بسم الله الرحمن الرحيم

الجمعية الطبية لطلاب إفريقيا بجامعة إفريقيا العالمية

African Medical Students Association at the International University of Africa (AMSA – IUA)

AMSA – IUA Second International Health Conference:
Challenges facing Health Service Providers in Africa

10 – 11 January, 2014 AD / 9 — 10 Rabiy Auwal, 1435 AH
IUA, Khartoum – Sudan

Conference Proceedings

(AMSA Media and Information Office)

Compiled by:
Muhammad Umar Sani,
Maram El-Zain Awad
(Year 5 Faculty of Medicine)

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From the Vice Chancellor

The nineteenth assembly of the University Board of Trustees was held in January 2013, and witnessed during the period of its activities the first International Health Conference organized by the African Medical Students Association (AMSA). The conference had presentations of scientific papers by students under the supervision of their lectures and the theme of the conference was on the "Health problems of Africa: Is there any hope left?"

The initiative of the association was encouraged by Professor Mabyou Mustapha, Deputy Vice Chancellor for Academic and Cultural affairs, who chaired and coordinated the linking of the association to other humanitarian organizations like Physicians Across Continents (PAC). The outcome of that conference was generally outstanding and beneficial.

I was pleased and expressed my views on this association to some higher authorities in the state and those involved in the related sector. I also proposed to see such activities (conferences) sustained. The association along with the faculty of medicine and allied health sciences (Dentistry, Nursing, Pharmacy, and Medical Laboratory Sciences) of the University took to their feet, where Professor Mabyou continued to be patron of the association. Despite his health situation, he was still able to attend the general Ramadan Breakfast of the association last year; this entails his concern for the association where he believes these students have got a future and deserve to have a helping hand.

Professor Mabyou was succeeded in his noble task of being the patron of the association Dr. Mohammed Alhassan Eltikena, Dr. Omer El-Adil and Dr. Kamal Mohammed Khair. It was under their supervision and the enthusiasm of the members of the association that preparations of the second conference kicked off which is scheduled to take place in January 2014 –a year after the first conference. The theme of this conference is an advancement of the

scope of the first, which focuses on the challenges facing health service providers in Africa. This conference (and their other activities) is in line with the message of the association of: "let's join hands to save Africa".

This conference attracted the interest of the University and the State and Federal Ministries of Health where both Ministers welcomed and supported the project. The conference comes at the time of laying the first foundation of the Rajihi Teaching Hospital of the International University of Africa which will add to the facilities of the university in training of her students who are currently clerking in Ibrahim Malik Teaching Hospital. The renovation of the health clinic of the university in view of improving the health of the staff and students is also in place.

Indeed the efforts of the Medical and allied health sciences students in the formation of this association and their engagement in scientific research activities is a project that though still nascent, will overtime become fruitful, if stakeholders and those with expertise will join and support this task. This will no doubt be appreciated by the University and those sponsors of such projects.

Professor Kamal Mohammed Obeid
Vice Chancellor, IUA.

تقديم مدير الجامعة

عقد مجلس أمناء جامعة أفريقيا العالمية إجتماعه العادى في دورته التاسعة عشرة في يناير 2013م وكان من ضمن البرامج المصاحبة لدورة الانعقاد هذه إنعقاد المؤتمر الأول للجمعية الطبية لطلاب أفريقيا بجامعة أفريقيا -AMSA) (IUA والذى قدم فيه الطلاب عدداً من الأوراق تحت إشراف أساتذتهم وكان موضوع المؤتمر يدور حول (المشاكل الصحية في أفريقيا هل من أمل في حلها) واضطلع الاستاذ الدكتور - مبيوع مصطفى- نائب مدير الجامعة للشئون العلمية والثقافية برعاية الفكرة وتطويرها ونسق جهود الجمعية مع عدد من المنظمات من بينها (أطباء عبرالقارات) وكانت نتائج ذلك المؤتمر باهرة وفائدتها عميمة, وقد عبرت عن اعجابى بذلك البرنامج لعدد كبير من المسئولين والمهتمين ودعوت حينها ليكون هذا البرنامج سنوياً فتجاوبت الجمعية ومعها كلية الطب وسائر الكليات الطبية بالجامعة وواصل بروفيسور- مبيوع رعاية البرنامج حتى ألمت به وعكة وهو يشارك في نشاطها في أحتفال افطارها الرمضانى وتولى الأمر بعده الدكتور- محمد الحسن التكينة والدكتور- عمر العادل والدكتور- كمال محمد خير، وتحت إشرافهم وبحماس متدفق من شباب الجمعية بدأ التحضير للمؤتمر الثانى لينعقد في يناير 2014م بعد سنة بالتمام من تاريخ انعقاده الأول واختاروا موضوعاً جديداً لهذا المؤتمر هو تطوير للموضوع السابق حيث اختاروا (التحديات التى تواجه مقدمى الخدمات الصحية

