item 3 of the same table, workplace supervisors were asked to rate the interest of their institution to provide clinical practice in the future. As to this, more than 50% of the respondents rated medium. The Chi-Square test revealed that for 2 degree of freedom at 0.05 level of significance the critical value of X^2 was greater than the table values of X^2 implying that the groups of respondents did not have statistically significant difference in perceiving the measuring instrument employed. From the result it can be inferred that the institutions have less interest to participate in clinical practice in the future.

Table XVII

Financing Clinical Practice Program and Incentives Mechanisms

No.	Items	Respondents							
		Trainees		Vocational Counselors		Workplace Supervisors		Total	
		No.	%	No.	%	No.	%	No.	%
1	Do trainees pay fee for clinical practice program?								
	A. Yes	79	36.2	-	-	17	45.9	96	36.8
	F. No	139	63.8	6	100	20	54.1	165	63.2
	Total	218	100	6	100	37	100	261	100
2	Did the hospitals make payments to trainees?								
	A. Yes					-	-	-	-
	B. No					37	100	37	100
	Total					37	100	37	100
3	Did your hospital incur loss emanating from training?								
	A. Yes					14	37.8	14	37.8
	B. No					23	62.2	23	62.2
	Total					37	100	37	100
4	If trainees are required to pay for the clinical practice program, how do you rate their capacity to pay?								
	A. High	16	7.3	4	66.7			20	8.9
	B. Medium	64	29.4	2	33.3			66	29.5
	C. Low	138	63.3	-	-			138	61.6
	Total	218	100	6	100			224	100
5	Did private TVET Colleges pay fees for the clinical practice program?								
	A. Yes					26	70.3	26	70.3
	B. No					11	29.7	11	29.7
	Total					37	100	37	100
6	Were there incentives given to hospitals cooperating in clinical practice?								
	A. Yes			6	100	26	70.3	32	74.4
	B. No			-	-	11	29.7	11	25.6
	Total			6	100	37	100	43	100
7	If 'yes', Which of the following was/were among the forms of incentives given?								
	A. Tax exemption on imported machines and equipments			2	33.3	25	96.2	27	84.4
	B. Charge free training for the employees of the hospital			4	66.7	16	61.5	20	62.5
	C. Charge free provision of land for expansion			1	16.7	21	80.8	22	68.8
	D. Letter of thanks given on graduation days from TVET health colleges			5	83.3	19	73.1	24	75.0

A quality work-based route to educational and training achievement is not a cheap option. It is not an easy task to compute the direct and indirect costs required over a period ranging from one to three years clinical practice programs in this respect. These costs need to be shared among the three parties involved – employer, trainee and taxpayer. Those who benefit from the scheme should also contribute in covering the costs. Thus,

employers could be responsible for the employment costs of the scheme. The trainee would contribute through reduced pay level to the clinical practice.

Governments have to accept that there is role for the public funding of work-based training. It is clearly unfair for the public to fund post secondary full time education while ignoring young people entering the world of work. It is important that public funding be used to pay for the education component of the clinical practice schemes.

An examination of Table XVII illuminated about the condition of financing clinical practice. As it was clearly shown in the table, quite the great majority of the total respondents 165 (63.2%) confirmed that special charge was not laid on trainees by both the TVET health colleges and the hospitals that cooperate with the college to participate in clinical practice program. Those who respond negatively to the item indicated in the open ended question, the college collect monthly payment during their clinical practice period .The interview conducted with the deans confirmed trainees were charged while they were not in campus. According to them there was not only for the months but for the students' convenience distributed evenly to the months of the year. On the other hand, all of the total respondents affirmed that trainees were not paid by organizations for their labor during the clinical practice period, whatever the quality level of services they come up with.

Item 3 of same table was constructed to examine whether costs were incurred to the hospitals during clinical practice. To this end, the majority 23 (62.2%) of the total respondents ascertained that there were no costs incurred to hospitals. As to the capacity of the trainee to pay for the clinical practice the great majority of the total respondents 138 (61.6%) were rated low. In-contrary to this, 4 (66.7%) of the vocational counselor respondents rated the capacity of the trainee to pay for clinical practice high. As the trainees responses hold true, one can safely infer that their capacity to pay for clinical practice low.

As to item 5 of the same table, the respondents were asked whether the private TVET Health Colleges pay for clinical practice program for the co-operating hospitals.

Accordingly, 26 (70.3%) of the total respondents ascertained that the colleges pay fee for the hospitals. The interview conducted with the deans, department heads and nurses head at hospitals confirmed the college pay birr 200 per trainee. In addition the college provide the trainees materials like gloves, guan etc. as an input for the clinical practice according to the department heads. Form this finding one can conclude that principle was adversely exercised by the health care institutions.

The 6th item of Table XVII was designed to examine whether some incentives measures were implemented to encourage further participation of health care intuitions for their cooperation in participating in the practical training at their hospitals. To this end, all the vocational counselors, a great majority 26 (70.3%) of the workplace supervisors, confirmed that the existence of incentive measures. To the other end, 121 (55.5%) of trainees respond there is no incentive measures to increase the involvement of health care institutions in participating in clinical practice.

In item 7 of the same table, the respondents who reacted positively to item 6 were asked to indicate the incentive mechanisms employed to elicit active participation of employers in the scheme. The highest ranking incentives were charge free training for employees of the Hospital in TVET colleges, second ranking were provision land charge free for expansion, and the third ranking was letter of thanks given on graduation days were considered as the most important factors to promote clinical practice. The interview conducted with deans ascertained, tax exemption on imported machines and equipments, and charge free provision of land for expansion were common for all those participated in education and health investment searching of other mechanism in particular to the health institution as incentives to increase their co-operation in practical training.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

4.1. Summary

The purpose of this study was to investigate the practices and major challenges encountered in implementing clinical practice program through partnership system in the private TVET Health Colleges and health care institutions in Addis Ababa City Administration.

To this end, basic questions addressing the fundamental factors that determine successful implementation and quality of clinical practice program such as existing legal frame works, incentive measures and mechanisms, organization and management practices and responsibilities of the major actors (health care institutions, trainees and the private TVET Health Colleges), materials and human factors and range of co-operation area and the level of co-operation were raised.

In an effort to investigate the clinical practice program difficulties, descriptive survey method was employed in the study. Out of 25 private TVET Health Colleges in Addis Ababa City Administration, six were selected by using purposive sampling techniques.

The subject of the study were 218 trainees, 6 deans, 6 vocational counselors, and 37 workplace supervisors in hospitals co-operating in providing clinical practice. All the deans and vocational counselors found in the six selected private TVET Health Colleges were incorporated in the sample by using available-sampling techniques.

On the other hand, the trainees were selected through multistage stratified random sampling while supervisors were included in the sample through purposive sampling

techniques. Generally, the sampling techniques were based on the number of trainees in the selected department specifically second year trainees, and sector of activities of the hospitals (different wards). The data for the study was obtained through questionnaires, interviews, documentary analysis observation. The data obtained through the administration of data gathering tools were analyzed using percentages and Chi-square test methods as needed. Based on the results of the data analysis, the following major findings were identified:

1. The majority trainees, vocational counselors and workplace supervisors were female. This indicates that nursing as a field of study is female dominated. As to the qualification, more than half of the vocational counselors were first degree holders. As the finding indicated all the vocational counselors duty was given to them as additional task and none of them had vocational background and took training on the profession as confirmed from open ended questions. Regarding workplace supervisors qualification, majority of them were diploma holders. More than 75% of the workplace supervisors were served for more than 25 years. From this it is possible to conclude that they have a very good experience obtained through extended years of service. The majority of the vocational counselors have work experience less than five years;
2. More than half of trainee's parents were civil servants. This finding seems that the majority of the trainees' parents do have awareness about trainings made at workplace in health care institutions which were even extended to the night shift. It indicated that trainees may not face family problem in making clinical practice out of their TVET Health Colleges in health care institutions during this extended practical period;
3. While the majority of workplace supervisors confirmed the presence of TVET law regarding clinical practice program, conversely more than half of trainees and vocational counselors stated that such laws were unknown in their settings. According to this finding for the majority of the trainee and vocational counselor respondents, there were no any laws backing clinical practice program. Clinical

practice requires the involvement of at list three main parties' whose duties and responsibilities should be supported by legal frameworks. The finding indicated that the training was not implemented according to the legal framework and it was not communicated to trainees and vocational counselors;

4. As to the criteria employed in selecting health service institutions cooperating in provision of clinical practice, slightly more than half of trainee respondents said, there was no criterion for selection of health care institutions to participate in the provision of clinical practice. On the other hand, all vocational counselors and the majority of workplace supervisors confirmed the existence of criteria for selection. According to them, even though there were criteria to select the health care institutions their willingness and availability of spaces were also determinant factors; this was confirmed via the interview made with the department heads. . According to the finding, number of trainees to be assigned to each health care institution was decided by the agreement made between the private TVET Health Colleges and hospitals;
5. Regarding the clinical placement decision of trainees the majority of trainee, vocational counselor and workplace supervisor respondents confirmed that, such decisions were made by the department head in the private TVET Health Colleges. The finding also indicated the trainees were assigned to each hospital by lottery system without considering the remoteness of their residence from the hospitals;
6. The interview conducted with the department head confirmed that, privately owned health care institutions were not willing to accept trainees to their hospitals or health centers;
7. As the interview conducted with the head nurses at hospital revealed, customers (patients) were not willing to be serviced by the trainees even when three or four trainees want to make observation what the on duty nurses doing, they were not happy;

