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Workshop on Pharmacy Education in the Caribbean

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CONTENT

ABBREVIATIONS AND ACRONYMS

Workshop on Pharmacy Education in the Caribbean

Background

It must be taken into account that the key elements of the CARICOM Single Market and Economy (CSME) include: Free movement of labour - through measures such as removing all obstacles to the intra-regional movement of skills, labour and travel, the harmonisation social services (education, health, etc.), provision for the transfer of social security benefits and the establishment of common standards and measures for accreditation and equivalency.

Additionally, the development profile of the CARICOM Region must be considered. With their current levels of debt, most Caribbean countries are among the 30 most indebted countries in the world. Six (6) Caribbean countries have outstanding debt that is well in excess of their total Gross Domestic Products (GDP's) and 10 countries have debt to GDP ratios above the Maastricht indicative target of 60%. The Caribbean average for debt to GDP ratio is 92% (2003) and 6% to 17% of budgets are allocated to health[1].

There are several recommendations in the Caribbean, and two of them are very important in this context. The Port of Spain Declaration (2007) states "that our Ministries of Health, in collaboration with other sectors, will establish by mid-2008 comprehensive plans for the screening and management of chronic diseases and risk factors so that by 2012, 80% of people with non communicable diseases (NCDs) would receive quality care and have access to preventive education based on regional guidelines". Secondly, the CCH III "Investing in Health for Sustainable Development" is a framework for a mechanism to unite Caribbean Territories in a common goal to improve health and wellbeing, develop the productive potential of the people and by extension the competitive advantage of the region.

In addition, we also need to consider that in a globalised world, there is a distinct need for regional integration mechanisms, such as CARICOM, and the need to harmonise in different areas. One subject that is present on the agenda of many governments is Health Reform and its associated challenges such as limited resources, access to, the quality and the rational use of medicines and health technologies as well as quality care. In this context, the development of Human Resources and the use of Knowledge management mechanisms are very important and necessary. This is to ensure the availability of adequate skills to process the great volume of information, using evidence based practices and to change to a Lifelong learning approach.

[1] Report of the Caribbean Commission on Health and Development, 2006

According to WHO, one third of the global population still does not have regular access to essential medicines. There is a gap between the health needs and health research priorities. The funds spent on medicines correspond to 7 - 66% of the national expenditure on health. Therefore, health is a major expenditure for individuals and families[2]. In the Caribbean access to safe, good quality and effective medicines and their rational use are the issues on an inconclusive agenda and they need to be addressed in a broader perspective. One of the constraints of the situation, is a shortage of qualified human resources to carry out the activities related to Pharmaceutical Policies in the public health context. This is mainly with respect to the management of medicines supply systems and regulation, as presented in the overview of the Pharmaceutical Situation in the Caribbean, based on the level I questionnaire in 2007[3].

Objectives

The objectives of the meeting were:

1. To present the pharmacy curricula from programs and schools of pharmacy in the CARICOM region.

2. To sensitize stakeholders in pharmacy education on the role of the pharmacist in the health care system in the CARICOM Region.

3. To discuss the development of a professional pathway for the pharmacy profession in the CARICOM region.

4. To discuss strategies for the harmonization and the strengthening of pharmacy education and pharmacy practice in the CARICOM region.

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[2] WHO. ***Effective drug regulation:*** **a multicountry study.** Geneva: 2002. p. 7

[3] In 2007, seven countries had a National Medicines Policy (NMP), but only slightly more than half of the countries with NMP have an implementation plan and only half of them is integrated to National Health Policy (NHP). In 2007 nine countries (81,8%) had legal provisions for a Medicines Regulatory Authority (MRA). Regarding the legal provisions for transparency, in 2007, only 4 (40%) countries had legal provisions. Nine (81,8%) countries reported having a National Essential Medicines List (EML) an seven (70%) mentioned to have National Standard Treatment Guidelines.

Expected Outcomes

The expected outcomes were:

1. A draft work plan for strengthening pharmacy education in the CARICOM region developed.

2. Collaboration mechanisms among academics in the pharmacy programs and schools in the CARICOM region proposed.

Summary of presentations and discussions

Opening remarks

Dr. Bernadette Theodore-Gandi, the Caribbean Programme Coordinator of the Pan American Health Organization/World Health Organization, highlighted the importance of the integration of Pharmacy Schools and welcomed the participants. She also mentioned other initiatives supported by PAHO such as the Public Health Consortium.

The Pharmacy Programme at School of Pharmacy, Faculty of Medical Sciences, University of the West Indies

By Prof. Gopal K.Pillai[4]

Prof. Pillai presented an overview of the BSc. Pharmacy Degree programme at the UWI. The degree programme was started in 1995 and since then 10 batches of students have graduated (238 graduates as of 2009). As one of the five schools under the Faculty of Medical Sciences, it provides an academic environment where pharmacy students are in contact with students in other health care professions, therefore reinforcing the concept of a health care team. The school implemented a revised curriculum in 2005 and started an M.Phil programme in Pharmaceutics. Regarding quality assurance, the School of Pharmacy had its first quality audit in 2003 by the quality assurance division of the University of the West Indies that brought in a team of experts from England,

[4] Dean of the School of Pharmacy, Faculty of Medical Sciences, University of the West Indies.

Canada, Jamaica. The next quality assurance exercise is scheduled for late November 2009.

He presented the curriculum and it started with a list of outcome expectations and professional competencies required of a contemporary pharmacist. These include prescription processing, management of medicines supply system; management of medicine therapy and health related issues; inter-professional relationship; retrieval, evaluation and management of professional information and literature; an understanding of the laws governing the practice of pharmacy and the sale and supply of medicines, Evaluation and documentation of interventions and pharmaceutical care outcomes among others.

To achieve those outcomes and professional competencies, the curriculum includes courses such as integrated Basic Health Sciences (anatomy, physiology, biochemistry, community health, microbiology, pathology and physiopathology), Pharmaceutical sciences, Behavioural, Social and Administrative pharmacy sciences, Professional experience and Pharmacy practice. Teaching and learning methodology includes: Problem Based Learning (PBL), Lectures, Laboratory, Research projects, Seminars, Case studies, Poster presentations and Computer-aided learning. The skills training includes: communication and presentation Skills, numeric Skills and IT skills, team Work & Interpersonal skills, high order cognitive skills and subject specific skills. The evaluation methodology includes: Multiple Choice Questions (MCQ), Modified Essay Questions (MEQ) and Objective Structured Clinical Examination (OSCE).

The teaching and learning resources include computer and internet facilities for all students, five public hospitals and two health facilities for clinical training, private pharmacies, analytical instruments, pharmacy practice lab: compounding, dispensing & sterile product preparation facilities (laminar flow hoods) and Biochemistry, Anatomy and Physiology lab and access to Pharmaceutical and biomedical technical literature.

It was also highlighted that educational programmes are continuously reviewed and some of the recently introduced courses/topics were biotechnology, gene therapy, targeted drug delivery systems and complementary/Alternative Medicine (CAM), a research active environment, with the benefit of multidisciplinary support for teaching, research, patient care and service to the public; employment of practitioners as tutors/preceptors, the existence of quality assurance mechanisms (audit every five years), contribution from external examiners (UK,USA, Canada), student-centered teaching and learning, student-friendly curriculum, optional courses, an accelerated degree programme to upgrade the non-degree pharmacists (diploma holders) to the degree level, the existence of a cooperative working relationship with Pharmacy board of Trinidad and Tobago, Food and Drug Administration and the Medical School.