في أفريقيا) وأثروه بشعار (يّد فوق يدٍ لإنقاذ أفريقيا) وحظى هذا المشروع بأهتمام الجامعة ووزارة الصحة السودانية ووزارة الصحة بولاية الخرطوم حيث رحب وزيراها مشكورين بدعم المشروع ورعايته ويتزامن مع هذا النشاط وضع حجر الأساس لمستشفى الراجحى التعليمى الخاص بجامعة أفريقيا العالمية ليكون اضافة ولبنة فوق لبنة بعد أن واصلت الجامعة تدريب طلابها بمستشفى إبراهيم مالك وتجرى إجراءات تطوير الوحدة الصحية للجامعة لتوسيع مواعين التدريب والرعاية الصحية للطلاب والعاملين وأسرهم.

ان مبادرة طلاب كلية الطب والكليات الطبية الأخرى في تأسيس هذه الجمعية وإهتمامهم بالعمل العلمى البحثى المتطور مشروع قد يبدو ضئيلاً ولكن بمرور الزمن وتراكم التجارب وتنامى الخبرات ستسعد أفريقيا والعالم بحصاد طيب من عمل هؤلاء الطلاب وأساتذتهم وحينها يحق لجامعة أفريقيا وداعميها أن يهنأوا بتلك النتائج.

البروفيسور - كمال محمد عبيد
مدير جامعة إفريقيا العالمية

Foreword

The International University of Africa has a quite long history of enrolment and graduating of professionals in its different faculties and departments. The university represents a major platform where people from many countries and continents of the world meet to share knowledge and ideas, and to acquire the professional skills needed to make a positive change in the rapidly growing and developing contemporary world of today. The University has since its establishment trained and graduated individuals that have been of key importance in their positive contributions in the society.

A good initiative in the name of the African Medical Students Association represents the Medical and Allied Health Sciences specialties of the university who have gained the awareness of the various health problems and disease burden of the African continent, and have embarked towards sensitizing the international community of what the situation is and the role they can play in an attempt to intervene in the areas of healthcare delivery. This also represents the role of the University as it boost the human resources adding to the health workforce of the different countries of the continent.

Dr. Ibrahim Fathal-Rahman
Head of Advisory Board

Acknowledgement

Having successfully completed and managed to extract the most priority medical and health problems facing African communities with the series of contributions and recommendations in the first International Health Conference organized by this marvelous association, the idea of the second conference was immediately suggested to focus on challenges facing health service providers in Africa, I acknowledge the completion of yet another milestone in this year's 2nd International Health Conference which is taking place on the 10th-11th of January, 2014 at the Africa conference hall, International University of Africa, it's my most sincere pleasure to thank the administration of International University under the leadership of the Vice Chancellor and his entire dedicated staff for the continued support and contributions towards the success of the conference.

Words are too little to express our outmost gratitude to the research and scientific supervisors Dr Amal Abdou Abdalla- Director of Health Observatory –Sudan and Dr Abdul Mageed Osman Musa- Director Medical Education and Research Center-IUA for the support and guidance they rendered to the students scientific committee throughout the preparations. Also to Tarig Farouq Abdalla, I say a very big thank you.