8. The great majority of the trainees, vocational counselor and workplace supervisors confirmed that there was no memorandum of agreements signed between the concerned parties.
9. As ascertained by all vocational counselors and the majority of workplace supervisors; incentives were given for health care institutions participating in clinical practice program. In contrary, more than half of trainees responded, there was no incentive measures to increase the involvement of health care institutions in participating in clinical practice program. The interview conducted with deans ascertained, tax exemption on imported machines and equipments, and charge free provision of land for expansion were common for all those participated in education and health investment; designing other incentive mechanism which particularly benefits those health care institution to increase their co-operation in clinical practical program. "Thank you letters" and "certificate of participation" were also the most common types of incentives as confirmed by the interview were in favor of the presence of incentives. As to the finding the government health care institutions accommodate large number of trainees during the summer of each year;
10. Majority of trainees, all of the vocational counselors and workplace supervisors confirmed that the private TVET Health Colleges send students for clinical practice immediately after in school training completed or during summer vacation. Regarding the convenience of the period, majority of the trainee respondents agree with the convenience of the period. In contrary to this, the majority of the vocational counselors and workplace supervisors claimed the inconvenience of the summer schedule. Majority of trainees, vocational counselors and workplace supervisors confirmed that the time was few adequate to very few to allow trainees cover areas of training that were supposed to be practiced;
11. As confirmed by more than half of the trainee respondents, the private TVET Health Colleges assigned personnel to undertake the follow-up activities while trainees were at workplaces. On the other hand, where these practices exists, the

finding depicted that 98 (45.0%) and 85 (39.0%) of the follow-up activities were carried daily and once in a week, respectively;

12. More than half of the trainee respondents witnessed the relevance between the content of workplace practical training and the skills acquired from the private TVET Health Colleges was found to be medium. Significant number of trainees rated their activity relevance were low. The root causes were shortage of trainers, low skills of trainers and shortage of inputs for practical training were rated dissentingly by the respondents;
13. Financial problem was rated second by all respondents as attrition from clinical practice program. Regarding the financing of clinical practice program the finding revealed that the majority of trainees, all supervisors and the great majority of workplace supervisors responded, trainees were not charged for clinical practice program. On the other hand, significant number of trainee and workplace supervisors respondents confirmed that trainees were paid for the clinical practice program. Those who positively responded claimed that the trainees pay for the college for the whole year including those periods while they were on practice; therefore, it is assumed that they paid for the clinical practice through the college. The direct activities relating to clinical practice's that demands monetary expenditures such as trainees' personal expenses and work related expenses (raw materials, such as gloves, overall, syringes etc) etc were covered by trainees or their families and the private TVET Health Colleges, respectively;
14. Majority of trainees, vocational counselors and work place supervisors confirmed that the number of trainees assigned to each health care institution was made by agreement between the private TVET Health College and the health care institutions;
15. According to the finding the hospitals accept on average 20-25 students at a time from on private TVET Health colleges. The interview held with the nurse heads at hospital also confirmed that it is not only TVET trainees who were assigned to the hospitals but also degree students from each hospital too. The interview

conducted with the deans showed only one of the selected private TVET College do not have degree program;

16. According to the finding among given cooperation areas, common and complementary use of training personnel, materials and equipments participation in evaluation and testing of trainees and financial support from the clinical practice program were rated high. The most important parts of cooperation such as joint organization and management of clinical practice program, preparation of curriculum and rules and regulations for clinical practice and giving allowance to trainees and coverage other expenses were rated low. This shows there were areas where the institutions co-operate leaving the important part out;
17. Concerning the feasibility of follow up the day to day activity of trainees more than fifty percent of the respondents confirmed workplace supervisors were assigned to guide and support the trainees during clinical practice;
18. The trainees rated workplace supervisors' competence "knowledge of the subject matter, skills on presentation and skills on giving practical training low;
19. The finding revealed that the external supervisors were assigned by each hospital as a workplace supervisor by the private TVET Health Colleges. From the selected hospitals only one was not allow external supervisors as internal workplace supervisor;
20. As the finding obtained from the interview conducted with departments heads private health colleges indicated that most of the time the colleges assign technical staff to follow up the trainees;
21. According to the finding, 79 (36.2%),of trainees, 3 (50.0%) respondents of vocational counselor and 19 (51.4%) workplace supervisors confirmed that the time allotted for clinical practice was very few and few, respectively. In general the respondents rated the inadequacy of the time allotted for clinical practice was not sufficient;

22. According to the finding obtained through interview the training conducted at the TVET Health Colleges were theory-laden;
23. According to the finding trainees were forced not to attend the clinical practice due to their reluctance and those who quite the training were due to personal problem such as health, marriage etc. followed by high distance from their residence;
24. The finding revealed that the private TVET Health Colleges were charged Birr 200 per student for one month's by hospitals while their student were on clinical practice which is assumed to be indirect cost of the trainees.

4.2. Conclusion

The Ethiopian Technical and Vocational Education and Training (TVET) have been introduced with the major aim of curbing the serious middle level human power shortage the country faces. The curriculum implementation strategy of the program requires 30% theoretical and 70% practical training. The school-based training, which is planned to be executed in full-time TVET schools, is assisted by project works and by what is referred to as 'clinical practice program' in different actual workplaces (in different health care institutions). The central rational of the clinical practice program is to reinforce the students' skills that they acquire from the school-based training. However, most of the practical training activities were not conducted according to the implementation strategy in. The following conclusions were drawn as the main bottlenecks for the realization of quality clinical practice program.

- Clinical practice program is determined by a contractual agreement made between health care institutions and trainees based on a set of promises that the law will enforce. This contract further determines the contents and duration of clinical practice program, duties and responsibilities of the involved parties as well as an agreement on the condition of the termination of the contract and payment rates for the trainee. All the concerned parties (trainees, hospitals and the private TVET Health Colleges) did not signed any binding contract before the placement of

clinical practice or during the clinical practice program. Hence, the training was not implemented based on the legal frame work designed;

- The finding indicated that the selection of health care institution that could cooperate in provision of clinical practice was based on the type of ownership and the size of the health care institutions. Privately owned hospitals/health centers and government or privately owned health care institutions, clinics were not selected for their unwillingness to accept trainees to their hospitals or health centers and the low capacity that the clinics had to provide clinical practice, respectively.
- As the summary of open ended questions indicated, the government health care institutions accommodate large number of trainees during the summer season of each year. The number of trainees that the hospitals accept at a time from each private TVET Health College ranges from 20-25. The response of the interview further indicated that it was not only TVET trainees who are assigned to the hospitals but also the degree program practitioners from the private TVET Health Colleges and the practitioners from the government universities. There is a competition for a limited number of opportunities that exist in the health care institutions for clinical placement as students from all the health training institutions compete for the places that are available. Hence, there is often real difficulty in finding placement;
- The finding indicated that trainees were assigned to each hospital by the department heads. The department heads used the lottery method to assign trainees to the selected health care institutions. This finding shows trainees' problem was not considered and it seems inconvenience was created upon trainees during their clinical practice program. The number of trainees assigned to each hospital was determined by agreement between private TVET Health Colleges and health care institutions. Thus, the hospital authorities have discretionary power to determine the total number of trainees to be accepted or not to accept at all. As the summary of open ended questions indicated the number of trainees that the hospitals accept at a time from each private TVET

health colleges ranges from 20-25. The interview conducted with the nurse heads at hospitals further indicated that it was not only TVET trainees but also degree students from private colleges as well as trainees from the same hospital or other government university and/or in-company TVET trainees. Due to this the TVET trainees did not get sufficient place to practice;

- Effective partnership (co-operation) between TVET Health Colleges and health care institutions are widely recognized as vital to the development and provision of quality clinical practice program. Many health care institutions (HCI), including government-owned, were not appropriately committing themselves to provide adequate clinical practice for trainees. Although almost all the government health care institutions provide clinical placement opportunities for trainees from private TVET Health Colleges, in many cases, they do not assign the trainees into the right work where they can appropriately practice what they previously learned in their colleges. In some cases, the trainees are usually assigned to perform trivial and routine works. The health care institutions cooperating in clinical practice are usually not even well informed on which skills the trainees should make their practice. Privately owned health care institutions were not willing to co-operate with the private TVET Health Colleges in providing clinical practice program;
- Supervision is a key element of the training contract between an employer and their trainee. Supervision in the workplace is critical to enabling the trainee to become competent with a safe work environment. Level of supervision varies according to the working conditions and progress in the trainee's confidence and abilities. Concerning the feasibility of follow-up of the day-to-day activity of trainees, the finding showed, workplace supervisors were assigned to guide and support the trainees during the clinical practice. The finding also revealed that external supervisors were employed by the private TVET Health Colleges to supervise trainees as workplace supervisor to guide and support trainees. As the interview with the head nurses at each college ascertained from the selected hospital only one hospital was not allow external personnel to supervise at

workplace. According to the finding, trainers were assigned to follow-up the day-to-day activity of the trainees during clinical practice program. As the finding obtained from the interview conducted with department heads of the selected private TVET Health Colleges indicated the majority of clinical practice program follow up was done by technical staff that had no longer work experience in the world of work. This might adversely affect the quality of clinical practice conducted at hospitals;