Pharmacy Education in Barbados: Barbados Community College

By Lesia Proverbs[5]

Today's ever changing healthcare environment requires a pharmacy practitioner to be competent and knowledgeable today, tomorrow and to embrace the concept of life-long learning. Curricula must change along with the changes taking place in both in healthcare and in pharmacy. Some elements within pharmacy which have impacted on the need for change in the pharmacy curriculum, are patient safety, a need to contain medication errors and a need to assure quality healthcare for the client. Informed consumers and an aging population with an increased incidence of chronic disease continue to challenge the pharmacist and our healthcare systems.

Pharmacists must be held accountable and must inspire confidence and trust within their clientele. They must demonstrate the benefits of value added pharmacy services and increase their collaboration with other health professionals. They must focus on health outcomes and this must be crystallized by becoming more research-oriented in their practices.

A brief history of Pharmacy Education in Barbados was given. Prior to 1974, pharmacists were trained by the apprenticeship system which included 3 years of working with a registered pharmacist and in 1976, pharmacy education was formalized and offered as a two year certificate programme at the Barbados Community College. In 1987 a two year associate degree in pharmacy evolved and in 1989 the pharmacy programme became a 3 year Associate Degree. Currently, the programme is under revision to become a 4 year Bachelors (BSc) Pharmacy degree to begin in 2010.

Some of the factors influencing the curriculum changes:

- **Academic:** The academic arena is the comfort zone for educators. This provides a body of knowledge to develop competencies in pharmacy and includes the basic, medical and pharmaceutical sciences and professional practice skills. Educators must help students to get the most out of a tertiary education and the academics must become more student centered, and enable students by using technology.
- **Social:** Pharmacists trained in different countries often reflect the health structures found in those countries. Most Caribbean countries have socialised medicine, universally accessible health care, therefore their curriculum will be different to that of the United States, but have similar aspects to Canada or perhaps the UK.
- **Political:** This is immensely important in government funded institutions such as ours. Pharmacists need to create a stronger lobby, to promote

[5] MSc Pharm, Barbados Community College

themselves better than they have, look at expanded roles commensurate with their new skills to become a major player in healthcare delivery and focus on patient outcomes. How does party in power view nursing and medical education versus pharmacy education? How can we promote ourselves to elicit top funding?

- **Economic:** Barbados provides free tertiary education; BCC depends on government funding to run institution; Institutions with a low budget/student plans a different curriculum to one with a high budget/student;

Prerequisites for entry to pharmacy are five Caribbean Examination Council Certificates (CXC) – including Mathematics, English, Chemistry, Biology and one other. This represents a minimum threshold and in no way guarantees admission. For quality assurance purposes and accreditation, should all institutions in the Caribbean offering pharmacy have the same entry requirements?

The current 3 year associate degree includes 98 credits:

- Year 1 – core educational building blocks
- Year 2 – fundamentals of pharmacy and drugs
- Year 3 – preparing for drug distribution and patient care

The Pharmacy internship is of six months duration with three two month rotations in the hospital pharmacy, a polyclinic pharmacy and a community pharmacy. For quality assurance purposes and accreditation should internships be standardised throughout the region?

Continuing Professional Development (CPD) is not currently mandatory. There are web based opportunities and many local pharmacists participate in internet based offerings. There are no official Memorandum of Understanding (MOU), nevertheless, there is assistance from Canadian institutions: Universities of Toronto and Alberta. There is an excellent co-operation with UTECH for BCC graduates to complete their fourth year and receive their BScPharm.

Current pharmacy practice opportunities abound and include community pharmacy, primary health care settings, hospital – public and private, medical representatives, Barbados Drug Service administration and industrial pharmacy. To expand opportunities for pharmacists, they should be encouraged to do a Master in Business Administration (MBA) or a Master in Public Health (MPH) and complementary practice, considering drug therapy is ubiquitous.

In the future, How can we work together as a region to benefit our pharmacists and future healthcare? Can each regional institution offer any particular specialty? The presentation was closed with the quote: “Today’s reality becomes tomorrow’s history!”

Pharmacy Education: the Bahamian Perspective

By Bridget S. Hogg[6]

A Historical Overview was presented. The Pharmacy Programme started at College of Bahamas (COB) in 1962 as a Certificate of Competency (COC) which was discontinued in 2004. In 2008 the Programme was re-established as Bachelors in Pharmacy (PPharm) in collaboration with University of Technology (Jamaica) and The Ministry of Health[7].

In 2008, there was a Fall intake of the 1st BPharm cohort in the Bahamas at COB Oakes Field Campus. In 2009 a 1st phase of the Capacity Building with new laboratories (2), new full-time faculty (1) and Programme development. In the Spring of 2009 a new application will be processed for the second cohort.

For the implementation of the Pharmacy Degree, it was taken into account that there are approximately 140 pharmacists, 90% of them qualified via COC system (with 5% BPharm or greater - Bahamian) and 5% BPharm or greater - contracted Non-Bahamians) and there is an increased demand for degree level pharmacists.

In 2002-2003, there were 4.2 pharmacists per 10,000 population and 0.2 pharmacy technicians per 10,000 population. The population grew19% between 1990 and 2000. There is an increased demand of PMH -100 scripts per pharmacist per day (8 pharmacists) plus support services such as total parental nutrition, Oncology and Dialysis.

Another factor considered was the significant increase in CNCD (45% of all deaths- 2001) with high rates of obesity & overweight (2005 prevalence =71%), diabetes (9%) and hypertension (37.5%). In this context, there is an expanded role of the pharmacist related to drug therapy decision making and research.

Regarding the content of Pharmacy Education, the programme is composed of Basic Natural Sciences; Advanced Natural Sciences; General Education; Business and Profession specific courses.

The challenges presented were: the need for the sustainability of the programme, as there is a competition for government resources, to guarantee adequate

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[6] *Associate Professor, School of Sciences and Technology, The College of The Bahamas (COB).*

[7] In 1980's there were discussions on changes in the training programmes. In 2003, The Ministry of Health (MOH) & The College of the Bahamas (COB) established a partnership, but in 2004, the COC Programme was discontinued. In 2006, MOH started discussions with the University of Technology (UTECH) for establishing a BPharm. A collaboration was established in 2007 among COB/UTECH/MOH and an agreement was signed between Utech and The College of The Bahamas. In 2008 the MOH established a financial commitment regarding student grants for tuition & stipend.

facilities as there are requirements for specialty instructional spaces, human resources – faculty, staff, technicians; the constant brain drain in the region, the need for regional mechanisms of collaboration and taking advantage of the use of modern technologies.

Considering the importance of continuing education, it is proposed that a Distance Learning Institute be developed, that can provide CEU for established pharmacists, keeping practitioners “current”, using modern delivery technology. This institute can provide high quality post qualification education in a cost effective manner; enhance regional cohesiveness and the sharing of knowledge and experience. The future of the pharmacist is a regional concern for us all.