And to the Humanitarian Organizations: Physicians Across Continents, especially Dr Azhari Abdurahim; Sudan Doctors Union, Patients Helping Fund-Sudan for their material support and not forgetting Ministries of Health and other health authorities across African countries for giving us a chance of retrieving information and serving as our references.

Finally, this acknowledgement will never get completed without mentioning the tremendous guidance and support of our senior and colleague in person of Professor Mabyou Mustafa A-Wahab Deputy Vice Chancellor – Academics. We pray may the almighty Allah continue to guide and protect you.

Dr Omer El-Adil Abdallah Hamid,
AMSA - IUA Patron.

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Challenges facing Health Service Providers in Ethiopia, 2013

Prepared by:

HassenYimer Hassen, Year 5 – Faculty of Medicine.

Introduction

Ethiopia is situated in the horn of Africa between 3 and 5 degrees north latitude and 33 and 48 degrees east longitude. Bordered by Eritrea in the North and North East, Djibouti and Somalia in the East, Kenya in South, and Sudan in the Westand South West. Ethiopia is the countries with high population in Africa and has diversified culture, linguistic composition and large ethnic compositions. The country introduced a federal government structure in 1994 composed of nine Regional States: Tigray, Afar, Amhara, Oromia, Somali, BenishangulGumuz, Southern Nations Nationalities and Peoples Region (SNNPR), Gambela and Harrari and two city Administrations (Addis Ababa and Dire Dawa). The Regional States are administratively divided into 78 Zones and 710 Woredas .The total area of the country is about 1.1 million sq. km. Total projected population of the country is about more than 85 million.Ethiopia is the second most populous country ,34.5% Oromo 26.9% Amhara6.2% Somali6.1% Tigray4.0% Sidama2.5% Gurage 2.3% Welayta1.7% Hadiya1.7% Afar1.5% Gamo1.3% Gedeo11.3% others.(WHO 2007).

Ethiopia is one of the poorest countries in Africa. Poverty is both a cause and consequence of poor health. Infectious and neglected tropical diseases kill and weaken millions of the poorest and most vulnerable people each year. The largest group of poor people in the country is composed of small-scale farmers.The major health problems of the country remain largely preventable communicable diseases and nutritional disorders. Despite major progresses have been made to improve the health status of the population in the last one and half decades, Ethiopia's population still face a high rate of morbidity and mortality and the health status remains relatively poor. Figures on vital health indicators from DHS 2005 show a life expectancy of 54 years (53.4 years for male and 55.4 for female), and an IMR of 77/1000. Under-five mortality rate has been reduced to 101/1000 in 2010 and more than 90% of child deaths are due to pneumonia, diarrhea, malaria, neonatal problems, malnutrition and HIV/AIDS, and often a combination of these conditions. (WHO 2007)

Country Background

Ethiopia is situated in the horn of Africa between 3 and 5 degrees north latitude and 33 and 48 degrees east longitude. Bordered by Eritrea in the North and North East, Djibouti and Somalia in the East, Kenya in South, and Sudan in the West and South Sudan in the South West. It covers an area of approximately 1.14 million square kilometers and is one of Africa's most populous countries: the 2007 Population and Housing Census counted a population of about 77.5 million, of which males constituted 50.5 percent and females 49.5percent. Population density was 64.1 per sq. km. Average life expectancy was 53.42 and 55.42 years for males and females, respectively. Nearly 84 percent of the population (32.50 million people) lived in rural areas while the remainder (16 percent, 6.95 million) was urban. Based on the country's annual growth rate of 2.6 percent, the commission estimated the population in 2009/10 to be nearly 80 million (Population Census Commission 2008).Adopted in 1995, the constitution that established the Federal Democratic Republic of Ethiopia provides for a system structurally based on a federal government, nine autonomous states, and two chartered cities (Addis Ababa and Dire Dawa). Ethiopia is one

of Africa's poorest countries yet is relatively stable. Poverty is both a cause and consequence of poor health. Infectious and neglected tropical diseases kill and weaken millions of the poorest and most vulnerable people each year. The largest group of poor people in the country is composed of small-scale farmer

Table 1: Show health indicator in Ethiopia.