- It was revealed in the finding that the health care institutions were reluctant to take trainees from the TVET institutions for practical training. The private health care institutions were not willing to admit trainees to their hospitals and/or health care institutions. Furthermore, the skills acquired by trainees in the private TVET Health Colleges were found to be inadequate to allow trainees to give the service required of them at health care institutions. From this it can be concluded that the lack of health care institutions' interest to co-operate in providing clinical practice program is a result of conditions relating to internal effectiveness of school-based training which in turn determined by the extent of training facilities, quality of teachers and adequate recruitment of suitable trainees;
- Patients were not willing to get service by trainees; even when three or four trainees want to make observation what the on duty nurses doing they were not happy. This was considered as the greatest challenge of all because one can't take the patients to their demonstration room unless they establish their own hospitals and health centers at their TVET Health Colleges;
- There were no fees for clinical practice that the trainees pay. As the finding showed the private TVET Health Colleges pay Ethiopian Birr 200 per month per each trainees. Moreover, the private TVET Health Colleges provide training supplies such as gloves, gown, etc. for the clinical practice program. From this finding showed the incentives of clinical practice program of the colleges were practiced reversely from the legal frame work. Secondly, this shows that the cost paid by the colleges were with no doubt assumed to be the cost of trainee which makes the total cost of training very expensive. This seems that the role of health

care institutions in sharing the cost of training seems negative and if the college fails to pay the incentives they will not get health care institutions to co-operate in providing clinical placement;

- Students sent for clinical practice immediately after in school training completed or during summer vacation. The period was convenient for the trainees but over crowds the health care institutions as well as the time is inadequate to allow trainees to cover areas of training that are supposed to be practiced;
- As the finding indicated, the relevance between the content of workplace practical training and the skills acquired from the private TVET Health Colleges was found to be medium. Significant number of trainees rated their activity relevance were low. The root causes were shortage of trainers, low skills of trainers and shortage of inputs for practical training were rated dissentingly. This affects trainees' competence;
- Financial problem was rated second by all respondents as attrition from clinical practice program. Trainees were not charged for clinical practice program directly. According to the finding trainees were charged while they were on clinical practice. Therefore, it can be concluded that trainees were charged for clinical practice;
- The finding indicates that number of trainees assigned to each health care institution was made by agreement between the private TVET Health College and the health care institutions. Hospitals accept on average 20-25 students at a time from on private TVET Health colleges. The interview held with the nurse heads at hospital also confirmed that it is not only TVET trainees who were assigned to the hospitals but also degree students from private and government higher institutions too. The interview conducted with the deans showed only one of the selected private TVET College do not have degree program. They compete with the training resources with the TVET trainees' resource at their college and clinical placements at health care institutions;

- According to the finding there was mild co-operation between government health care institutions and private TVET health colleges which include cooperation areas common and complementary use of training personnel, materials and equipments participation in evaluation and testing of trainees and financial support from the clinical practice program were rated high. The most important parts of cooperation such as joint organization and management of clinical practice program, preparation of curriculum and rules and regulations for clinical practice and giving allowance to trainees and coverage other expenses were rated low. This shows there were areas where the institutions co-operate leaving the important part out. Therefore, it was concluded that the clinical practice program was not coordinated;
- The majority of the private TVET health Colleges do not assign competent supervisors for the trainees in order supervise their performance. In many cases, they assign technical staff to follow up the trainees. The interview further pinpointed only one supervisor is assigned to hospital. There are also times when one trainer supervisor from the private TVET Colleges supervise trainees assigned to two or more hospitals. Hence, trainees were supervised by less qualified supervisors;
- The time allotted for clinical practice was not sufficient. Trainees move from one ward to another without gaining adequate experience from that ward. Therefore, the time allotted for clinical practice program was not sufficient to make trainees competent;
- Regarding the relevance of trainees' activities in the health care institutions and at the private TVET Health Colleges, the relevance between the contents of the two training places (at their relative private TVET Health Colleges) were rated average. This indicates that it was below the desired quality. As the main reason, the finding identified shortage of trainers, low skill of trainers and shortage of inputs for practical training.

4.3. Recommendations

On the basis of the finding obtained and conclusion reached at, the following suggestions were forwarded to improve the quality of the clinical practice program in general and to enhance the effective implementation in particular:

1. Sending trainees for clinical practice program during the summer season remain as a problem until the number of trainees mismatches with the capacity of the health care institutions to accommodate the large number of trainees at the same season. Solving these problems requires immediate concern. Among the possible means in solving the problem is using flexible time for clinical practice is one. Almost all trainees from the existing private TVET Health Colleges including degree students have been released for clinical practice by the end of each year for clinical placement. At this time the co-operating health care institutions could not entertain all the requests from all private TVET Health Colleges at a time, because the size is beyond the capacity they can accommodate. Hence, the schedule for clinical practice program should not stick towards a single season rather should stretch throughout the year. This requires an authority that can facilitate the flexible scheduling of the clinical practice program (possibly the Clinical Placement Agency) can be established. This authority registers the capacity of capable and willing health care institutions to accommodate trainees for the clinical placement. Then, the authority schedule clinical practice program as the capacity of the capable and willing health care institutions in collaboration with the representatives of the private TVET Health Colleges;
2. For any type of co-operation there has to be a guide line, otherwise nothing bind the two parties. Unless they have and properly use it, they will have no chance to know where the position of their clinical practice program is. This would help them see back what they were doing and what they should do now and in the future. In addition, possessing the curriculum guide alone does nothing. It has to

be fully practiced. Therefore, in order to be guided by the laws, trainees should sign contract before they go to the health care institutions where they placed for clinical practice;

3. The clinical practice program in private TVET Health Colleges and health care institutions co-operating in provision of the practice need to be managed. The management functions should be reconsidered and practiced in the manner they should be. For instance, the planning aspect has to be exercised on the basis of guideline where it shows the duties and responsibilities of each party that participate in such kind of training program;
4. Trainings are essential inputs for those who supervise clinical practice program. Workplace supervisors have to be trained continuously. This would help them how to go about the task, increase self-confidence, and be encouraged. More than all become very good examples to their trainees. It is apparent that when supervisors are found to be inadequate in knowledge and lack experience for certain specialized parts of curriculum, the trainees do not get sufficient experience in the industrial setting to make their time there worthwhile. Therefore, the private TVET Health Colleges should organize tailor made pedagogical training, to supervisors of selected cooperating health care institutions, to fill this gap;
5. Private TVET Health Colleges need to work hard to establish and maintain strong relations with stakeholders, specially, health care institutions which has large accommodation capacity of trainees for clinical practice. In clinical practice program partnership of health care institutions, private TVET Health Colleges and the trainees should be considered as preconditions to feasibility and implementation of the clinical practice program;
6. Increased promotion of clinical practice program needs as a prerequisite for better implementation of clinical practice at various levels. To develop the necessary co-

operation and support by health care institutions, it is necessary to establish a continuous working relationship. Therefore, the private TVET Health Colleges are required to organize seminars or workshops at the institutional levels and use of different broadcast for the public awareness;

7. Concerning the feasibility of follow-up the day to day activities of the trainees, the workplace supervisors in the health care institutions should provide the necessary education, assistance, and control provided by a journey-level employee. Beside this, private TVET Health Colleges are required to strengthen their follow-up activities not only checking the way the trainees dress and their presence but also how they are performing;
8. The time duration of clinical practice program is not adequate to make the trainees competent and competitive enough in world of work. Thus, as the German experience indicates, apprentices work for three to four days a week in the company and then spend one or two days at a vocational school and adopted as co-operative training for all fields of training. However, this may not be feasible in all fields of training specially in health area if started from the very beginning as well as where there are no sufficient health care institutions providing clinical practice program. Therefore, designing alternative mode of delivery in the health area can solve the majority of the problems;
9. As to the alternative mode of delivery forwarded trainees enroll to private TVET Health Colleges for two years school-based education. Upon completion of their training at private TVET Health Colleges trainees will be certified by the private TVET Health Colleges which leading them to the enrolment of clinical practice program and the trainees are eligible to pocket money while they are on clinical practice. Health care institutions announce vacancy to employee trainees. This will be facilitated by to be established Clinical Placement Agency (CPA). After one year of clinical practice program, competent trainees will be certified for clinical practice completion. Then the trainees' salary shift from pocket money to

minimum payment. They will be licensed for the clinical practice program by Clinical Placement Agency. Trainees can be employed by the license obtained from the authority. This license also eligible the graduate to take CoC test to obtain a license from Addis Ababa Health Bureau (see the Appendix for alternative mode of deliver for health training);

10. Since this study is not an end itself, further study should be carried out focusing on health workforce training in general in the areas of clinical practice program in particular.