T.A, Marryshow Community College Pharmacy Program (TAMCC) of Grenada

By Evelyn Davis[8]

Professor Davis presented some historical aspects of the pharmacy course at TAMCC. The first programme started in the mid 1980's as a Certificate in Pharmacy. It was a three year programme offered by the Department of Pharmacy. The Associate Degree was proposed and implemented in the Summer of 2007. It is in keeping with the changes in the curriculum of most Tertiary Level Institutions in the region, to attain a level acceptable by other regional Institutions so that our graduates can proceed to full degrees and masters and beyond, at these institutions in the shortest time possible, e.g. Post diploma Bachelor Degree programme at UTECH. The curriculum is revised and updated and is still being updated. This Year, July, TAMCC will be having their first Graduates with an Associate Degree in Pharmacy.

The duration of the course is 6 semesters over 3 years and the entry requirements are: 5 CXC or GCE Subjects inclusive of English, Mathematics, Chemistry and Biology. One credit corresponds to 3 hours lecture /week. A brief description of the curriculum was presented. For the award of Associate Degree in Pharmacy the student must have passed all the courses, have a minimum G.P.A. of 2, receive a satisfactory grade in the Externships and clinical rotation and complete the Associate Degree in Pharmacy in a maximum of five years. The Internship is developed as determined by Pharmacy Council.

It is considered that TAMCC contributes to the development of the Pharmacy profession as graduates have found employment in many countries in the Caribbean. The TAMCC curriculum and training in Pharmacy serves as a strong foundation for our graduates to pursue studies leading to a Bachelor, Masters and Doctorate in Pharmacy and the program can lead to specification with in the pharmacy profession such as Clinical Pharmacy. Pharmacology, Forensic pharmacy, research in any allied studies in the field of health.

Prof. Davis mentioned the institution is lobbying Regional institutions to accept the curriculum and facilitate its graduates to pursue higher learning. Continuing Education for pharmacists is not compulsory for practicing pharmacists but the suggestion was proposed by the Pharmacy Board. It was considered that the upgrade of current practicing pharmacists is another issue that has to be addressed and the pharmacists need to meet the criteria proposed by CARICOM but we need to work in collaboration with other regional institutions.

To conclude the presentation, she mentioned that TAMCC welcomes the harmonization of the practice of Pharmacy as suggested by CARICOM to meet international standards but to achieve this we need to work in collaboration with regional institutions of higher learning.

[8] Associate Professor, TAMCC.

Pharmacy Education in Guyana

By Khame Sharma[9]

The first batch of Pharmacists graduated from the Faculty of Health Sciences (FHS), which started in the Faculty of Natural Sciences, University of Guyana , Turkeyen Campus, in the late 1970's. The FHS was established as a separate Faculty in 1981. The Faculty has since grown and developed over the years and now comprises the School of Medicine, the School of Dentistry, and the Departments of Pharmacy, Medical Technology, and Public Health.

The present program offered in Pharmacy is the Associate of Science Degree in Pharmacy comprising a total of 116 credits over a six semester period or three years. This has evolved from the previous Diploma in Pharmacy where the designation was changed from Diploma to Associate of Science Degree in Pharmacy to accommodate the growing number of changes in the Pharmacy curricula needed to adapt to the changing conditions at the time. It allowed for the internal harmonization of the various disciplines along similar lines.

The program of Radiography was discontinued by the Faculty while other programs have been recently developed[10]. One of the ways of overcoming the lack of tutors in the Faculty of Health Sciences was addressed by incorporating lecturers in the Natural Sciences Faculty in a cross Faculty collaboration. This has also led to having common core competencies combined so that limited resources could be more meaningfully exploited by sharing.

The admission requirements to the Faculty for the Associate of Science Degree in Pharmacy is based on an age requirement, 16 years of age in the calendar year of entry to the program and on a range of academic requirements or criteria set by the Faculty.

A period of practical attachment is compulsory at the end of the third year and comprises two cycles of 4 weeks and one cycle of two weeks or a total of fourteen weeks under the supervision of a registered Pharmacist with no less than three years experience. This is a major pre-requisite for registration for professional practice. Formalized reports are expected to be submitted for the attachment to be properly accessed and evaluated.

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[9] Deputy Director, Food &Drugs, Associate Lecturer, Faculty of Health Sciences, University of Guyana

[10] These include Nursing, Dentistry and Medical Technology which are now offered at the degree level while the Associate Degree in Science in Environmental Health has been retained. The degree program in Environmental Science is now being offered by the Faculty of Natural Sciences.

The present Health Sector Reform initiated by the Ministry of Health in Guyana has implications for the training of Pharmacists to meet the health care needs of the Guyanese public. The new National Medicine Policy (NMP) which evolved from the National Drug Policy (NDP) aims at providing a guaranteed package of health care delivery services through a system of decentralized health care service providers. It is envisaged that if pharmacists are to play a key role in the future, they will have to acquire a new orientation on their role as well as upgrade skills and competencies through advanced training programs such as those offered at the University, regionally and internationally. For the training of Pharmacists to be meaningfully integrated into and become key players in this new strategy, new and innovative ways of overcoming the present hurdles and challenges is necessary.

Comment [PLU1]: To mention the year of official approval/adoption

At present the Ministry is processing applications for a revised Pharmacy Assistant training program to cater for the present need of meeting the pharmaceutical needs of the expanding Public and Private Health Sectors. This program has been initiated in the past but has been sporadic and needs updating.

It is proposed that the present Associate of Science Degree in Pharmacy program will be phased out with the incoming batch of students accepted for 2009-2010 academic year. The present proposal of BPharm, that is expected to be launched in 2010-2011, will be an eight semester course with a period of Internship similar to the “Attachment” program which can develop to meet with the new requirements brought about by the need to adapt to the changing environment.

There are many challenges to be faced as the Pharmacy Program continues to expand and evolve in order to meet the new demands of the times. We in Guyana are confident that with the continued assistance of such International Agencies, such as PAHO and the SCMS capacity building will continue to meet the challenges ahead. The participation of Guyana in the Barbados meeting of Pharmacy educators is a great opportunity for resource limited countries to overcome many of the individual difficulties experienced by many of the territories of the Caribbean and to share common resources for meeting the global challenges ahead.

The Faculty of Health Sciences, University of Guyana has been conducting training in Pharmacy for over thirty years ago meeting not only the developmental needs of Guyana but also contributing to the training needs of many of the smaller Caribbean States through training and the ‘export’ of our Pharmacists to the Caribbean and abroad. An integrated, coordinated approach as incorporated in the NMP in Guyana provides a unique opportunity for us to continue building on our present achievements while exploring new initiatives and innovative ways of meeting the present challenges we all face. For us in Guyana we can sum this up by saying “The Future will be brighter tomorrow.”

Developing Pharmacy Curricula: The St. Lucia Experience

By Beverly Lansiquot[11]

Prof. Lansiquot presented the background for the establishment of a Pharmacy Programme in St. Lucia that is under development. The demand for training in Pharmacy was initiated by the St. Lucia Pharmacists Association (SLPA) 2005-06 and the Drug Procurement Office of Organization of Eastern Caribbean States (OECS[12]). The main champions are the Pharmacist in the private sector, where employees receive only on-the-job training with little access to on-line programmes. The degree programmes include four levels:

1. Pharmacy
2. Pharmacy Technician (600h)
3. Pharmacy Aide (350 h)
4. Health Sciences Core (100h)

Each component may be integrated into one programme and yet can permit exit after each stage. The proposal includes common Health Science Core subjects for all Ancillary Health Occupations, to facilitate occupational mobility of students, to promote interdisciplinary learning, to be cost effective for students from Education and Health Sectors, to save time and to respond to industry / sector needs, to provide flexibility and foster work-study programmes and life long learning principles. For the Health Sciences core, the principle of the proposal is to integrate Cognitive, Psychomotor & Affective skills and competencies[13].