Health indicators

Indicator		**Source**
Population(2008)	77,812,236	Projection from 2007 Census
Proportion to population leaving In rural areas	84%	2007 Census
Per capita income	$232 USD	2010 National 5 Year Growth Transformation Plan, MOFED
Life expectancy	55.2 years	2008 World Bank Development Indicators
Fertility rate	5.32	2008 World Bank Development Indicators
Contraceptive prevalence rate	14% 32%	2005 DHS Last 10K survey 2009 (Oromiya , Amhara, SNNP,
Unmet need for family planning	34%	2005 DHS
MMR	673/100,000	2005 DHS
Proportion of deliveries assisted by skilled birth attendant	18.4%	2008/9 MOH Health and Health Indicator Report
Proportion of health facilities meeting	11%	2009 National Emergency Obstetric

minimum emergency obstetrical and neonatal care (EMONC) standards		and Newborn Care Baseline Assessment (MOH, UNICEF, WHO)
Cesarean rate	0.6%	2005 DHS
Neonatal MR	39/1000 live births	2009 WHO
IMR	77/1000 live births	2005 DHS
Under-five mortality rate	123/1000live births	2005 DHS
Stunting	38%	EHNRI National Nutrition Program baseline 2010
Orphans and Vulnerable Children	5.4 million (900,000 from HIV/AIDS)	2010 FHAPCO Report on progress towards implementation of the UN Declaration of Commitment on HIV/AIDS
Fully immunized children < 1year	65.5%	2008/9 MOH Health and Health Indicator Report
TB incidence (all forms)	378/100,000	2007 WHO
Malaria mortality rate	1.9% among inpatients with malaria (5.6% of all inpatients)	2008/9 MOH Health and Health Indicator Report
HIV prevalence	2.3% (urban 7.7%; rural 0.9%)	2007 FHAPCO
Male circumcision prevalence	93%	2005 DHS
PLHIV	1.2 million (60% urban; 40% rural)	2007 FHAPCO
PLHIV on treatment	186,154 (62% coverage)	2008/9 MOH Health and Health Indicator Report
PMTCT coverage (% HIV+ women who receive ARVs)	175%	2010 FMOH

Health cadres : population Doctors Health officers Nurses Midwives Health extension workers	 1 : 36,710 1 : 48,451 1 : 3,928 1 : 57,350 1 : 2,514	 2008/9 MOH Health and Health Indicator Report **Health**
Health posts	14,192	MOH AnnualPerformance Report, 2010
Health centers Hospitals (public & private)	2,147 (current); 3,300 (planned) 195	2008/9 MOH Health and Health Indicator Report **Health**

Methods

This is a descriptive studytaken from secondary data considering the challenges facing health care providers in our country in which tables, pictures, charts and figures are used to present

General objective

To enlighten the challenges facing health service providers in Ethiopia and their overall consequences in order to suggest possible recommendations.

Specific objectives

- To point out challenges facing overall health care practice and practitioners in Ethiopia.
- To look into the consequences of these challenges and their impact on overall health of the country.
- To suggest possible solution and/or recommendations towards solving these challenges.

1. Governmental policies in health practice:

The 1993 Health Policy focuses mainly on providing quality Primitive, Preventive and selected curative health care services in an accessible and equitable manner to reach all segments of population, with special attention to mothers and children. The policy has a particular emphasis on establishing an effective and responsive health delivery system for those who live in rural areas.

a) Focus Areas of The Health Extension Program

As a preventive program, the HEP promotes four areas of care: Disease Prevention and Control, Family Health, Hygiene and Environmental Sanitation, and Health Education and Communication. Health service extension program introduced 16 packages in four main areas that include.