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Appendix A

Addis Ababa University
School of Graduate studies

Department of Business Education-Management of Vocational Education

A questionnaire to be filled by Trainees

The purpose of the questionnaire is to gather information and opinion about the implementation of Clinical Practice in private TVET Colleges in Addis Ababa. Thus, your frank and sincere response to the items in the questionnaire helps to meet the objective of the study. Be sure that the information you provide will be kept confidential, used only for the academic purpose.

Part one: General Background

1. Name of the TVET College _____
2. Sex of the respondent: A. Male B. Female
3. Age: A. Less than 16 B. 16-20 C. 21-25 D. 26-30 E. Above 30
4. Address (place) where General Secondary School Education attended
A. Region _____ B. Zone _____ Woreda _____
B. Town _____
5. Parents occupation
A. Office worker B. Farming C. Trade D. Other (specify) _____

Part two: General Questions

1. What was the distance between your permanent residence and the hospital/health center where you attended clinical practice?
A. 1-10 kms B. 11-20km C. 21-30 kms D. 31-40kms
E. More than 50kms
2. Who assign trainees to each selected hospital/health center?
A. the vocational counselor B. Teacher/ Department head
C. Through trainees' personal contact D. Other (specify) _____
3. Did you sign Memorandum of Agreement with hospital/health center that offered clinical practice?
A. Yes B. No
4. If your response to question No. 3 is "Yes", what are the items in the agreement (You may give more than one answer)
A. Full name and age of trainee
B. Name and address of the hospitals/health centers
C. Name and address of TVET college
D. The occupation in which the trainee is intended to undergo clinical practice
E. The date on which the clinical practice shall start and its duration
F. Conditions for the termination of the contract

- G. Conditions for payments for the trainee
- H. Conditions of insurance for damages on training
5. For how long did you attend clinical practice with in each training period?
 A. _____ months B. _____ days _____ C. _____ hours
6. What criteria are used in the process of assignment of trainees to hospitals?
 A. Distance B. Interest C. Chance/Lottery D. other specify _____
7. What is your opinion towards time you indicated in question No. 4 to conduct clinical practice successfully?
 A. Highly exaggerated B. Adequate C. Few D. Very few
8. The time when clinical practice was undertaken:
 A. During training period/side by side C. During Summer vacation
 Other (specify) _____
9. Do you think the period you indicated in question No. 6 convenient for the majority of trainees to undergo clinical practice?
 A. Yes B. No
10. Were there laws backing implementation of clinical practice? A. Yes B. No
11. Are there criteria set relating to selection of hospitals/health centers for clinical practice?
 A. Yes B. No
12. If your response to question No. 5 is "Yes", what are the criteria determined to select organizations that shall participate in the provision of clinical practice?
 A. The number of employees B. The amount of capital
 C. Type of ownership D. Other (specify) _____
13. How does the number of trainees to be assigned to each hospital/health centers for clinical practice determined?
 A. By each organization unilaterally
 B. By TVET colleges on the basis of present criteria
 C. By the agreement between TEVT colleges and hospital/health center
 D. On the basis of the statement of the law
 E. There is no formal procedure
 Other (specify) _____
14. Do trainees pay fee for the clinical practice?
 A. Yes B. No.
15. If your response is to question No. 13 is "Yes", please state the process of payment.

16. If trainees are required to pay for the clinical practice, how do you rate their capacity to pay (whether they can afford or not) A. High B. Medium C. Low
17. Were there some trainees forced not to attend clinical practice?
A. Yes B. No
18. If your response is to question No. 16 is "Yes", which one of the following were the reasons?
A. Absence of adequate hospitals/health centers in the area
B. Inconvenience of the time for clinical practice
C. Reluctance of the trainees
D. Shortage of manpower to organize clinical practice
E. Other (specify) _____
19. Did some trainees quit (dropout) before they complete their clinical practice?
A. Yes B. No
20. If your response is to question No. 18 is "Yes", which of the following could be the possible reason?
(You can give more than one response)
A. Assignment on the duties other than field of training
B. The period overlaps with trainees engagement in other activities
C. Financing problem
D. Other personal problems (such as health, marriage, etc.)
E. High distance to hospital/health center that offers clinical practice
F. Other (specify) _____
21. Which of the following duties and responsibilities were not practiced by Hospitals/Health Centers providing clinical practice? (More than one response is possible)
A. To receive and provide clinical practice to trainees
B. To assign the trainee in the place appropriate to his/her training to ensure that the trainee acquire proper work experience
C. To assign a capable supervisor who would enhance the skills of the trainee and should follow up the day to day performance of the trainee
D. To give orientation about the rules and regulations of the Hospitals/Health Centers as well as advice about safety rules
E. To provide raw materials, tools and other necessary inputs for trainees
F. To evaluate the performance of the trainee and submit the result to the TVET college
G. To cooperate and work in coordination with the TVET colleges
H. The job you assigned to was routine and remained unchanged throughout clinical practice period in the hospital/health center.
I. Other (specify) _____

22. Did the hospital/health center assign supervisor to guide and follow-up your work during clinical practice? A. Yes B. No

23. Qualities supervisors should possess are listed here under. How do you evaluate your supervisor's capabilities and willingness that was manifested during clinical practice?

	<u>High</u>	<u>Medium</u>	<u>Low</u>
A. Knowledge of the subject matter (theoretical knowledge)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Skills on presentation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Skills on giving practical training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Skills on giving appropriate tasks for practical training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Follow logical procedure for teaching trainees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Recognize that trainees are students and co-workers, not cheap help	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

24. Did your TVET College assign professional who follow-up your progress during clinical practice?

A. Yes B. No

25. If your response to question No. 23, is "Yes", how frequent was the follow-up?

A. Daily B. Once a week C. Once in two weeks
D. Once in a month F. Other (specify) _____

26. How do you rate the relevance of the activities you have undergone during clinical practice to your occupational field of training? A. High B. Medium C. Low

27. If your response to question No. 25 is low or no relationship at all which one of the following could be adequate reason?

- A. The occupation in which you trained was not among the activities in the hospitals/health centers.
- B. Reluctance of the hospital/health centers to assign you according to your occupation
- C. Your reluctance to the trainer assigned in your occupation
- D. Improper training in TVET College
- E. Your failure to regularly attend the practice
- F. Other (specify) _____

28. How do you evaluate the degree of clinical practice to the skills acquired from your TVET Colleges?

A. High B. Medium C. Low

29. Which of the following problems prevail in your college? Multiple responses are possible

- A. Shortage of trainers
- B. Low skills of trainers
- C. Shortage of training materials
- D. Shortage of inputs for practical training
- E. Shortage of reference materials
- G. Others (specify) _____

30. Do you think that the problems in TVET College have repercussion on the clinical practice?

A. Yes B. No

31. If your response to question No. 29 is "Yes" which of the following could be the causes?
- A. The courses/portion of courses not covered were appeared during clinical practice
 - B. Mismatch between training materials and materials used during clinical practice
 - C. Presence of practically unexercised task due to shortage of inputs, during clinical practice
 - D. Personal failures to properly attend the training
 - E. Other (specify) _____

32. How do you evaluate the similarity of materials for practical training in hospital/centers and TVET College?
- A. High
 - B. Medium
 - C. Low

33. Would you please list major problems you faced during clinical practice

34. What solution/s would you suggest to solve the problems you listed above?

Appendix B

Addis Ababa University
School of Graduate studies
Department of Business Educational- Management of Vocational Education
Questionnaire to be filed by vocational counselors

The purpose of this questionnaire is to gather information and opinion about the implementation of clinical practice in Private Health TVET Colleges in Addis Ababa. Thus, your frank and sincere responses to the items in the questionnaire help to meet the objective of the study. Be sure that the information you provide will be kept confidential and used only for the academic purpose.