The facilitating factors were mentioned: Community College structure; supportive environment in the public and private sector; Qualified Pharmacists in the country to serve as Lecturers and the existence of most resources needed within the capacity of the country.

The limiting factors were mentioned: Low number of persons that may be trained at one time; limited sites with fully qualified Pharmacists; sustainability of the programme - saturation of the market; expensive to offer programme to very few students and absence of accurate data on Human Resource Development needs.

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[11] Principal, Sir Arthur Lewis Community College(St Lucia)

[12] No formal training programmes are offered to provide the specific cognitive and technical competencies required. The training needs include: the certification and training of pharmacy technicians, to assist Pharmacists in certain tasks that require basic knowledge and skills related to the discipline of pharmacy.

[13] It includes: the Health care delivery system and health occupations; communication and interpersonal skills; legal and ethical responsibilities; the application of wellness and disease concepts, including CCH- III Priorities; the demonstration and recognition of safety and security procedures and emergency situationsnresponse.

The opportunities were mentioned: to explore hybrid distant learning strategies (CKLN); pooling resources such as human, technical and materials and to explore strategies to development HRD needs assessment sub-regionally (OECS) or regionally.

For the Pharmacy Programme (BSCPM), it was mentioned that there are Core Health Sciences and Qualified Pharmacy in country to support entry level occupational and pre-professional programmes related to certificate/diploma and Associate Degree (Professional tract).

The challenges were mentioned: Inadequate numbers of Master's and Doctoral Prepared Pharmacists to deliver BSCPM; most Science courses offered as A'Level with a delivery method and competencies that are no longer organized to permit students to access relevant modules; inadequate Laboratories that are expensive to sustain in each country and Limited Library and learning resources

The strategic priorities presented were: Agreement on a regional framework and core competencies for Pharmacy curricula at each level of function and professional practice; Curriculum plan that would facilitate delivery of most of the programme in country directly by using hybrid delivery methods and core technical competencies to be delivered in selected institutions over a short period (one year); Identify and support core set of library materials; Training of Pharmacists at Graduate (Master's Degree) level; Identify and support core set of learning support materials and supplies for Laboratory exercises within existing labs at Community Colleges; Accreditation standards: Monitoring and evaluation and Legislation that would support and regulate the level of pharmacy education and practice.

Procedures of CAAM-HP.

Professor Errol Walrond

Comment [PLU2]: Please include complete words

An Overview of CAAM-HP was presented. The authority provides assurance to medical and health care students, graduates, the health professions, healthcare institutions and the public that undergraduate programs leading to qualifications in medicine and other health professsions meet appropriate national and international standards for educational quality. CAAM-HP performs periodic evaluations of programs, independently of participating countries. The Programs which meet all of the standards of quality are designated as Accredited for a term of 5-7 years, depending on the length of the programme.

The current composition of the Authority was described. It was established initially to evaluate the medical education programs. Provision was made to expand the membership to include representatives of other health professions as they come under the aegis of CAAM for accreditation.

The functions of the Authority and its secretariat, the financial mechanisms and the conduct of its meetings was also described.

Regarding the forms and terms of accreditation, these are the following options:

- Accreditation for a full period [5-7 yrs] or for a period with conditions Provisional Accreditation (2-4 years) - Critical correctable deficiencies
- Accreditation on probation (1 to 2 years) - Critical deficiencies not corrected in the time given
- Denial or withdrawal of accreditation
- Initial Provisional accreditation for New Developing programs - yearly surveys
- Additional review – major programmatic changes

Accredited programs are required to submit annual reports.

At the initiation of the accreditation process, programs are required to do an Institutional Self Study utilising the written standards of CAAM-HP. This is followed by an external evaluation conducted by a Survey Team[14]. The Survey

14 The self study is guided by a pre-set written Standards related to: Institutional Setting; Students; Education programs; Faculty; Education Resources; Internships and Continuing Professional Education The survey team have specific recruitment and training requirements and can be composed of educators and practitioners, with up to five members including one from CAAM: chair, secretary and observers. The members have to sign a declaration of Conflicts of Interest and the team is subjected to the Dean's review. All expenses and stipends are paid through CAAM. Regarding the survey report, a confidential draft is submitted by the secretary and reviewed by the secretariat, team and dean. It is submitted with recommendations to CAAM, that makes the decision to accept, defer or decline. Afterwards, a letter of Accreditation is sent to the institution with strengths /weaknesses and potential for impact.

teams report and self study, forms the basis for the accreditation decision. All decisions are taken by a two-thirds majority. There are appeals procedures.

CAAM reports through CARICOM their decisions; annual reports; and changes in policy to contracting parties and to relevant licensing /accreditation bodies. There is a public listing of Accredited Programmes their status, duration, withdrawal or lapses and an annual summary data on schools and documentation on accreditation on the website[15].

Currently, standards have been written for medical, veterinary and dental schools. The Authority has completed reviews in regional, national and 'offshore' medical schools and reviewed applications for the establishment of new 'offshore' medical schools. Reviews of medical and veterinary programmes are in progress. Discussions have been held with other disciplines about accreditation by CAAM.

In setting standards CAAM commissions and discusses a study on education standards in the discipline. CAAM commissions the writing of standards in the format adopted by CAAM and solicits the views of the professions, through individuals, professional organisations and educators. Once approved, CAAM writes to education institutions in the region, appraising them that CAAM is ready to initiate the accreditation process. CAAM will consult with schools on how to prepare for the accreditation process.

[15] www.caam-hp.org

CARICOM Consultancy on Pharmacy Practice

By Lennox Prescod[16]

An overview and the results of the consultancy on the subject of pharmacy practice in CARICOM countries were presented. The objective of the consultancy was to establish the Current Standards of Practice of Pharmacists with particular emphasis on their contribution to patient care and to develop a Draft Proposal for New Standards of Practice with respect to Patient Care[17]. Information was obtained from a Questionnaire and visits to Belize, Jamaica, Bahamas, St. Lucia and St. Kitts along with information from Barbados and from Pharmacists at CAP Meetings.

A summary of Results were presented. The majority of Pharmacists are female, under 40 year with a family, very few pharmacists have a degree, the majority have an Associate's Degree. With respect to the practice, most pharmacists dispense, offer some advice on dosages and drug interactions and most do not perform Value Added services even where private areas are available. In the Hospital setting Ward Rounds are not well organized and structured. Regarding Continuing Education, most pharmacists indicated that it should be mandatory and tied to re-licensure and indicated they would pay up to US$200 per year for CE.