A .Hygiene and Environmental Sanitation (Seven packages).There are: -

- ✓ Proper and safe excreta disposal system;
- ✓ Proper and safe solid and liquid waste management;
- ✓ Water supply safety measures;
- ✓ Food hygiene and safety measures;
- ✓ Healthy home environment;
- ✓ Arthropods and rodent control;
- ✓ Personal hygiene;

B. Disease Prevention and Control (four packages). There are:

- ✓ HIV/AIDS prevention and control;
- ✓ TB prevention and control;
- ✓ Malaria prevention and control;
- ✓ First aid;

C .Family Health Services (Five packages)- There are

- ✓ Maternal and child health;
- ✓ Family planning;
- ✓ Immunization;

- ✓ Adolescent reproductive health;
- ✓ Nutrition;

D. Health Education and Communication

The Health Service Extension Program is implemented in the following modalities: -

- An outreach programme centered around rapid vocational training of health extensionworkers, two per Kebele, and construction and equipping of health posts (a health postper kebele) through accelerated expansion of PHC facilities.
- A community promotion programme centered around volunteer/private sector communitypromoters/TBAs,, working under the supervision/guidance of health extension workersand providing support to households for behavioral change (e.g. breast feeding,complementary feeding, immunization, use of bed nets, clean delivery etc.). The formerFrontline Health workers (CBRHAs,TBAs) are incorporated into the system by servingas volunteers that work under the supervision of the Health Extension Workers.
- A programme strengthening the quality of and demand for clinical care particularlytreatment of diarrhea, malaria in children, assisted delivery, early referral for mothers andchildren with danger signs, HIV testing and counseling as well as prevention of mother tochild transmission in existing health stations and health centers.

b) Current Status of the Health Service Extension Program

The total number of health service extension workers demanded throughout the nation is 30,000.The total number of health service extension workers deployed as of March 2008 is 24534, which is 82% of total demanded. Moreover, 5466 health service extension workers will be trained and deployed until 2009. (FMOH, 2005-2009).

Table 2: Percentage Distribution of Health Service Extension Workers Deployed by Region (2008).

No	Region	Number	Percentage
1	Tigray	1399	5.7
2	Afar	717	2.9
3	Amhara	8824	35.9
4	Oromia	5973	24.3
5	Somali	2785	11.3
6	Ben-Gumuz	86	0.3
7	SNNPR	4585	18.6
8	Gambella	47	0.2
9	Harari	39	0.1
10	Addis Ababa	0	0
11	Dire Dawa	79	0.3
	Total	24534	99.6

Source: FMOH, Planning and Programming Department.

c) Program Challenges

The Following are major challenges encountered during the implementation of the program.

- Lack of attention to the details of working conditions and to human resources management (underdeveloped environment).
- Absence of Institutional arrangements for management of health service extension program at all levels.
- Absence of regular supervision not doing monitoring the quality of training and soliciting cooperation of other social sectors.
- In availability of contraceptives, infrastructure, vaccines in sustainable manner.
- In some area, health posts are not fully well equipped with needed equipment and supplies.

2. Neglected tropical diseases (NTD) challenge:

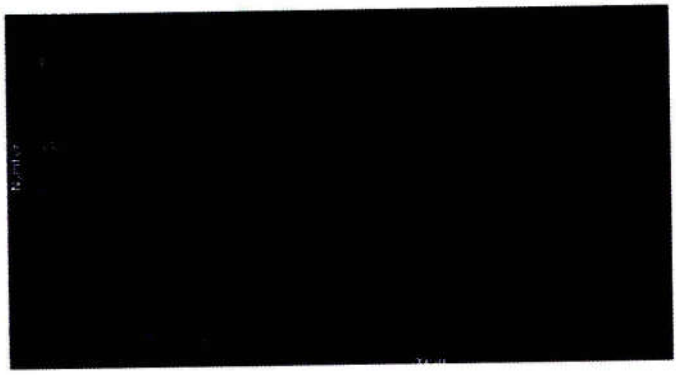
The big three diseases HIV/AIDS, TB, and malaria are a hard nut to crack as long as Ethiopia is concerned. The NTDS, which are a group of tropical infections which are especially endemic in low income populations in developing regions like that of Ethiopia.

Thirteen poverty-promoting diseases have recently been designated as neglected tropical diseases (NTDs). These diseases include

- visceral leishmaniasis (VL),
- human African trypanosomiasis (HAT),
- Chagas disease,
- hookworm infection,
- ascariasis,
- trichuriasis,
- lymphatic filariasis,
- onchocerciasis,
- drancunculiasis,
- schistosomiasis,
- trachoma,
- leprosy (Hansen's disease), and
- Buruli ulcer.