Part one: General Background

1. Name of the TVET College _____
2. Sex of the respondent: A. Male B. Female
3. Age: A. Less than 25 B. 26-30 C. 31-35 D. 36-40 E. Above 40
4. Current position _____
5. Qualification of the respondent: A. Diploma B. BA/BSc C. MA/MSc D. PhD
E. Other (specify) _____
6. Major field of study _____
7. Total years of experience _____
8. Year of experience as a vocational counselor _____

Part Two: General questions

1. The task of vocational counselor is given to you
A. Being assigned only for the task B. In addition to other tasks
2. Were you given training on vocational counseling? A. Yes B. No
3. If your response to question No 2 is "Yes", please state when and by whom the training was offered

4. Were there laws backing implementation of clinical practice? A. Yes B. No
5. If your response to question No. 4 is "Yes" which of the following were used by your college to facilitate clinical practice (you may give more than one answer)
A. apprenticeship proclamation B. Apprenticeship regulation
C. Clinical practice guideline D. Other (Specify) _____
6. Are there criteria set relating to selection of Hospitals/Health Centers offering clinical practice?
A. Yes B. No
7. If your response to question No. 6 is "Yes" what are the criteria determined to select Hospitals/Health Centers that shall participate in the provision of clinical practice?
A. The number of employees B. The amount of capital
C. Type of ownership D. Other (Specify) _____

8. How does the number of trainees to be assigned to each Hospital/Health Center for clinical practice determined?
- A. by each organization unilaterally
 - B. by TVET College on the basis of present criteria
 - C. by the agreement between TVET College and Hospital/Health Center
 - D. On the basis of the statement of the law
 - E. There is no formal procedure
 - F. On the basis of the guidelines of co-operation
 - G. Other (specify) _____
9. Who is responsible for organizing clinical practice (identification of hospitals/health centers, communication with the hospitals/health centers, assigning trainees, etc. in your TVET College?)
- A. the vocational counselor
 - B. the trainer/teacher /department head
 - C. Through trainees personal contact
 - D. Other (specify) _____
10. What criteria are used in the process of assignment?
- A. Distance
 - B. Chance/Lottery
 - C. Interest
 - D. Other (Specify) _____
11. Did trainees sign training contract/Memorandum of Agreement/ with Hospitals/Health Centers offering clinical practice?
- A. Yes
 - B. No
12. If your response to question No 11 is "Yes", what are the items in the training contract? (you may choose more than one answer)
- A. Full name and age of trainee
 - B. Name and address of the Hospital/health Center
 - C. Name and address of the training institution
 - D. The occupation in which the trainee is intended to undergo clinical practice
 - E. The date on which the practice start and its duration
 - F. Conditions for the formulation of the contract of clinical practice
 - G. Condition of payments for the trainee
 - H. Conditions of insurance for damages on training
13. Who covers the personal expense of trainees (such as pocket money, transportation cost, etc.) during clinical practice?
- A. The TVET College
 - B. The Hospitals/Health Centers
 - C. Trainees/Families
 - D. Sponsorship Agencies
 - E. Public Fund
 - F. Other (specify) _____
14. Do trainees pay fee for the clinical practice?
- A. Yes
 - B. No
15. If your response to question No. 14 is "Yes", please state the process of the payment
- _____
16. If trainees are required to pay for the clinical practice, how do you rate their capacity to pay (whether they afford?)
- A. High
 - B. Medium
 - C. Low

17. Were there some trainees forced not to attend clinical practice? A. Yes B. No
18. If your response to question No. 17 is "Yes", which one of the following were the reasons?
- A. Absence of adequate Hospitals/Health Centers
 - B. Inconvenience of the time for clinical practice program
 - C. Reluctance of the trainees
 - D. Shortage of manpower to organize clinical practice
 - E. Other (specify) _____
19. Did some trainees quit clinical practice? A. Yes B. No
20. If your response to question No. 19 is "Yes", which of the following could be the possible reasons? You may choose more than one answer
- A. Assignment of the duties other than filed of training
 - B. The period overlaps with trainees engagement in other activities
 - C. Financial problem
 - D. Lack of suitable support from Hospitals/Health Centers that offers clinical practice
 - E. Health Problem
 - F. High distance to Hospitals/Health Centers that offers clinical practice
 - G. Other (specify) _____
21. Which of the following duties and responsibilities were not practiced by Hospitals/Health Centers providing clinical practice? (More than one answer is possible)
- A. To receive and provide clinical practice to trainees
 - B. To assign the trainee in the place appropriate to his/her training to ensure that the trainee acquire proper work experience
 - C. To assign a capable supervisor who would enhance the skills of the trainee and should follow up the day to day performance of the trainee
 - D. To give orientation about the rules and regulations of the Hospitals/Health Centers as well as advice about safety rules
 - E. To provide raw materials, tools and other necessary inputs for trainees
 - F. To evaluate the performance of the trainee and submit the result to the TVET College
 - G. To cooperate and work in coordination with the TVET Colleges
22. How do you rate the appropriateness of materials used for practical training in the TVET College?
- A. High
 - B. Medium
 - C. Low
23. How do you evaluate the appropriateness of materials in the Hospitals/Health Centers to enhance the practical skills of trainee? A. High B. Medium C. Low
24. How do you evaluate the similarity of materials for practical training in Hospitals/Health Centers and TVET College? A. High B. Medium C. Low
25. If your response to question No. 24 is low, which one of them is well equipped?
- A. The training College
 - B. The Hospitals/Health Centers

26. How do rate the performance of trainees during clinical practice?

	<u>High</u>	<u>Medium</u>	<u>Low</u>
A. The trainees diligently perform the clinical practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. To work according to the work methods of the hospitals/health centers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. To utilize machine/equipment with care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. To perform practical activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. To co-operate with other employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. To utilize input efficiently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. To produce quality service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

27. How do you evaluate the degree of partnership between your TVET college and hospitals/health centers relating to the following co-operation areas in the process of promoting clinical practice?

	<u>High</u>	<u>Medium</u>	<u>Low</u>
A. Joint organization and management of clinical practice preparation of curricula and rules and regulations for clinical practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Common and complementary use of training personnel, materials and machinery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Participation in evaluation and testing of clinical practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Financial support for clinical practice purpose	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Giving allowances to trainees and covering other expense	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Participation in development of qualified staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

28. How do you evaluate the capability of the supervisors assigned by Hospitals/Health Centers to evaluate the performance of trainees? A. High B. Medium C. Low

29. If your response to question No. 28 is low, which of the following could be the main reason for the problem?

- A. the supervisors has inadequate pedagogical skills to train/evaluate trainees
- B. The supervisor has inadequate technical/practical skills to train trainees
- C. The supervisor is academically not qualified
- D. Other (Specify) _____

30. In your opinion which of the following highly hinder the smooth implementation of clinical practice?

Rank them accordingly.

- A. Lack of appropriate workplace and qualified supervision
- B. Insufficient number of training places
- C. Lack of regulation and guideline for co-operation in clinical practice
- D. Lake of partnership between Hospitals/Health Centers and TVET Colleges
- E. Reluctance of organizations to co-operate
- F. Mismatch between number of trainees and capacities of Hospitals/Health Centers to absorb them
- G. Lack of suitable institutional support (employer association, trade unions, etc.)

I. financial problems and incentives

F. Other (specify) _____

31. Would you please state major problems you faced in relation to the implementation of clinical practice?

32. What possible solution/s would you suggest to alleviate these problems?

Appendix C

Addis Ababa University School of Graduate studies

Department of Business Education-Management of Vocational Education

A questionnaire to be filled by supervisor in Clinical Practice Offering Hospitals/Health Centers)

The purpose of the questionnaire is to gather information and opinion about the implementation of Clinical Practice in private TVET Colleges in Addis Ababa. Thus, your frank and sincere response to the items in the questionnaire helps to meet the objective of the study. Be sure that the information you provide will be kept confidential, used only for the academic purpose.

Part one: General Background

1. Name of the Hospital/Health Center _____
2. Sex of the respondent: A. Male B. Female
3. Age: A. Less than 25 B. 26-30 C. 31-35 D. 36-40 E. Above 40
4. Qualification of the respondent: A. Diploma B. BA/BSc C. MA/MSc
D. PhD E. Other (specify) _____
5. Your position in the organization _____
6. Type of Employee in the organization
A. Permanent B. Contract/ temporary/ bases
7. Total year of service _____
8. The Hospital/Health Center is accountable/answerable /to
A. Federal government B. Regional Government
9. The number of TVET trainees attended clinical practice in your hospital/health center during the year 1999 E.C and 2001 E.C A. 1999 E.C _____ B. 2000 E.C _____
C. 2001 E.C. _____ D. Total within three years _____
10. How long did TVET trainees attend clinical practice in your hospital/health center at a time from one TVET colleges? A _____ months B. _____ days C. _____ hours

Part two: General Questions

1. How was your hospital/health center made to provide clinical practice?
 - A. On the basis of the request by TVET college
 - B. On the basis of instruction/guideline order from local administration office
 - C. On the basis of stable tripartite negotiation and suitable institutional support (such as employer association, trade union)
 - D. On the basis of discussion and agreement made between TVET college and Hospitals/Health Centers
 - E. Other (specify) _____