Regarding the upgrade of education, 99% of pharmacists indicated that they wanted to have a degree and most of them stated a preference for Distance Learning for both the Degree and CE. The main barriers to obtaining a degree were cost, accessibility and inability to leave job. Most pharmacists support CSME and the freedom of movement to practice. Very few pharmacists expressed fear about competition for jobs under CSME and the majority of pharmacists indicated that they should be more involved in the development and execution of lifestyle change programmes for chronic diseases.

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[16] M.S (Pharmacy), MBA; Pharmaceutical Business Development Manager BS&T/Neal&Massy

[17] The terms of reference of study included preparing the instrument and collecting data on current roles and tasks performed by Pharmacists in the public and private sectors; the education and training required; undertaking an assessment of tasks and roles of Pharmacists in education and the training required in the context of international standards of practice in order to identify gaps in current practice and make recommendations for upgrading the standards of practice taking into account the areas of the Caribbean Cooperation in Health Initiative and the goals and objectives of national health plans; presenting Draft Regional Standards of Patient Care for Pharmacists at the 2006 Annual General Meeting of the Caribbean Association of Pharmacists; and facilitating discussion among Pharmacists, training institutions and other relevant stakeholders with a view to finalizing recommendations on New Standards of Practice for Patient Care to be adopted by Pharmacists. These Standards will be submitted for the consideration of the Council for Human and Social Development.

Some recommendations presented to CARICOM were highlighted. The general recommendations include: the need for a Regional Body for the Registration of products and companies; Continuing Education should be mandatory and tied to re-licensure; the recognition of Pharmacy Technicians by the Profession; the development of a Distance Learning programme for Degree and CE. For professionals aspects related to patient counselling and Medication Therapy Management, changing the practice environment, use of generics, evidence based practice, involvement in operational research to determine practice outcomes, advocacy and team work was considered.

Based on United States bibliography, some questions were asked regarding the access and the availability of continuing education in the Caribbean and the participation of the pharmacist in that process. This includes the possibility of using managed care in an effort to reduce their costs when pharmacists are intimately involved; the participation of the pharmacist in the development of Appropriate Drug Therapies, Educating Patients, Monitoring patients and continually assessing the outcomes of therapy. The need to improve pharmacist counselling and aspects related to cost-effectiveness and efficiency in reaching desired outcomes was mentioned.

The presenter deemed that there is a lot of work to be done at the regional, national and individual level in order to meet the new practice standards; planning also has to centre on the development of programmes that focus on the outcomes and governments, educational institutions and pharmacy bodies have to work closely together with CARICOM and other regional institutions to achieve results.

Consultancy on Strengthening and Harmonization of Internship Programs for Pharmacy Graduates

By Francis Burnett[18]

An overview and the results of the consultancy regarding the pharmacy practice in CARICOM countries were presented. The objective of the consultancy was "to develop proposals to strengthen and harmonize internship programs for pharmacy graduates"[19]. As part of the methodology Barbados, Jamaica, Guyana, Trinidad and Tobago were visited and telephone interviews were done and e-mail communications were sent. A structured questionnaire was administered on May, 8th and June, 6th, 2006 to Pharmacy Schools and Pharmacy Councils. A total of nine persons were interviewed. The summary of internship programmes is presented in table 1.

Table 1. Summary of Internship Programs in CARICOM

Country	Entry	Duration (mths)	Managed by	Evaluation
Barbados	Associate Degree	6	School	Yes
Guyana	Diploma	3	School	Yes
Jamaica	Bsc.	12 2.5	Pharm. Council P C& Utech.	Yes 360 degrees
T & T	Bsc.	9 6.5	School Board	Yes

In Barbados the strengths are the varied experiences, the programme is well supported by pharmacists and its written objectives and guidelines. The weaknesses are there are no assignments at practice sites, a lack of organized preceptor training and the internships are administered only by the training institution.

In Guyana, the strengths are the varied experience and the documented internship program. On the other hand, the weaknesses are that the internship is managed only by the University of Guyana, the paucity of experienced

[18] Organization of Eastern Caribbean States/Pool Procurement Service (ECS/PPS) Director.

[19] Terms of Reference included: Prepare instruments to gather data on internships; Review structure and management of internships; Recommend proposals to strengthen and harmonize internships; Present proposals to CAP 2006 convention and facilitate discussions among key stakeholders, COHSOD.

preceptors, limited sites, Pharmacy & Poisons Board under-performing and poor institutional practice by some non-pharmacists.

In Jamaica, the strengths are that the internship is managed by the Pharmacy Council and UTECH, it is well-documented, and there is a structured evaluation and a varied experience.

In Trinidad and Tobago, the strengths are the existence of a varied experience and a thorough evaluation (portfolios, final exam). However, its weaknesses are inadequate preceptor sites; lack of training for preceptors, the programme is managed only by the training institution and a lack of clinical pharmacists as preceptors

As part of the consultancy, a proposal for Guidelines for strengthening and harmonization of internships was developed. The suggestion was made to register interns with the Pharmacy Council, to display the intern ID badge & certificate, to have a prior review of intern and preceptor roles and the purpose of internship as it is not merely a preparatory period for registration/graduation.

It was also considered to be the perfect opportunity to: acquire skills and knowledge for independent practice and to hone existing skills from formal training in order to work with a model good practice from experienced and competent preceptor.

The Preceptor was defined as the person to teach, enlighten, advise, coach, mentor, direct, educate with a broader role that also encompasses encouraging & supporting the intern. His qualities should also include being a positive role model, ethical practices showing compassion for patients; a desire to educate others; requisite, training, experience & competence and a systematic, self-directed approach to own CPE.

From the preceptor, the intern should expect support & guidance, resources, goal setting and clear and honest feedback. An internship lays the foundation for a lifetime of rewarding professional practice. Interns should accept responsibility for their own learning and take the initiative, use all available resources and opportunities as well as work in close partnership with preceptors.

Common evaluation instruments should be developed, taking into account 360° evaluation procedures with description, goals and competencies per site. It is recommended that the internship has duration of 6 – 12 months, with a maximum of 40 hrs per week. It should be managed by the pharmacy council, with a coordinator and a written manual with clear policies & procedures and have standardized preceptor training, approved internship sites and established preceptor pre-qualification

The PAHO/WHO Recommendations for Standards in Pharmacy Education and Pharmacy Practice

By Adriana Mitsue Ivama [20]

Dr. Ivama presented an overview of the current context. She highlighted that in this globalised world, the harmonization is one of the requirements of regional integration mechanisms such as CARICOM. One subject that is present on the agenda of many governments is Health Reforms and its key challenges are related to managing health with limited resources in order to guarantee access, rational use of medicines and health technologies and quality care. In this context, the development of Human Resources and the use of knowledge management mechanisms are very important and necessary to ensure the availability of adequate skills, to handle the great volume of information using evidence based practices and to change the actual approach to a Lifelong learning one.

There have been several economic advances in the Americas: increasing life expectancy at birth, immunization coverage, access to sanitation services and the decrease in the rates of mortality (infant, from communicable diseases)[21], but there are still inequities in the income distribution and in the health conditions.

According to WHO, one third of the global population is still unable to regularly access essential medicines. There is a gap between health needs and health research priorities. The funds spent on medicine correspond to 7 - 66% of the national expenditure on health and represents the major health expenditure for individual and families[22].