Except for Chaga's disease, all other officially designated NTDs occur in Ethiopia, with varying magnitude. Soil transmitted helminthiasis (STHs) and schistosomiasis, the profiles of which have superficially been considered elsewhere, are the most prevalent and yet neglected diseases in Ethiopia.

Figure 1 Cases of Visceral Leishmaniasis, Ethiopia, 2004-201



3. Human Resource for health

HR Category	End HSDP I		End 1997 HSDP III		Africa Regional Indicators
	Total No	Ratio to population	Total No	Ratio to population	
All physicians	1,888	1:35,603	2152	1:34,986	1:3984
Specialist	652	1:103,098	1151	1:62,783	
General practitioner	1,236	1: 54,385	1001	1:76,302	
Public health officers	484	1:138,884	3,760	1:20,638	
Nurses Bsc, & Diploma(except midwives)	11,976	1:5,613	20109	1: 4,895	1:1069
Midwives (Senior)	862	1:77,981	1379	1:57,354	1:3236
Pharmacists	118	1:569,661	661	1:117,397	
Pharmacy Tech.	79	1: 84,767	3013	1: 25,755	

	3				
Environmental HW	971	1: 69,228	1,819	1: 42,660	
Laboratory technicians & technologist	1,695	1:39,657	2,989	1: 25,961	
Health Extension Workers	-	-	31,831	1: 2,437	

Source: Adapted from the WHO reports.

Table 4: Total number of available Human Resource for Health by region, 2009

Region	Physician (GP & specialist)	Physician : Population Ratio	Health Officer	HO : Population Ratio	All Nurses	Nurse : Population Ratio	Mid-wives	Mid Wife: Population Ratio
Tigray	101	1:44,880	188	1:24,111	2,332	1:1,944	185	1:24,502
Afar	15	1:98,258	29	1:50,823	185	1:7,967	–	–
Amhara	304	1:58,567	434	1:41,024	3,790	1:4,698	212	1:83,983
Oromia	378	1:76,075	448	1:64,189	5,040	1:5,706	287	1:100,197
Somali	71	1:65,81	12	1:389,41	314	1:14,882	45	1:103,84

a		7		5				4
Ben-Gumuz	12	1:59,309	42	1:16,945	452	1:1,575	37	1:19,235
Gambella	13	1:25,585	13	1:25,585	91	1:3,655	4	1:83,150
Harari	29	1:6,655	31	1:6,226	276	1:699	29	1:6,655
Addis Ababa	934	1:3,056	170	1:16,791	3,377	1:845	244	1:11,699
Direda wa	53	1:6,796	19	1:18,957	272	1:1,324	20	1:18,009

The above table shows health professional to population ratio in selected key categories of health professionals across regions. Anchored in the recent reports, numbers of health professionals in different parts of the country are lower than what is standard especially worsened in agrarian and pastoralist regions. However; the available professionals at the end of HSDP III compared to the HSDP III targets show that the target has been met for community level and most of mid-level health professionals. The number has also significantly increased compared to the levels in the previous HSDPs. However, there is still major gap in highly skilled professionals like Medical doctors, midwives and anesthesia professionals.

4. Lack of in-service training:

Health care delivery in Ethiopia has been seeing and facing numerous setbacks among which is the incompetence of the care providers themselves. This has a link with the poor in-service training.

5. Poor supportive supervision of healthcare providers:

Poor supervision of health care delivery system and providers has many out comes like negligence ,laziness, failure to carry out the task one is being

assigned and so on .Adequate supervision of healthcare delivery is still an issue to the practice in Ethiopia.

6. Harmful Traditional beliefs , behaviors , taboo, and habits:

Up to 80% the Ethiopian population depends on traditional medicine for PHC. This also could be an indicator of poverty (Poor affordability, accessibility and poor quality of health services). As this dominance is huge ,concerns are being raised on the challenges traditional medical practices and beliefs ,behaviors ,taboos, and habits pose. Diversity ,safety ,effectiveness, and quality, knowledge, and sustainability, patient safety and use .The WHO promotes the use of traditional medicines but so long the above mentioned challenges are not addressed ,traditional medicine and other health practices(especially the bad traditional health practices) still remain a threat to the development and advancement in modern medicine in Ethiopia.