2. Were there laws supporting implementation of clinical practice? A. Yes B. No
3. If your response is yes to question No. 2 , which of the following laws were applied?
 - A. TVET law
 - B. Apprenticeship training Act
 - C. Clinical practice guideline
 - D. Other (specify) _____
4. Were your hospital/health center made familiar with issues relating to clinical practice?
 - A. Yes
 - B. No
5. If your response to question No 4 is "Yes" how was your hospital/health center made familiar with the issue?
 - A. By providing clinical practice co-operation guideline to the hospitals/health centers
 - B. Through discussion with higher officials of the organization on the meeting held for one day
 - C. Though training of workplace trainers/supervisors in the form of workshop (seminar)
 - D. Other (specify) _____
6. Are there criteria set relating to selection of hospitals/health centers for clinical practice?
 - A. Yes
 - B. No
7. If your response to question No 6 is 'Yes' what are the criteria determined to select organizations that shall participate in the provision of clinical practice?
 - A. The number of employees
 - B. The amount of capital
 - C. Type of ownership
 - D. Other _____
8. How the number of trainees does was assigned to your hospital/health center for clinical practice determined?
 - A. By each organization unilaterally
 - B. By TVET college on the basis of preset criteria
 - C. By the agreement between TEVT college and hospitals/health centers
 - D. On the basis of the statement of the law
 - E. There is no formal procedure
 - F. Other _____
9. Who assign trainees to each selected hospitals/health centers/?
 - A. the vocational counselor
 - B. the trainee/Teacher
 - C. Through trainees' personal contact
 - D. Other _____
10. How do you evaluate your ability to train trainees (for supervisor only)
 - A. High
 - B. Medium
 - C. Low

11. Duties and responsibilities expected of trainees are listed here under. Rate them accordingly.

	<u>High</u>	<u>Medium</u>	<u>Low</u>
A. To diligently perform the apprenticeship training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. To be acquainted with work method to the organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. To utilize wit care and economy materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. The ability to perform practical activities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. The ability to cooperate with other employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. The ability to utilize input efficiently	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. The quality of goods they produce	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. The ability to use office equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Other _____			

12. Which of the following activities were performed by TVET colleges? You may choose more than one answer

- A. utilizing trainees evaluation done by your supervision as a component of overall evaluation of trainees during certification
- B. following up the process of clinical practice by assigning appropriate professional
- C. Collaborate with your organization by preparing guideline and schedules for implementation of the clinical practice
- D. Other (specify) _____

13. Have you evaluated and transferred trainee result (grade) to their institution?

- A. Yes B. No

14. If your response to question number 13 is "Yes", how do you rate your capacity to evaluate (for supervision only) A. high B. Medium C. Low

15. Do trainees pay fee for clinical practice? A. Yes B. No

16. If your response is yes to question No. 15, please state the processes of the payment

17. Did the hospital/health center/ make payments (such as pocket money, transportation cost, uniform etc) to trainees? A. Yes B. No

18. Did your hospital/health center/ incur loss emanating from clinical practice? A. Yes B. No

19. If your response to question No 18 'yes' which of the following could be the reason? (more than one answer is possible)

- A. The services of trainees are below quality standard
- B. The services of trainees are worthless
- C. Capacity of trainees for practical work is minimal
- D. Misuse of inputs by trainee

E. Work discipline of trainee is low

F. Other (specify) _____

20. Were there incentive given to your hospital/health center/ for offering clinical practice?

A. Yes

B. No

21. If your response to question No 20 is "Yes", what was an incentive given? (you may chose more than one answer)

A. Tax exemption on imported machine and other equipments

B. Charge free training for employees of the hospital/health center/ in TVET colleges

C. Charge free provision of land for expansion

D. Letter of thanks given on graduation days from TVET colleges

E. Other _____

22. Did trainees sign Memorandum of Agreement (training contract) with your hospital /health center/ offering clinical practice?

A. Yes

B. No

23. If your response is "yes" to question No. 22, what are the items in the contract (You may choose more than one answer)

A. Full name and age of trainee

B. Name and address of the organization

C. Name and address of training institution

D. The occupation in which the trainee is intended to undergo clinical practice

E. The date on which the clinical practice shall start and its duration

F. Conditions for the termination of the contract

G. Conditions for payments for the trainee

H. Conditions of insurance for damages on training

24. Did TVET colleges pay fee for the clinical practice? A. Yes B. No

25. If your response is "Yes" to question No. 24, please state the processes of the payment

26. How many trainees can your hospital/health center/ absorb at a time? _____

27. How do you rate the interest of your hospital/health center/ to provide clinical practice in the future? A. High B. Medium C. Low

28. How do you evaluate the similarity of materials for practical training in your hospital/health center/ and TVET colleges? A. High B. Medium C. Low

29. Would you please list major problems you faced during clinical practice?

30. What solution would you suggest to solve these problems?

Appendix D

Addis Ababa University
School of Graduate studies

Department of Business Education – Management of Vocational Education

A key Informant Interview Questions for deans, department heads and head nurses and
guide to document analysis

Part one: General Background

1. Name of the institute _____
2. Sex _____
3. Qualification of the respondent: _____
4. Major field of respondent specialization _____
5. Year of experience _____

Part two: General questions

1. The current number of academic staff by qualification
2. Did all concerned partners (your college, the hospital/health center/ and the trainees) sign Memorandum of agreement about clinical practice?
3. Who is responsible body for clinical practice program in your institution?
4. What are the major tasks of this responsible body?
- 5. What strength/Weakness could you mention regarding the clinical practice?
- 6. Do you have guide lines set for clinical practice?
- 7. Are you implementing the clinical practice according to the curriculum?
8. Were there any laws backing the implementation of clinical practice?
9. Were there criteria set to select Hospitals/Health Centers offering clinical practice?
10. How do you evaluate the extent of partnership between your TVET College and public and private health centers in promoting clinical training?
- 11. Who assign trainees to each selected hospitals/health centers?
- 12. What are the criteria used to assign trainees?
- 13. What were the strategies devised by your college to improve links with clinical practice offering hospitals/health centers and the private TVET Health College?
- 14. Is there trained/qualified vocational counselor in your TVET College?
- 15. Were there trainees quite clinical practice?

- 16. Is there any plan for the clinical practice program?
- 17. What were the ranges of activities undertaken promote clinical practice?
- 18. Who covers trainees' personnel expenses during clinical Practice?
- 19. Where trainees charged fee by your college for the clinical practice?
- 20. Did your institution subsidize the direct clinical practice cost of the hospitals/health centers?
- 21. Did hospitals/health centers/ demonstrate commitment to clinical practice?
- 22. Were there any incentives given to the hospitals/health centers?
- 23. How do you evaluate the adequacy of raw materials/inputs in your college?
- 24. Would you please state major problems you faced while implementing clinical practice?
- 25. What possible solution would you suggest to alleviate these problems?
- 26. How many students the hospitals receive at a time?

➤ Suggested “Alternative Mode of Delivery”



➤ Duration of training: maximum two years

➤ Training deliver:

- ✓ Theory
- ✓ Visiting (short term internship)
- ✓ In campus practical training
- ✓ Video show etc.

➤ Requirement :

- ✓ Certificate of TVET Health College
- ✓ Registration by CPA

➤ Supervision: by HCI & CPA

➤ Duration: Minimum 1 year

➤ Certification: by

CPA if competent

➤ Payment: Pocket money

➤ Requirement:

certificate of clinical practice completion by CPA

➤ Payment: Minimum salary

➤ Eligible to CoC Assessment

➤ Licensed middle level professional if competent

Figure 2.1 Structure of the Ethiopian Education System

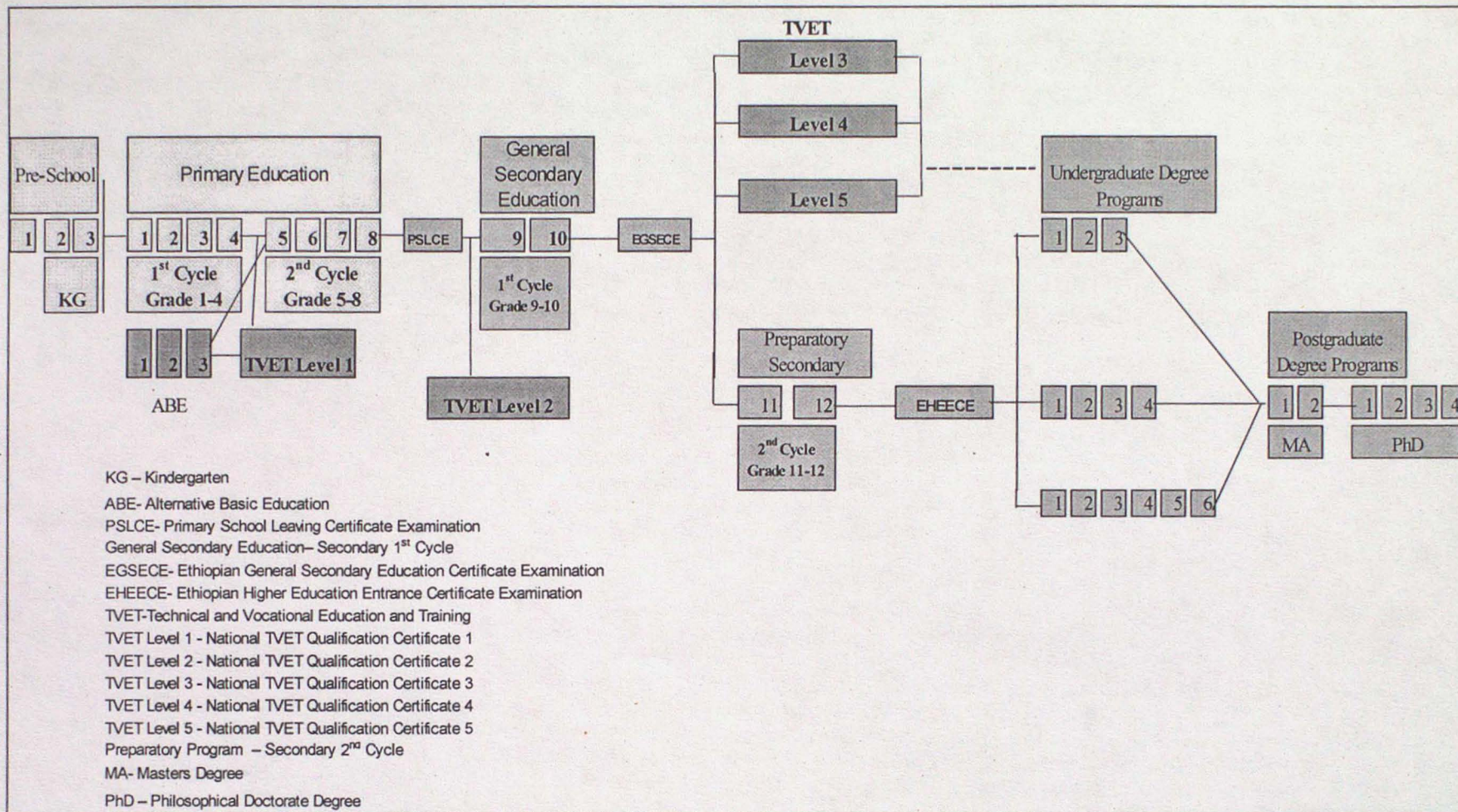


Figure 2.1 indicates the structure of both formal and non-formal education available in Ethiopia, including the examinations that influence education options.

በአዲስ አበባ ከተማ አስተዳደር የቴ/ሙያ/ት/ሥልጠና ኤጀንሲ የወቅቱ እውቅና ያላቸው የጤና ኮሌጆች ስም፣ የሚገኙበት ክ/ከተማና የሚያሰለጥኑበት የሙያ ዓይነት ዝርዝር መግለጫ፤

ተ/ቁ	የኮሌጁ ስም	የሚገኝበት ክ/ከተማ	የሚያሰለጥኑበት የሙያ ዓይነት
1	ኬር ሜዲካል ኮሌጅ	- የካ	- ክሊኒካል ነርሲንግ
2	ኪያሜድ የጤና ኮሌጅ	- አራዳ	- ክሊኒካል ነርሲንግ - ፋርማሲ ቴክኖሎጂ - ላብራቶሪ ቴክኒሻል
		- የካ	- ክሊኒካል ነርሲንግ - ፋርማሲ ቴክኖሎጂ
		- ልደታ	- ክሊኒካል ነርሲንግ
3	አዲስ አበባ ዴንታል ማይንስ ኮሌጅ / ካምፓስ/	- የካ	- ዴንታል ቴራፒ - ዴንታል ነርሲንግ - ዴንታል ሃይጂን
4	ቤተል ሜዲካል ኮሌጅ	- ልደታ	- ክሊኒካል ነርሲንግ - ክሊኒካል ላብራቶሪ ቴክኖሎጂ - ፋርማሲ ቴክኖሎጂ
5	አዲስ አበባ ሜዲካል ኮሌጅ	- አራዳ	- ክሊኒካል ነርሲንግ - ፋርማሲ ቴክኖሎጂ
		- የካ	- ክሊኒካል ነርሲንግ - ፋርማሲ ቴክኖሎጂ - ክሊኒካል ላብራቶሪ - ራዲዮ ግራፊ
6	አፍሪካ ጤና ኮሌጅ	- ቂርቆስ - ቦሌ	- ክሊኒካል ነርሲንግ - ፋርማሲ ቴክኖሎጂ - ክሊኒካል ላብራቶሪ - በራዲዮ ግራፊ

• ይህ ዝርዝር የመጨረሻ አይደለም በየቀኑ ለውጥ ሊኖር ይችላል። / የተቋማት ጥራት ማረጋገጥ ዋና የሥራ ሂደት / ከኮሚዩኒኬሽንስ ጉዳዮች ጋር በመተባበር / አድራሻ : አርበኞች መንገድ / ሰባራ ባቡር / ስልክ 011 156 42 29 ኢ ሜይል AATevet@yahoo.com

በአዲስ አበባ ከተማ አስተዳደር የቴ/ሙያ/ት/ሥልጠና ኤጀንሲ የወቅቱ እውቅና ያላቸው የጤና ኮሌጆች ስም፣ የሚገኙበት ክ/ከተማና የሚያሰለጥኑበት የሙያ ዓይነት ዝርዝር መግለጫ፤

ተ/ቁ	የኮሌጁ ስም	የሚገኝበት ክ/ከተማ	የሚያሰለጥንበት የሙያ ዓይነት
7	ያኔት የጤና ኮሌጅ	- አዲስ ከተማ	- ክሊኒካል ነርሲንግ - ሜዲካል ላብራቶሪ ፋርማሲ
8	እናት ሜዲካል ኮሌጅ	- ጉሰሌ	- ክሊኒካል ነርሲንግ - ፋርማሲ ቴክኖሎጂ - ክሊኒካል ላብራቶሪ ቴክኖሎጂ
9	ተዘንኦ ኮሌጅ እና ሄልዝ ሣይንስ	- ልደታ	- ክሊኒካል ነርሲንግ - ፋርማሲ ቴክኖሎጂ - ክሊኒካል ላብራቶሪ - ራዲዮ ግራፊ
10	ሴንትራል ዩኒቨርሲቲ ኮሌጅ	- ቦሌ	- ክሊኒካል ነርሲንግ - ክሊኒካል ላብራቶሪ
		- የካ	- ክሊኒካል ነርሲንግ - ክሊኒካል ላብራቶሪ
		- ቂርቆስ	- ክሊኒካል ነርሲንግ - ፋርማሲ ቴክኖሎጂ
11	አየር ጤና የጤና ሣይንስ ኮሌጅ	- ኮልፌ -- ኮልፌ	- ክሊኒካል ነርሲንግ - ሜዲካል ላብራቶሪ ቴክኖሎጂ - ፋርማሲ ቴክኖሎጂ
12	አትላስ ኮሌጅ	- አራዳ	- ዴንታል ቴክኒሻን - ፋርማሲ ቴክኒሻን - ዶ/ር ኦፍ ዴንታል ሜዲሲን / DDM/
13	ትሮፒካል ኮሌጅ እና ሜዲሲን	- ልደታ	- ክሊኒካል ነርሲንግ - ሜዲካል ላብራቶሪ ቴክኖሎጂ - ፋርማሲ
14	ቤተሳታ ጤና ሣይንስ ኮሌጅ	- ቂርቆስ	- ክሊኒካል ነርሲንግ - ሜዲካል ላብራቶሪ ቴክኖሎጂ

• ይህ ዝርዝር የመጨረሻ አይደለም በየቀኑ ለውጥ ሊኖር ይችላል። / የተቋማት ጥራት ማረጋገጥ ዋና የሥራ ሂደት / ከኮሚዩኒኬሽን ጉዳዮች ጋር በመተባበር / አድራሻ : አርበኞች መንገድ / ሰባራ ባቡር / ስልክ 011 156 42 29 ኢ ሜይል AATevet@yahoo.com

በአዲስ አበባ ከተማ አስተዳደር የቴ/ሙ/ያ/ት/ሥልጠና ኤጀንሲ የወቅቱ እውቅና ያላቸው የጤና ኮሌጆች ስም፣ የሚገኙበት ክ/ከተማና የሚያሰለጥኑበት የሙያ ዓይነት ዝርዝር መግለጫ