Dr. Ivama mentioned some challenges related to the access, quality and rational use of medicines in the Americas and presented an overview of the Pharmaceutical Situation in the Caribbean, based on the level I questionnaire in 2007[23]. As established through this questionnaire the average of the total

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[20] Medicines, Vaccines and Health Technologies Sub Regional Advisor PAHO/WHO – Office of Caribbean Programme Coordination, with the collaboration of Jose Luis Castro, regional Advisor on Rational Use of Medicines, PAHO/WHO.

[21] *PAHO/WHO.* ***Health in the Americas.*** WDC: PAHO/WHO, 2007; PAHO/WHO. ***Health Agenda for the Americas, 2008 – 2012.*** WDC: PAHO/WHO, 2008.

[22] WHO. ***Effective drug regulation:*** **a multicountry study.** Geneva:WHO, 2002. p. 7

[23] In the Caribbean, the number of countries with a NMP increased from three (27.27%) in 2003, of which two were officially adopted, to seven (53.8%) in 2007, with four officially adopted (57.1%). In 2003, only four countries mentioned having legal provision for a **MRA** and four (66.6%) had a established MRA. In 2007, eleven (84.6%) had legal provision, with nine (69.2%) having an established MRA. Regarding legal provision for transparency, in 2003 three countries (60%) had it and in 2007 five out of eleven countries (45.5%) had this provision. Nine (81,8%) countries reported having a National Essential Medicines List (EML) an seven (70%) mentioned to have National Standard Treatment Guidelines.

expenditure on medicines in the public sector in the Americas (US$ 33,000,000) is considerably higher than in participant Caribbean countries ($ 4,000,000). However, the average of public expenditure per capita is much higher in participant Caribbean countries (US$ 20.90) when compared to the whole region of the Americas (US$ 11.50).

PAHO/WHO has a mandate from the Ministries of Health of the State members. There is an effort to integrate Global and Regional Health Agendas with respect to the goals and Objectives of the PAHO Project in Medicines and Biologicals; these goals for the 2008-2012 period were presented.

For the Caribbean, the Port of Spain Declaration (2007) that states "that our Ministries of Health, in collaboration with other sectors, will establish by mid-2008 comprehensive plans for the screening and management of chronic diseases and risk factors so that by 2012, 80% of people with Non-Communicable Diseases (NCDs) would receive quality care and have access to preventive education based on regional guidelines" and the Caribbean Cooperation in Health (CCH III), give the framework for orientation and for increasing the public health approach in the pharmacy education.

In 2004 an Agreement between the European Union and the World Health Organization for the development of the EU/ACP/WHO Project "Partnership on Pharmaceutical Policies" was signed. This includes Africa, the Caribbean and the Pacific, with the overall objective of "to close the huge gap between the potential that essential medicines have to offer and the reality that for millions of people, particularly the poor and disadvantaged, medicines are unavailable, unaffordable, unsafe or improperly used".

The project has four strategic objectives and the outcomes and priorities for each of them were presented:

- Pharmaceutical Policy: To provide an evidence basis and to support the development and the monitoring of pharmaceutical policies
- Access and Innovation: To support the strengthening of integrated supply systems
- Quality and Regulation: To support the strengthening of core functions of National Regulatory Authorities (NRAs) and the sub-regional regulatory framework
- Rational Use of Medicines: to support the strengthening of core-functions

Health professionals have to be then inserted into the health services with a clear view of their mission and role. With respect to pharmacists, two questions relating to their training and development were raised. Are the Pharmacy Schools preparing our future pharmacists to address the public health challenges? Have the future professionals been prepared to "take care" of people?

PAHO/WHO has many recommendations and documents that provide answers to these questions, in particular, the series of documents related to the "The role of the Pharmacist in the Healthcare System", namely:

- 1985 – Conference about Rational Use of Medicines (Nairobi)
- 1988 – The role of the Pharmacist in the Healthcare System (New Delhi)
- 1993 – Tokyo Declaration: Pharmaceutical care; Good Pharmacy Practices
- 1997 – Preparing the Future Pharmacist – Curricular Development (Vancouver)
- 1998 – The role of the Pharmacist in the self-care and self-medication (The Hague)

These documents highlight that "The mission of pharmacy practice is to supply medicines and other health products and services related to health and to help people and the society to use them in the better possible way". The Guidelines for Good Pharmacy Practice – GPP[24], provides a definition of standards for:

- Health promotion, prevention of diseases and to reach the health objectives;
- To supply and to promote rational use medicines and other health products;
- Self-care;
- Improvement of prescription and use of medicines;

The WHO document of 1997 highlighted the characteristics of the Seven Star Pharmacist (1997)[25]: Caregiver; Decision-maker; Communicator; Leader; Manager; Life-long learner and Teacher. Some elements are required for the curricular development of that pharmacist, namely: Teaching and Learning Methods and Strategies; Student Centred Learning; Problem solving and critical thinking; use of education technologies and establishment of partnerships.

In the Americas, since 1990, PAHO/WHO has been supporting the organization of Pan American Conferences on Pharmacy Education. An historical overview was presented.

The 1st Conference was held in Miami (US) in 1990. The Declaration of Principles and issues related to Primary Healthcare were approved: MOH and pharmacists, the pharmacist as the medicines expert, the strengthening of the collaboration among universities and integration into the healthcare team were discussed.

[24] WHO, 1996. Good Pharmacy Practices at Hospital and Community Settings.
[25] WHO, 1997. Preparing the Future Pharmacist – Curricular Development (Vancouver)

The 2nd Conference took place in Ixtapa (México), in 1993..The Mission of Pharmaceutical Education in the Americas that considers Pharmacists as citizens, the participation of students in the health policies, the integration into the healthcare team, the responsibilities of Pharmacy Schools and elements of Pharmaceutical Education was approved.

The 3rd Conference was in Buenos Aires (Argentina) in 1996. At this conference the Pan American Commission on Pharmaceutical Education was established. It had the following Objectives: Record of institutions and exchange opportunities; Exchange of experience – accreditation and evaluation; Human Resources strengthening; Proposal for minimum content of Ph, curricula and Exchange of experience – professors and students.

The 4th Conference was held in Santiago (Chile) in 1999. A proposal for curricular revision was discussed: Common curriculum for the Americas, based on the "Seven Star Pharmacist"[26].

The 5th Conference took place in Miami (US) in 2002, with the participation of representatives from countries from the Americas and Europe. The discussion included the establishment of an Americas Organization of Ph. Schools and a Proposal for the Accreditation of Ph. Schools (with the following dimensions: A- Institutional context; B - Academic Project; C - Human Resources; D – Infrastructure and E - Social and Professional Insertion, based on country experiences.

The 6th Conference took place in Montevideo (Uruguay) in 2008. There were 5 workshops[27]. At his conference, the proposal for Accreditation of Ph. Schools and the Basic Curriculum was discussed.

The Pharmacists stand at the interface among research and development, manufacturers, prescribers, patients and the medicine itself. WHO has called for greater involvement of pharmacists in the general health care system and wider use of their broad academic background[28].

The new paradigm for pharmacy requires that pharmacists are to be far more than experts in pharmaceutical chemistry and pharmaceutics. They have to

[26] The proposal of minimum curricula includes as contents: Basic sciences, pharm. sciences, applied sciences, social and behaviour sciences, administer; as methodology - longitudinal: cases simulation, problem solving, critical thinking and pharmaceutical education; professional practices – longitudinal and elective subjects.