7. Language/regional diversification:

Ethiopia has more than 94,000,000 population distributed among 9 Regions and two city Administrations(AddisAbaba and dredawa)recently according to Wikipedia and there are more than 81 ethnic compositions and different languages. This situation poses healthcare providers in the country; and therefore places a barrier in the delivery of adequate and efficient health services.

8. Health awareness:

When it comes to the simple health measures needed to live a healthy lifestyle, the average Ethiopian is some pace behind. This is a challenge as not only the health care provider is needed to attain a state of health an understanding of the simple health measures by the targeted population of health care delivery is critical in completing the process of service delivery.

9. Brain Drain, Brain Circulation and Human Capital Flight:

The minimum standard set by the World Health Organization (WHO) to ensure basic healthcare services is 20 physicians per 100,000 people. While Western countries boast an average of 222, 38 countries in sub-Saharan Africa fall short of the minimum standard and 13 of these have 5 or fewer.

PUSH FACTORS

- Low and eroding wages and salaries
- Unsatisfactory living conditions, lack of transport, housing, etc.
- Under-utilization of qualified personnel; lack of satisfactory working conditions; low prospect of professional development
- Better working conditions; job and career opportunities and Professional development
- Lack of research and other facilities, including support staff; inadequacy of research funds, lack of professional equipment and tools
- Social unrest, political conflicts and wars
- Discrimination in appointments and promotions
- Declining quality of educational system
- Lack of freedom

PULL FACTORS

- Higher wages and income
- Higher standard of living
- Better working conditions; job and career opportunities and professional development
- Substantial funds for research, advanced technology, modern facilities; availability of experienced support staff
- Political stability
- Modern educational system; prestige off foreign training'
- Meritocracy, transparency

- Intellectual freedom

Results

Ethiopia faces complicated health extension system challenges, deterioration of health indicators, increased preventable communicable diseases, shortage of human resources and misdistribution, incompetence of health care providers and equipment, poor health system information , language diversification, inadequate health awareness, using of traditional medicine and superstition beliefs and also international health travel.

Attribution of results to specific programs is always difficult because of the multiplicity of factors and actors in the social environment, but tangible improvements in key health indicators have been observed since HEP's implementation began. Supporting our conclusion that HEP is an effective approach to promoting good health in rural communities. It is now present in all rural agrarian areas and is being expanded to include pastoralist and urban areas. Credit for these improvements (Table below) must be shared with global health initiatives that are major players in the implementation of the health sector development program. The Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria; the President's Emergency Plan for AIDS Relief; and the World Bank have been major players in health for the last ten years. This has helped the work of the FMoH in HEP implementation.

Discussion

Ethiopia as mentioned .From table 4 page 17 it was clear that the ratio of the physicians internationally was 1: 1000 on average for most of the developed countries and for African countries was 1:3984. In Ethiopia the upper most in is Addis Ababa in which 1: 3056 while the lower most is in afar

region 1 : 98,258 .In Ethiopia if there is a means or way of attracting health service providers especially GP in all regions of the country the challenges discussed in this paper may be solved.

Recommendations

- Comprehensive development
- Increase on the medical scholarship for under/post graduate to different country.
- Encouragement of research by faculties for under/post graduate should be supported.
- Create a co-operation between Africa countries through supporting medical oriented bodies like AMSA-IUA.
- Funding of African medical students association at IUA. Allocate adequate budget to Health Posts
- Strengthen logistic management system and provide regular and uninterrupted supply of essential commodities
- Create conducive health environment and ways and means of attracting back qualified and trained professionals who are working abroad.

References

1. Ethiopian Journal of Biological Sciences (vol.6 no 2(2007)
2. En.wikipedia.org./wiki/health in Ethiopia
3. Population and housing census, 2007
4. Websites related to the problem