ተ/ቁ	የኮሌጁ ስም	የሚገኘበት ክ/ከተማ	የሚያሰለጥንበት የሙያ ዓይነት
15	ዩኒቨርሲቲ ሜዲካል ኮሌጅ	- ቦሌ	- ክሊኒካል ነርሲንግ - ፋርማሲ
16	አሜጋ የጤና ሣይንስ ኮሌጅ	- ቂርቆስ	- ክሊኒካል ነርሲንግ - ፋርማሲ - ሜዲካል ላብራቶሪ
17	አራዳ ጊዮርጊስ ሜዲካል ኮሌጅ	- አራዳ	- ክሊኒካል ነርሲንግ - ሜዲካል ላብራቶሪ ቴክኖሎጂ - ፋርማሲ
18	አልካን የጤና ሣይንስ	- አራዳ	- ክሊኒካል ነርሲንግ - ፋርማሲ - ሜዲካል ላብራቶሪ
19	ዳ/ምኒሊክ የጤና ኮሌጅ	- የካ/ የመንግሥት /	- ክሊኒካል ነርሲንግ - ህብረተሰብ ነርስ - አዋጅ ነርስ - ፋርማሲ ቴክኖሎጂ - ሜዲካል ላብራቶሪ
20	ኢትዮ ናሽናል ሜዲካል ኮሌጅ	- የካ	- ክሊኒካል ነርሲንግ - ፋርማሲ
21	ቅድስት ልደታ የጤና ሣይንስ	- ልደታ	- ሜዲካል ላብራቶሪ - ፋርማሲ
22	ሜድኮ ባዮ ሜዲካል	- ቦሌ - ቂርቆስ	- ላብራቶሪ ቴክኒሻያን - ክሊኒካል ነርሲንግ - ፋርማሲ
23	ላብላይት ሜዲካል ኮሌጅ	- ንፋስ ስልክ	- ላብራቶሪ ቴክኒሻያን - ክሊኒካል ነርሲንግ
24	ሪፍት ቫሊ ሜዲካል ኮሌጅ	- አዲስ ከተማ	- ክሊኒካል ነርሲንግ - ፋርማሲ
25	ዩኒቲ ጤና ኮሌጅ	- ቦሌ	ክሊኒካል ነርሲንግ - ፋርማሲ
26	ኢኮስታ	- በክሊኒካል ነርሲንግ - በህብረተሰብ ነርሲንግ - በፋርማሲ ቴክኒሻያን - በክሊኒካል ላብራቶሪ	- በክሊኒካል ነርሲንግ - በህብረተሰብ ነርሲንግ - በፋርማሲ ቴክኒሻያን በክሊኒካል ላብራቶሪ

• ይህ ዝርዝር የመጨረሻ አይደለም በየቀኑ ለውጥ ሊኖር ይችላል። / የተቋማት ጥራት ማረጋገጫ ዋና የሥራ ሂደት / ከኮሚዩኒኬሽን ጉዳዮች ጋር በመተባበር / አድራሻ : አርበኞች መንገድ / ሰባራ ባቡር / ስልክ 011 156 42 29 ኢ.ሜይል AATevet@yahoo.com



1.9 TVET-Programme Structure

1.9.1 Modules / Subject Table

Modules / Subject Table		Logo of TVET Provider		
TVET-Programme Title: Clinical nursing				
Modules		Total Duration Hrs.	Theory Hrs.	Practical ² Hrs.
A.	MAIN MODULES			
1	Nursing Health Service Management and Planning	124	64	60
2	Provision of Basic Nursing Care	388	228	160
3	Provision of Advanced Nursing Care	200	120	80
4	Provision of Nursing care for a Patient with Medical and Surgical Disorders	368	218	150
5	Manage a patient with Communicable Diseases	135	80	55
6	Clinical Nursing Pharmacology and Medication Administration	138	108	30
7	Provision of Sexual and Reproductive Health Care for Clients	165	80	85
8	Provision of Maternity Nursing Care	207	107	100
9	Provision of Child Health nursing Care	456	276	180
10	Provision of Nursing Care in first Line Emergency and Intensive Care Environment	170	100	70
11	Provision of Nursing Care in Pre/Post and Intra-Operative Environment	72	40	32
12	Provision of Nursing Care in Contemporary Rural/Remote Health Care	72	32	40
Sub-total		2495	1453	1042
B.	SUPPORTIVE MODULES			
1	Nursing Health Assessment	48	48	-
2	Ethic-legal aspects of Nursing With Effective Communication skills	32	32	-
3	Human Anatomy and Physiology for clinical nurses	110	110	-
4	Microbiology and Parasitology for clinical nurses	70	70	-
5	Health Education	32	32	-
6	Introduction to Nursing Research Methodology	32	32	-
7	Human Nutrition	42	42	-
8	Introduction to Health Statistics and Epidemiology	64	64	-
9	Environmental Health and Personal hygiene for clinical nurses	32	32	-
10	Psychosocial Nursing care	48	48	-
11	Introduction to Psychiatry Nursing	32	32	-
12	Introduction to Sociology	16	16	-
13	Introduction to Psychology	32	32	-
Sub-total		590	590	
C.	COMMON MODULES			
See Common Modules attached as a separated table				
Sub-total				
D	Team Training Program*	312	-	312

² including practical training done at the TVET Institution and in the form of internships at companies: assignment of hours to be decided by TVET-Provider

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already been practiced in the past (industry attachment / apprenticeship training) and is still relevant.

1.9. TVET-Programme Structure

1.9.1 Modules / Subject Table

Modules / Subject Table		Logo of TVET Provider		
TVET-Programme Title: Pharmacy Technician Training.				
Modules		Total Duration Hrs.	Theory Hrs.	Practical ² Hrs.
A	MAIN MODULES			
1	Development of unconventional medicine	160	110	50
2	Application of Pharmacology	200	200	-
3	Dispensing	660	298	362
4	Drug and Medical Supplies Management	190	100	90
5	Handling Medical Devices and Equipments	64	40	24
6	Pharmaceutical Quality Control	260	66	194
7	Pharmaceutical Manufacturing	362	113	249
Sub-total		1896	927	969
B.	SUPPORTIVE MODULES			
1	Biochemistry	64	64	--
2	Epidemiology and Health Statistics	32	32	--
3	First Aid and Accident Prevention	25	16	9
4	Organic Chemistry	94	74	20
5	Analytical Chemistry	75	36	39
6	Health and Drug education	20	16	4
7	Human Anatomy and Physiology	80	80	--
8	Pharmaceutical Microbiology and Parasitology	72	54	18
9	Human Psychology	28	28	--
10	Introduction to Sociology	16	16	--
Sub-total		506	416	90
C.	COMMON MODULES (To be completed later)			
Sub-total				
Grand-total		2402	1391	1011

² Including practical training done at the TVET-Institution and in the form of internships at companies; assignment of hours to be decided by TVET-Provider

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1.9 TVET-Programme Structure

1.9.1 Modules / Subject Table

Modules / Subject Table		C		
TVET-Programme Title: Midwifery Nursing				
Modules		Total Duration Hrs	Theory Hrs.	Practical ² Hrs.
A.	MAIN MODULES			
1	Epidemiological and socio-cultural context towards maternal and new born health	26	16	10
2	Quality ANC services	576	90	486
3	Quality family planning service	352	60	292
4	Management of labor and delivery, obstetric and New born emergencies	668	215	453
5	Post natal care	496	75	421
6	Health activity management in midwifery practice	26	16	10
Sub-total		2144	472	1672
B.	SUPPORTIVE MODULES			
1	Ethics in midwifery practice	20	16	4
2	Epidemiology & health statistics	32	32	—
3	Introduction to Sociology	32	32	
4	Health education	16	16	---
5	Human Anatomy & Physiology	120	120	---
6	Pharmacology	32	32	---
7	Basic Nursing Art	345	60	285
8	Communicable disease	64	64	---
9	Food and Human Nutrition	20	20	----
10	Psycho-social Nursing	32	20	12
11	Environmental health and personal hygiene	32	32	---
12	Health planning & Management	32	32	---
13	Physical diagnosis (+Nursing Health Assessment)	25	10	15

² including practical training done at the TVET-Institution and in the form of internships at companies; assignment of hours to be decided by TVET-Provider

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14	First Aid and accident prevention	30	17	13
15	Medical surgical Nursing	64	40	24
16	Microbiology & Pracytology	48	48	---
17	Operation room technique	32	18	14
Sub-total		976	609	367
C.	COMMON MODULES (To be completed later)			
Grand-total		3120	1081	2039

N.B From total practical hours 312 hours is allotted for team training programs (TTP).

1.9.2 Sequencing Structure

Sequencing Structure				Logo of TVET Provider	
TVET-Programme Title: Midwifery Nursing					
Sequential order Code	Modules		Total Duration Hrs.	Pre-requisite Modules	
	Module Title	Module Type			
1	Human Anatomy & Physiology	Supportive	120		
2	Basic Nursing Art	Supportive	345		
3	Food and Human Nutrition	Supportive	20		
4	Microbiology & Parasitology	Supportive	48		
5	Health education	Supportive	16		
6	Ethics in midwifery practice	Supportive	26	-	
7	First Aid and accident prevention	Supportive	30	Human Anatomy & Physiology	
8	Physical diagnosis (+Nursing Health Assessment)	Supportive	25	Human Anatomy & Physiology,	
9	Introduction to sociology	Supportive	32		
10	Psycho-social Nursing	Supportive	32	Physical diagnosis (+Nursing Health Assessment)	
11	Epidemiological and socio-cultural context towards maternal and new born health	Main	26	Introduction to sociology	
12	Quality ANC services	Main	541	Human Anatomy & Physiology, Ethics in midwifery practice	

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