[27] The workshops were: a) Accreditation: common proposal – final discussion on the document; b) Self-assessment and basic syllabus: proposal for consensus; c) Proposal of Declaration on Good Pharmacy Practices; d) Students meeting and e) Pharmaceutical care and rational use of medicines: pathways for diffusion and practice implementation (proposal).

[28] WHO. **Developing pharmacy practice:** A focus on patient care (2006).

understand and apply the principles behind all the activities necessary to manage drug therapy. In 1999, the European Association of Faculties of Pharmacy (EAFP) proposed a shift during the pharmacy study programme from laboratory-based sciences to practical and clinical sciences.

In April (2009), a working group to improve the pharmaceutical services based on Primary Healthcare was established. The following values were proposed: the right to the highest possible level of health, Equity, Solidarity, Humanization, Excellence, Transparency and Ethics.

The Critical Factors that are needed to the strengthen the Pharmaceutical Services based on PHC were also mentioned. These include theoretical references and tools; Change Management; advocacy; Insufficient competent and committed human resources; the Integration of Pharmaceutical Services into the Health System based on PHC and of the pharmacist into the health team, Intersectoriality; Appropriate political and regulatory framework and Infrastructure and equipments.

Taking into account the existing context and the presented recommendations, how can we face the current challenges in the Caribbean? It is necessary to consider the following: the lack of a sub-regional Pharmaceutical Policy or a regulatory framework; the lack/limited national capacity as a part of essential public health functions and the National Steering Role; the Pharmaceutical Policies and monitoring mechanisms; Medicines supply management and regulation –without separation of functions and rational use of medicines/service delivery. All these challenges contribute to a limited capacity to ensure the access to quality, safety, effective medicines and rational use with a very high expenditure.

The participants were invited to think about mechanisms to implement the recommendations. As part of the next steps, the following questions were presented:

- Can we have collaborative mechanisms - integrating education and practice?
- How can we address harmonization and accreditation?
- How can we bring public health into Pharmacy courses and Pharmaceutical contents to other health professions education?
- Can we have interprogramatic/transdisciplinary work?

Regarding the expected results and the methodology of work, a correlation between this and the passage of Alice in the Wonderland was drawn where Alice and the cat[29], were reminded of how important it is to establish goals.

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[29] A***lice:*** *Would you tell me, please, which way I ought to go from here?*

Training Health Professionals to meet the Health Needs of the CARICOM Region

Gillian Barclay[30]

Some of the challenges that we are facing today came from the West Indies Federation and remain a part of the inconclusive agenda in the context of the CARICOM Single Market and Economy (CSME). The West Indies Federation existed from 1958 to 1962 and comprised the ten territories of: Antigua and Barbuda, Barbados, Dominica, Grenada, Jamaica, Montserrat, the then St Kitts-Nevis-Anguilla, Saint Lucia, St Vincent and Trinidad and Tobago.

The cooperation in tertiary education was consolidated and expanded during this period. The then University College of the West Indies (UCWI), which was established in 1948 with one campus at Mona, Jamaica, opened its second campus at St Augustine, Trinidad and Tobago, in 1960.

The Federation however faced several problems. These included: the governance and administrative structures imposed by the British; disagreements among the territories over policies, particularly with respect to taxation and central planning; unwillingness on the part of most Territorial Governments to give up power to the Federal Government; and the location of the Federal Capital.

In 2009, some of the challenges faced at that time are still present. Additionally we have several new challenges related to globalization and the current health context, such as the Influenza A H1N1, Disaster Preparedness and Emergencies among others. As stated in the World Health Report (2006), “These examples illustrate the enormous richness and diversity of the workforce needed to tackle specific health problems”

The key elements of the CARICOM Single Market and Economy (CSME) include: Free movement of labour - through measures such as removing all obstacles to intra-regional movement of skills, labour and travel, harmonising social services (education, health, etc.), providing for the transfer of social security benefits and establishing common standards and measures for accreditation and equivalency.

If we consider the profile of development in the CARICOM Region, considering the Debt levels, it places most Caribbean countries among the 30 most indebted countries in the world. Six(6) Caribbean countries have outstanding debt that is

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The Cat: *That depends a good deal on where you want to get to*
Alice: *I don't much care where.*
The Cat: *Then it doesn't much matter which way you go.*
Alice: *…so long as I get somewhere.*
The Cat: *Oh, you're sure to do that, if only you walk long enough.*

[30] Advisor on Human Resources Development for the Caribbean – OCPC-PAHO/WHO

well in excess of their total GDP's and 10 have debt to GDP ratios above the Maastricht indicative target of 60%. The Caribbean average for debt to GDP ratio is 92% (2003) and 6% to 17% of budgets are allocated to health[31].

Considering the population profile of the CARICOM Region, the current and the future "new" and "major" challenges are: Obesity and the co-morbidities of the CNDs, HIV/AIDS, Health and social *sequelae* due to injuries and violence, food insecurity, declining birth rates an increase in the ageing populations and migration of skilled health workforce.

Regarding the population health profile of the CARICOM Region, the non-communicable diseases are the major contributors to overall mortality. Cardiovascular disease (hypertension, coronary artery disease, and stroke), diabetes mellitus, and cancer accounted for 51% of the deaths in the latter part of the 1990s. the regional HIV-AIDS prevalence rates are second to Sub-Saharan Africa[32].

Some critical issues for Health Workforce Development in the CARICOM Region are related to the limited capacity and infrastructure, the inability to examine what works well for the region; the need to incorporate data and evidence-based approaches; the desirability to meet or exceed global standards. One of the biggest challenges it to decide if we are planning for the "now" versus planning for the "future"? It is necessary to get profit in times of scarcity.

In this context, there are several Declarations and calls to action, all important references for Health Systems Strengthening and Health Workforce Development, namely:

- The World Health Reports 2006 and 2007
- The Kampala Declaration and Agenda for Global Action
- The International Commonwealth Code of Practice
- Recruitment of Health Workers
- Alma Ata
- Declaration on Ageing
- The Nassau Declaration
- The Declaration of Port of Spain

If we think about the steps needed to prepare for the Future, it is important to consider the movement from solely medical model approaches to those that incorporate attention to the other health determinants. We would also like to draw attention to the renewal of primary health care. In view of this strategy, we have

[31] Report of the Caribbean Commission on Health and Development, 2006
32 Report of the Caribbean Commission on Health and Development, 2006

to consider the need for changing the main focus from treating ill people to encouraging people to be safer and healthier33.

In the current context, we have to consider that it is a reality and not an academic exercise; seamless transitions from training to practice and vice versa is a dynamic process. In planning for the Future, there are some issues that need to considered namely:

- Institutional capacity, infrastructure and debt
- Quality of education and training
- Dynamic process of training to practice
- Evidence-how many, where are they needed, how do we train to meet the needs of CARICOM populations, how do we train to meet CARICOM and exceed global standards

We also have to consider the CARICOM Organizations. Regarding Quality of Education, there are two organizations for accreditation, the Accreditation Council for Tertiary Institutions, linked to the Ministries of Education and the Caribbean Authority for the Accreditation of Medicine and the Other Health Professions, linked to Caricom. The professional organizations are also important stakeholders, namely: the Caribbean Association of Medical Councils; the Caribbean Nursing Organization; the Regional Nursing Body,

When taking infrastructure and capacity into account,, it is important to consider the experience of Nursing/Midwifery, Public Health, Health Care Management, and Dentistry. Some of the activities that can be highlighted are: Common Assessments across the Region by Nursing/midwifery and Public Health; assessments similar to those used by nursing and midwifery schools in the US and Canada (basic assessment); assessments similar to that used by the Council for Education in Public Health (basic assessment). The results of these activities are as follows:

- Linking Education to Practice
- Practice Standards
- Education Standards
- Linking Practice and Education Standards
- Continuing Professional Development
- Faculty Development

The assessment of faculty needs and the updating of competencies and skills is important. For example, skills in interprofessional education and collaborative practice.

[33] Barclay and Reede, W.K. Kellogg Foundation, 2004

It is critical to incorporate upstream approaches to Health Professional Training and for the CARICOM Region to address population health issues. The challenges are to move beyond the comfort zone of business as usual and to establish collaborations and partnerships with other sectors to enhance the dynamic process of training to practice.

For strengthening of Health Professional Training and the CARICOM Region it is needed to:

- Facilitators
- Infrastructure and capacity strengthening
- Policies in place to link sectors---transectoral policies
- Information systems
- Country and CARICOM level functional human resources plans that support the vision of health and development
- Legislative and policy frameworks
- Enhancement of skills and competencies
- Leadership

As stated in the World Health Report (2006), “At the heart of each and every health system the workforce is central to advancing health.”

Systematization of working groups

Considering the limited existing resources, the participants discussed the importance of sharing experiences and resources and to strengthen integration and harmonization, in order to improve quality of Pharmacy Education in the Caribbean. The participants listed several strategies to move forward in this direction.

Afterwards, it was discussed the changes in the education to meet the health and development needs.

Strategies to enhance the quality of education

Harmonization Strategies

- Harmonize pharmacy education in the region
- Ensure that entry level qualifications are at a suitable level across the board
- Identify core pharmacy curriculum for all
- Agree on Minimum Standards for accreditation, training and practice
- Establish a framework for pharmacy education and practice across service delivery
- Clearly define and agree on core competencies (skills, knowledge) for each level of training and category of health worker
- Write regional curricula for each level - include recommendations for standardizing practice/internships
- Determine gaps in current practice and provide courses/programmes to fill the gaps (through dialogue with practitioners)
- Ensure articulation with each level of education/ training
- Conduct a manpower survey to determine and project the human resource needs in pharmacy
- Introduce inter-professional education in pharmacy education
- Internships / CPE sessions / etc

Quality of Education Strategies

- To promote strategies to enhance the quality of education

- To establish a system of institutional and regional quality assurance
    - faculty and staff
    - programme and outcomes
    - facilities

Mechanisms for strengthening institutions and sharing resources

- Identify key resources for regional use and reference

- Incentive and opportunities for faculty and staff – targeted upgrade
- Examine and model best practices in other disciplines
- Course/cost sharing with respect to resources
- Use of distance education
- Invest to increase pharmacy educators

Integration/networking Mechanisms

- Improve information sharing amongst institutions
- Establish a network of institutions
- Network of Pharmacy Educators.
- Establish collaborative agreements (inter and extra-regional) for course delivery, staff exchange, study tours, external examiners, etc.
- Establish a Forum for Pharmacy Educators with Terms of Reference (TOR)
- Establish formal agreements with Ministries of Health for practical experiences
- Involve advisory committees in curriculum development
- Incorporate a primary care / patient centered focus in curricula

Training Workforce to meet Health and Development Needs

It was considered important to be aware of and understand key development needs which are as follows:

1. to identify and liaise with national stakeholders and to promote an interdisciplinary approach with them;
2. to include electives that provide exposure and content on national issues and to include and publish research on relevant health issues.

With respect to current health problems, it was considered priority to target:

a) NCDs, by promoting life style changes (getting involved). This includes meal plans, exercise, limiting alcohol intake, reducing cigarette smoking; providing diabetes education. It can be achieved by conducting sessions with a focus group and counselling about repeat prescription; and
b) HIV/AIDS &STDs, mainly on ARV counselling

It was also considered important to establish collaboration mechanisms namely:

- Share human resources: it can be achieved by using video conferencing, Web-based seminars, promoting exchange (guest lecturers/skills), accessing practicum sites and promoting distance education to shore faculty
- Literature: a) Library and instructional materials and b) research: Joint research projects and sharing research methodology and analysis.

- To co-ordinate the content and training to meet common regional health issues; and to create regional centres of excellence rather than trying to have all institutions do everything.

Enhancing competencies and skills

The roles of schools and programs of pharmacy in enhancing competencies and skills of practicing pharmacy health professionals in the CARICOM region are:

- To engage faculty with the required /relevant subject matter and competence; to transfer knowledge and competencies
- To provide a laboratory environment which would promote inter-professional education
- To provide an environment for modelling desired behaviours
- To offer continuing education opportunities
- To collaborate with health agencies/business/schools
- To collaborate with Pharmacy professionals and other health organizations to arrange learning opportunities
- To offer courses/seminars by varied modalities to increase availability (online, face-to-face, multimedia CD, seminar) etc
- To establish communication with health professional groups
- To arrange multidisciplinary seminars
- To participate in workshops/seminars of other health professionals to draw more attention to the pharmacy issue

It was considered priority that the following competences be developed Interpersonal and inter-professional

- Problem solving
- Critical thinking skills
- Leadership skills
- Decision making skills
- Drug therapy monitoring
- Interpersonal and inter-professional collaboration

In addition to those already listed Bridge Pharmacy Education and practice was also considered,[34], as well as the establishment of Memorandum of Undestanding (MOU's) with government and non-government agencies, institutions and enhancing the involvement of professional organizations.

[34] It was considered that several strategies listed at question 1 contribute to bridge Pharmacy education and practice.

Promote and support quality and patient-centred health care

- Collaborating with other health care agencies and organizations to Support public education programmes / activities
- Promoting Self care management
- Using a patient centred internship guide
- Working with other health professionals to promote health education, workshops, publication
- Including patient counselling in the curriculum
- Providing joint health team training for pharmacy students/other health related students and professionals – participation in ward rounds
- Outcome based research (all parties)

Final considerations and recommendations

There was a consensus regarding the urgent need to establish integration mechanisms, including a process of mutual cooperation, harmonization and constant communication. To make it operational, it was deemed necessary to establish priorities.

The following priorities were agreed on in the final section:

1. To work on a proposal for the Pharmacy Schools Network and collaboration mechanisms (starting with the dissemination of e-mail and the creation of an e-mail distribution list). A proposal will be prepared and circulated for comments – Responsible PAHO, College of Bahamas and UTECH. The representatives from the Community College of St Lucia and OECS/PPS volunteered to collaborate in the proposal.
2. PAHO will send a letter to institutions inquiring about their interest in being part of the Network and to nominate a representative
3. The participants of this workshop will be responsible for doing the follow up the official communication and response
4. PAHO will consult the Caribbean Association of Pharmacists (CAP) to participate in the Network, integrate the initiative and search for external collaboration to support the implementation of the proposed strategies.

Annex 1. List of Participants

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